

PAPERS

RELATING TO THE FORMULATION OF THE SECOND FIVE YEAR PLAN

PANEL OF ECONOMISTS .

GOVERNMENT OF INDIA
PLANNING COMMISSION .

1955

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GOVERNMENT OF INDIA
PLANNING COMMISSION

FOREWORD

The Panel of Economists was set up by the Planning Commission in January, 1955 to advise the Commission on problems connected with the preparation of the Second Five Year Plan. The constitution of the Panel is as follows :—

1. Dr. A. K. Das Gupta, Professor of Economics, Banaras University.
2. Shri M. L. Dantwala, Member-Secretary, Research Programmes Committee, Planning Commission.
3. Shri B. N. Datar, Director, Labour and Employment Division, Planning Commission.
4. Prof. D. R. Gadgil, Director, Gokhale School of Economics and Politics.
5. Dr. B. N. Ganguli, Delhi School of Economics.
6. Prof. L. C. Jain, Professor of Economics, Saugor University.
7. Shri J. V. Joshi, Executive Director, Reserve Bank of India. (Resigned in July 1955.)
8. Dr. R. Balakrishna, Professor of Economics, University of Madras.
9. Prof. D. G. Karve, Director, Programme Evaluation Organisation, Planning Commission ; later Chairman, Village and Small-scale Industries Committee
10. Dr. D. T. Lakdawala, Professor of Economics, University of Bombay.
11. Dr. B. K. Madan, Economic Adviser, Reserve Bank of India.
12. Dr. S. K. Muranjan, Principal, Sydenham College of Commerce, Bombay; now Member, Tariff Commission.
13. Prof. J. P. Niyogi, Professor of Economics, University of Calcutta.
14. Prof. V. R. Pillai, Professor of Economics, University of Travancore.
15. Dr. K. N. Raj, Professor of Monetary Economics, Delhi School of Economics.
16. Dr. V. K. R. V. Rao, Director, Delhi School of Economics.
17. Shri D. S. Savkar, Director of Banking Research, Reserve Bank of India.
18. Dr. S. R. Sen, Economic and Statistical Adviser, Ministry of Food and Agriculture, Government of India.
19. Prof. B. R. Shenoy, Professor of Economics, University of Gujarat.
20. Prof. C. N. Vakil, Director, School of Economics and Sociology, University of Bombay.
21. Shri J. J. Anjaria, Chief, Economic Division, Planning Commission ; Secretary of the Panel.

2. The first meeting of the Panel was held on January 28 and 29, 1955 at which various basic issues relating to the preparation of the Second Plan were considered. Econometric studies* prepared at the Indian Statistical Institute were also reviewed broadly at this meeting. Following these discussions, a Standing Committee was constituted. This Committee decided at its meeting in early March that members of the Panel undertake certain studies urgently with a view to assisting the Planning Commission in the preparation of the Plan Frame to be issued in April 1955. In view of the time schedule of the Planning Commission, these papers had

*These are being published by the Institute in a separate volume.

(i)

to be sent in by the end of March. In pursuance of this decision, members of the Panel and economists in Government and at the Reserve Bank prepared a number of papers. These are reproduced in Sections III to VIII in this volume.

3. Section I of this volume gives the Memorandum prepared by the Panel at its meetings on April 8, 9 and 10, 1955 and the Note of Dissent sent in by Prof. B. R. Shenoy. The Memorandum sets out, in the light of the papers placed before the Panel, the conclusions reached on issues relating to (i) the size of the Five Year Plan, (ii) structure and content of the Plan, and (iii) policy and institutional aspects of the Second Five Year Plan. The two papers given in Section II constitute a 'frame' for the Second Five Year Plan. These were placed before the Panel at the meetings mentioned above and the Memorandum represents the broad reactions of the members of the Panel to the proposals contained in these two documents. Sections III to VIII reproduce, as mentioned earlier, the various papers, suitably grouped together, which the Panel considered. It needs to be stated that the papers published here were prepared within a very short time—about four weeks—and were submitted for use as a basis for discussion on the respective subjects rather than as finished studies.

4. It may also be mentioned that the Economists' Memorandum is an attempt to express in brief compass the consensus of views among a group, whose individual members cannot be assumed necessarily to subscribe unreservedly to every single statement made in it. It will also be understood that the statements or views, explicit or implicit, contained in individual papers do not in any way commit or carry the approval of the institution, official or non-official, to which the writer or group of writers belongs.

5. It is regretted that the publication of these papers has been delayed on account of the pressure of other—no less urgent—work with the Press.

New Delhi,
21st October, 1955.

C. D. DESHMUKH,
Chairman,
Panel of Economists,
Planning Commission.

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**I. MEMORANDUM OF THE PANEL OF ECONOMISTS
AND NOTE OF DISSENT BY PROF. B. R. SHENOY**

THE SECOND FIVE YEAR PLAN

**Basic Considerations Relating to the
Plan Frame**

A MEMORANDUM PREPARED

by

**THE PANEL OF ECONOMISTS,
PLANNING COMMISSION**

April 10, 1955

New Delhi,
April 10, 1955.

Dear Mr. Chairman,

In submitting the accompanying Memorandum, we would like to point out that the time at our disposal did not permit us to make an exhaustive study of the numerous papers placed before us both by our colleagues and by others nor to have a full and thorough discussion of the numerous issues involved. We regard this Memorandum as an interim document, pending fuller study on several points we have only briefly touched upon. We hope that we shall have occasion later to go into greater detail on some of the items included in this Memorandum. In the meanwhile, we have given our best possible consideration to the various questions connected with the Plan-Frame that we could within the time at our disposal, and the Memorandum that accompanies this letter represents the broad consensus of opinion reached at our meetings. One of our colleagues, Prof. B. R. Shenoy, has differences of opinion on some points and proposes to submit a separate note as soon as possible.

Yours sincerely,
D. R. GADGIL.

SHRI C. D. DESHMUKH,
Chairman, Panel of Economists,
New Delhi.

THE SECOND FIVE YEAR PLAN

BASIC CONSIDERATIONS RELATING TO THE PLAN FRAME

The Panel of Economists had its third session on the 8th, 9th and 10th April to consider the main issues relating to the preparation of a plan-frame. The issues grouped themselves under three broad heads :—

- (I) Size of the Second Five Year Plan ;
- (II) Structure and content of the Plan ;
- (III) Policy and institutional implications of the plan-frame proposed.

These questions were considered by the Panel in the light of a large number of papers—about forty—received from its members, and also in the light of the papers prepared by the economists and statisticians in Government and the Reserve Bank and the Indian Statistical Institute. This memorandum sets out the main conclusions reached by the Panel on these issues.*

I. SIZE OF THE PLAN

2. The Panel subscribes to the view that a bolder plan for the second five-year period is both necessary for dealing with the large problems of poverty and unemployment and under-employment and feasible in view of the momentum gained during the First Five Year Plan. The Second Five Year Plan must not only provide for a more rapid increase in aggregate national income ; it must make an advance toward the declared goal of a socialistic pattern of society. It is important, in other words, to secure simultaneous and balanced progress in the direction of raising living standards, increasing employment opportunities and reducing economic and social inequalities. The problem, therefore, is not merely one of stepping up the rate of investment in the economy—though that is necessary and important ; but of securing an optimum increase of production and employment together with a wider measure of social justice. A bolder plan is, obviously, not merely a bigger plan ; it must be one which is motivated by a bolder economic and social philosophy. Necessarily, it calls for a much greater effort and contribution by all classes of the community and presents a much greater challenge of organisation and administrative achievement. The Panel also wishes to emphasize the fact that clear decisions on the policy and institutional implications of a bolder plan are essential at the very outset if the several objectives and targets are to be realised.

3. The question of the size of the Plan may be considered with reference to the order of increase in national income (or production) on the average which should be aimed at during the second plan period, the employment objectives which should be borne in view and the resources which could be available for the financing of the Plan.

* Shri J. V. Joshi was not present at the meetings at which this Memorandum was prepared. He does not, therefore, associate himself with the views expressed in the Memorandum.

4. We consider that the Second Five Year Plan should aim at securing an increase in national income of about 25 per cent in the course of five years. If allowance is made for favourable monsoons the increase in national income during the period of the first plan is likely, on the basis of figures upto 1953-54, to be of the order of 12 to 13 per cent. The rate of increase proposed to be aimed at in the second plan period is thus roughly double of that attained during the first plan. We have observed the rates of increase in the national income of other countries over different periods and consider that, given a determined bid to put forth a maximum measure of effort, this rate of increase can be attained. It is clear that if such a big advance in the rate of increase of national income is to be achieved, a considerable stepping up of the tempo of development is indispensable. That the higher average rate proposed for the second plan is, however, not unattainable is indicated by the mounting scale of the development effort from year to year, as judged by the rate of investment, during the first plan period.

5. The rate of increase in national income aimed at is partly set by the employment objectives. The Planning Commission has indicated to the Panel that the Plan must provide for a creation of new opportunities for gainful employment for at least the additions that will take place to the labour force in the five-year period as a result of the increase in population. The minimum new employment target must, therefore, be the absorption of 9 to 10 million workers. Considering that, in addition, some at least of the existing under-employed have to be given fuller employment, the employment target of Plan has, in fact, to be higher.

6. We may, in this connection, stress a few salient points regarding the present occupational structure. Agriculture and cottage industries together account for about 75 per cent of the working force and carry a large amount of excess manpower. There is, therefore, little hope of any substantial absorption of the new increases in the labour force in these lines. New opportunities of the order of 10 or 12 million jobs have thus to be created on a base of some 30-40 million of the existing labour force employed in the secondary and tertiary sectors. The Plan has to provide for substantial investment in heavy industry, but such investment is by nature capital intensive; it cannot absorb large numbers of workers. It is not possible in the short period to bring into being a new employment structure which would afford stable job opportunities on an adequate scale. It is necessary at this stage, therefore, to increase the opportunities for revolving employment in construction and public works activity and so to plan this activity that it leaves behind, through additions to the society's productive equipment, a significant amount of permanent employment. Simultaneously, through programmes aimed at maintaining and increasing the demand for simpler types of labour intensive industries, the scope for durable employment in the field of industrial production may also be expanded.

7. For raising national income by some 25 per cent over the five-year period, investment in the economy will have to be stepped up from the present level of about 7 per cent of national income to about 11 per cent by the end of the next plan period. This is not too high a target, but it is fairly ambitious. It implies, on an average a 50 per cent stepping up of the rate of

investment and hence of savings (except to the relatively small extent to which resources from abroad can be obtained to supplement domestic savings). In terms of the total volume of investment the next Plan would have to provide for about double the investment in the first Plan. We should like to stress that the effort involved in this increase is considerable, and will strain the economy a very great deal.

8. We have reviewed broadly in this context the papers placed before us by the official economists on estimates of financial resources for the Second Plan. The papers bring out clearly the fact that considerable fresh taxation will be necessary even for ensuring that tax revenue maintains its present share of about 7 per cent of national income. Given the order of the proposed plan, however, we think that something like 9 per cent of national income will have to be directed into the national fisc in the form of total taxation, if deficit financing is to be kept within safe limits. We consider that the estimates of the likely receipts from public borrowings and small savings are capable of being realised, with the necessary drive.

9. We wish to stress in this connection the need for full and speedy implementation of the recommendations of the Taxation Enquiry Commission for mobilising the resources needed for development. Our present tax structure is not such as to ensure even a proportionate increase in tax receipts as national income goes up. What is needed, however, is more than this—an increase in the proportion of national income that becomes available to the public sector. The measures recommended by the Taxation Enquiry Commission for a widening and deepening of the tax structure have, therefore, to be implemented expeditiously, and tax administration has to be strengthened to enable it to cope with the additional work and effectively to minimise evasion. We note, however, that the Taxation Enquiry Commission in framing its recommendations, proceeded on the assumption of a total size of the next Plan for the public sector (*viz.* Rs. 3,500 crores) which was significantly smaller than is now proposed (*viz.* Rs. 4,300 crores) on a fuller consideration of the objectives of increasing production and employment. Even if the scope for deficit financing is now assessed somewhat less rigorously, the higher order of the proposed Plan compared to what the Taxation Enquiry Commission assumed indicates the large measure of fiscal effort that would be required *beyond* the recommendations of the Taxation Commission, if significant inflationary effects are to be avoided. An urgent summary review of the measures necessary to step up the tax effort is, therefore, necessary. When the plan-frame is adopted and a clearer picture is available of the extent and composition of the increases in national income that are likely to take place, the tax measures that would be appropriate to the increase in production could be worked out more precisely. An analysis of the investment structure of the tentative plan-frame, to which we refer in more detail in the next section of this memorandum, indicates that much the largest part of increase in industrial production would occur in producers' goods and small-scale cottage industries, neither of which would significantly expand the base of existing direct or indirect taxes in the period of the Second Plan. Owing to the employment-bias of the other components of the plan, too, the largest short-term increase in incomes would be in the form of wages of workers on construction and public works, including irrigation projects, or of agricultural producers. This emphasises the great difficulty of increasing tax proceeds unless a fundamental revision in some current concepts

that underlie the tax system is accepted. One of these concepts relates to the exemption of essentials from the scope of an important part of commodity taxation. When so large a measure of effort is necessary to increase the *proportion* of tax revenues to national income, which has remained so obstinately static, one cannot escape the logic of the fact that the mass of consumption is by the mass of the people. Unless this bears a somewhat higher burden of taxation, no perceptible change in the stubborn ratio of public revenues to national income can be achieved. We wish to endorse, in particular, the recommendation of the Taxation Enquiry Commission to the effect that Article 286(3) of the Constitution may be amended to remove the present exemption of articles "essential to the life of the community" from the scope of State sales taxation. Simultaneously, measures to secure a practical ceiling on incomes through a steepening of taxes on income and wealth, including estate duties, become an imperative necessity. A revision of the price policy of important public enterprises with a view to obtaining a larger surplus as a contribution to the resources for economic development is similarly required. Besides, the general increase in rates of direct and indirect taxation that will be involved in the considerable stepping up of tax effort will be part of the challenge to administrative efficiency that the big development effort for putting through the next Plan entails.

10. The extent to which recourse may be had to deficit financing will determine the magnitude of the efforts through alternative means of mobilising resources for the financing of the Plan. In an economy in which planned development is being undertaken a part of the expenditure in planned development is being currently or within a short time reflected in increase in current production. There is, therefore, an increment in total production against which it is possible to increase money supply within the community. No close and invariable relation as to the desirable measure of increase in money supply with increase in production can, however, be postulated, especially in an economy which is neither fully integrated nor fully monetised as the Indian. Even so it is reasonable to state that with a constantly increasing level of national income an addition to money supply may not only not have inflationary consequences, but may be required to prevent a decline in prices which may lead to distress and distortions in the economy.

11. Deficit financing is thus not necessarily always dangerous ; it is the timing and magnitude of it that is of crucial importance. Deficit financing undertaken while the economy is already under inflationary pressure, or in such volume as will rapidly generate inflationary effects, has to be avoided. It appears to us that at the present there is no general inflationary pressure in the economy. We do not, therefore, see any danger in undertaking deficit financing in a limited measure at the beginning of the second five year plan period. For a year or two, deficit financing at a rate of Rs. 200 crores or so is safe—and even necessary. But, continuous deficit financing on this scale for a number of years is certain to generate inflationary pressures. A bolder plan with an emphasis on employment and heavy industry has inevitably a large inflation potential. We should like at this stage to caution against any tendency to undue optimism as regards the extent to which the use of deficit financing may avoid the awkward necessity of a deliberate endeavour to mobilise resources, as a result of the apparently

large budgetary deficits of recent years not having produced adverse consequences. Firstly, the deficits have not been as large as originally envisaged in budget proposals. Secondly, there has been an unexpected—if not entirely adventitious—increase in food-grains production. It is impossible to forecast the total national and international economic situation at this stage. We cannot therefore say with certainty that the situation will remain equally favourable throughout the plan period. The undertaking of deficit financing may itself change the situation unless counteracted by a rapid pace of development or by international conditions. We feel it necessary to suggest, therefore, that the strictest watch be kept on the situation. Any indication that inflationary pressures are developing must be met by timely and suitable action to keep it under check. We do not suggest that the plan should be changed immediately some inflationary signs are observed. The immediate step would be to take appropriate action to keep inflation in check and have elaborate plans ready for the event of a further increase in inflationary pressure. These plans may involve imposition of financial and physical controls, and if there is no readiness to face this possibility, deficit financing would not be safe. It would be equally necessary at the same time to re-examine the financial plan to see whether it is not possible to increase the resources available to government in other directions. On the whole, we do not recommend deficit financing of a larger extent than that indicated by the figure of Rs. 1,000 crores for five years and are of opinion that the situation in this regard should be kept under watch and should in any case be re-examined at the end of the second year or at the midpoint of the plan period.

12. The pattern of investments in the Second Plan indicates that a very considerable increase in imports of capital equipment and machinery will be necessary. This will undoubtedly entail a heavy strain on the balance of payments. Such estimates as are available of the foreign exchange financing of the Plan indicate that foreign assistance to the tune of over Rs. 600 crores will be required for the plan period, if a draft on foreign reserves is to be avoided. In our opinion, foreign reserves should be kept for unforeseen emergencies or as a safeguard against miscarriage of calculations and not committed to any significant extent in respect of planned expenditure.

II. STRUCTURE AND CONTENT

13. We have considered the size of the Plan in the previous section and indicated the measure of the effort for mobilising the resources required for the purpose. It is now necessary to examine the Plan from the point of view of its structure, the pattern of investment it contemplates, the effect it will have on employment, and the kind of relationship that it postulates between different sectors of the economy for the purpose of securing internal consistency.

14. Broadly speaking, it is the intention of the Plan to maximise employment and capital formation, and increase consumption, consistently with the magnitude of the suggested overall increase in national income by 25 per cent over the five-year period. Obviously, we want to make the greatest possible impression on unemployment and under-employment in the country,

but the employment provided must be such as not only to lead to an increase in national income by 25 per cent, but also to see that the increase is distributed in such direction as to lead to the desired quantum of increase in both capital goods and in consumption goods. Without the former, there can be no real increase in productivity or in the capacity for further and accelerated growth in the economy ; without the latter, there will be no immediate change in the level of living, no incentive or enthusiasm for popular effort, and every danger of the emergence of inflation and a consequent breakdown of the programme for development. We must therefore make an appropriate division between saving and consumption from the additional incomes generated by the Plan. Having done this we have to see that the investment outlay not only leads to the desired increase in consumption goods and services, but also to such increases in capital goods and services as will not only be consistent with the needs of consumption goods industries but also lead to an increase in productivity, facilitate the growth of capital equipment from domestic resources, and make for an accelerated growth in the output of consumption goods in subsequent Plan periods.

15. Let us first take up the question of investment. The tentative Plan-Frame contemplates an investment outlay of Rs. 5,600 crores during the five-year period together with current expenditure by Government of Rs. 900 crores on development services, the latter figure being exclusive of the level of development expenditure expected to be reached at the end of the first Plan period. The broad pattern of the proposed investment outlay of Rs. 5,600 crores is visualised as under :—

Allocation of Net Investment in the Economy

	<i>Rupees crores</i>	<i>Percentage of total</i>
1. Agriculture and Community Development (including irrigation and flood control)	950	17·1
2. Power	500	8·9
3. Transport and Communications	900	16·1
4. Industries and Mining (incl. small-scale)	1400	25·0
5. Construction (houses, shops, schools, hospitals, etc.)	1350	24·0
6. Stocks and Miscellaneous	500	8·9
TOTAL	5600	100·0

16. We are generally in agreement with the investment pattern outlined in the preceding table. We are obviously not in a position to comment on the technical accuracy of the actual figures given under each head of investment ; in fact, this cannot be determined except through a process of detailed examination at the technical level of the individual projects included in the investment outlay and we presume this will be done by the Planning Commission during the coming months. But the greater weight that the investment pattern assigns to industry and mining has our full approval.

17. In saying this, however, we do not want to underestimate the importance of agriculture in our economy. Agriculture will for long remain the most important economic activity of our people ; and without an adequate supply of food and raw materials, there can be no economic development. But there is no denying the fact that the first Plan has laid a solid base for the development of agriculture, and while a part of the large increase that has taken place in agricultural production is due to favourable weather, a part is certainly due to the creation of better facilities for increasing production. The Second Plan continues the process and is designed further to strengthen the agricultural base of the economy. But the very development of agriculture beyond a certain stage requires the development of non-agricultural activities, specially of industry, not only for providing markets for the increased agricultural produce but also for providing the supplies of industrial consumer goods which alone can provide the incentive for increased agricultural production. Moreover, the expansion of agriculture needs more equipment and industrial goods like fertilisers, for which larger investments are required in the industrial sector. We would therefore emphasise that the greater importance proposed to be attached to industry in the Second Plan is not in opposition to agriculture but is only a complement to the same designed not only to bring about a balanced growth of the economy but also to facilitate the expansion of agriculture and, even more important, reduce the surplus population on land and raise the level of living of those left in agriculture. The economy needs both an agricultural base and an industrial base ; these are not in conflict but are really complementary, and, beyond a certain initial stage of development, the growth of one conditions and facilitates the growth of the other. Hence the greater priority assigned to agriculture in the First Plan and that proposed to be assigned to industry in the Second Plan. All the same, we would underline the importance of maintaining and expanding agricultural production in the Second Plan period. There should be no feeling of complacency on the agricultural front because of the currently easy position in regard to foodgrains. Every effort must be made to step up the production of food-grains and raw materials, and a suitable proportion of the investment contemplated in the Second Plan, especially in the field of heavy industry, must be linked with this objective ; and there should also be built up during the period sufficient reserves of foodgrains and essential raw materials that will give stability to the economy and prevent sudden falls in the pace of its general economic development.

18. We note that the tentative plan-frame gives high priority to what are known as heavy industries and that consumer goods do not figure prominently in the investment pattern. The explanation for this lies predominantly in the fact that a high capital-output ratio is assumed in the case of both factory consumer goods and consumer goods emerging from the small-scale and village industries sector. In the case of factory consumer goods, the full utilisation of excess capacity is expected to lead to a considerable increase in the volume of output without any significant increase in the volume of fixed capital ; in the case of non-factory consumer goods, labour is more important than capital equipment and the capital-output ratio is expected to be much more favourable than in the case of the organised industrial sector. It may be added that the investment in consumption goods industries, both factory and non-factory, though small in amount as compared to that in the so-called heavy industries, is nevertheless

designed to bring about an increase in output of about 25% (20% in factory consumption goods and 33% in non-factory consumption goods) during the Plan period. A great deal of special effort will be required to achieve this objective, especially in the field of organisation ; and this is not going to be easy. We shall revert to this subject before the end of this section.

19. The important place assigned to power, transport and communications is also a part of the same scheme for bringing about not only a balanced development of the economy but also to endow it with the capacity for self-propelling and accelerated growth. Economic overheads involve heavy investment ; but they yield rich dividends in the form of making possible an all-round expansion of the economy ; and there can be no denying the need for assigning an important place to these heads in the investment programme contemplated for Second Plan.

20. The Plan also assigns a great deal of weight to construction, the bulk of which is really of the nature of investment in fixed capital for economic and social overheads and which must be taken in conjunction with the contemplated increase in the annual expenditure on social and allied developmental services of about Rs. 100 crores in the Second Plan period as compared to the level expected to be reached in the last year of the First Plan period. Social overheads have a dual purpose ; on the one hand, they represent investment in human capital and promote an increase in productivity ; on the other hand, they represent an end-product in themselves and bring about a direct addition to consumption services and thereby promote a rise in the level of living, which is after all the final objective of planning. Hence it is that there is always a special pressure exerted for stepping up the level of expenditure on social overheads in terms of both investment outlay and current expenditure. There is also the further complication in the case of our country that the basic levels of remuneration of many of those engaged in the supply of social overhead services are below reasonable standards and there is therefore strong pressure for using available funds for raising these levels rather than use them for expanding the supplies of these services. There is no simple answer to the questions raised by this problem. All that we can say is that a certain minimum level of expenditure on social overheads is an essential condition for economic development, while further expansion of this expenditure is a concomitant of the growth of this development. We may express the same thing in a different way by saying that both investment and expenditure on social services must become increasingly important with every successive Plan period. For the purposes of the Second Plan period, we are satisfied that the level assigned to this category in the investment programme is as far as we can go, taking into account the resources available and the need for building up our economic overheads, though we cannot certainly express ourselves as satisfied with the position in absolute terms. That is really no more than saying that the economic development contemplated in the Second Plan period is no more than a second stage in a long journey the end of which will be reached only after many more Plan periods. There is no point in acting as if we have reached the goal before we have gone even half-way towards it.

21. It will be noticed that the pattern of investment outlay set out in this section assigns an important place to stocks. We have already explained the importance of holding enough stocks of foodgrains and essential raw materials in order to facilitate the smooth functioning

of the development programme and provide some insurance against the risks due to possible failures of the monsoon or other interruptions in supplies. We would only urge in this context the importance of undertaking and completing as quickly as possible the scheme for licensed warehouses recommended by the Rural Credit Survey Committee.

22. In considering the structure of the Second Plan, it is even more important to consider its employment aspect. It needs no saying that our major problem is one of the unemployment and under-employment. In the urban areas, besides the several lakhs of persons seeking employment through the employment exchanges, there are others who have not registered themselves ; and in addition, there is a considerable volume of under-employment and disguised unemployment prevalent among those who are shown as occupied in small industries, trades, and miscellaneous services. In the rural areas, the findings of the Agricultural Labour Enquiry reveal the presence of a considerable measure of both unemployment and under-employment among agricultural labourers ; the same is also true of rural artisans and workers engaged in miscellaneous services. There is also the undoubted presence of under-employment and disguised unemployment revealed by the vast numbers of the so-called earning dependents who, by definition, do not earn enough even to sustain their own maintenance. Then there are the cultivators of small and uneconomic holdings among whom there is a great deal of disguised unemployment. Among the estimates that have been placed before us, the lowest shows that leaving out the problem of disguised unemployment and under-employment among the cultivators, about 34 lakhs of people are wholly unemployed and there is a volume of under-employment equivalent to 49 lakhs of man years ; the major portion of the incidence of both being found in the rural areas. In addition to all this, there is the problem of employment created by the annual additions to the labour force estimated at about 1·8 million resulting from the normal growth of the population. The problem is indeed of enormous dimensions ; and it would be too much to expect that it can all be solved within the Second Plan period. All the same, an attempt has to be made ; and it has to be as big as our resources can permit. The tentative Plan-frame visualises that about 10 to 12 million people will find employment during the Plan period, the investment pattern being specially designed to make this possible. It must be pointed out that the figure mentioned above does not refer to jobs as such in the sense of work on wages or salaries ; a part will undoubtedly be jobs of this type ; but a part will be in the form of employment opportunities that will enable so many more self-employing workers to obtain their livelihood. Even as it is, the number of self-employing workers is much larger than that of hired workers ; and the position is not likely to undergo a material change during the Second Plan period.

23. It is expected that a large number of workers will be employed in construction, which includes constructional activity of various kinds, including those required for both economic and social overheads. There is also some likelihood of increase in the number of workers in mining and in the organised as well as the hand sector of industry. Employment opportunities particularly for self-employed workers, are expected to grow in the sectors of trade and miscellaneous services largely as a result of the increase in economic activity resulting from the Plan, while paid employment for hired workers will increase largely in the sphere of public

administration and social services. Incidentally, this is also expected to eliminate the growing unemployment among the educated classes in the country.

24. The pattern of employment opportunities visualised above rests to a large extent on the ability of the system to organise the labour force in the country, while the achievement of the targets set forth in regard to industrial consumption goods rests upon the ability to organise the sector of small industries and hand trades in the country. Both these involve large problems of organisation and unless these are successfully tackled, it would be difficult to implement the Plan either in respect of its employment or its investment programme. Too much emphasis cannot therefore be laid on the task of reorganisation, which is practically the king-pin of the success of the Plan ; and much more attention needs to be paid to this aspect of planning than has been done so far.

25. The other important problem is one of organising the supply of labour for whom jobs are to be found in the Second Plan period. Theoretically, the existence of a large volume of unemployment and the substantial additions that are made to the labour force every year by the growth of population should perhaps make such organisation unnecessary. In actual fact, however, labour in India has a great deal of lack of mobility as between rural and urban areas, and as between different States. It also suffers a great deal from lack of training either in skills or even in disciplined or regular hours of work. There is also the further fact, so glaringly revealed by the finding of the Agricultural Labour Enquiry and the National Sample Survey rounds, that large sections of the working force in rural areas obtain either wages or incomes much below the national average ; and social justice demands that this class, which in a way is the most exploited class in the country, is given the first chance to improve its condition when new jobs are being created in the country. Moreover, the incidence of distribution of this class is unevenly spread over different parts of the country and social justice demands that special attention is directed to what may be called the distressed areas in the country as distinguished from other areas which are better off, though in absolute terms their condition is no matter for satisfaction either. In view of these facts, a suggestion has been made for the organisation of a National Labour Force, recruited from the classes which at present have either little or no income and particularly from those areas where the incidence of economic distress is comparatively high.

26. This proposal might be likened in its effect to that of the continuous recruitment in the army during war. The agricultural labourers, small farmers, etc., are not employed all round the year. The experience of war has shown that provided full time employment at reasonable rates is available comparatively large numbers of adult males from such areas can be released full time and are fully mobile for employment. If it is possible to make use of such a labour corps in particular aspect of the general programme of development a number of advantages may arise. Firstly, it will withdraw significant numbers from labour in the countryside and thus relieve the unemployment and under-employment situation in many parts. Secondly, it will create a mobile force which can, as in the army, be fully trained in a variety

of skills required for purposes of the development plan. This training may have an important civic aspect also. The labour force may form a revolving body from which suitable recruits can be obtained for new and growing scattered townships and centres of industrial and other activity. We suggest a careful examination of the proposal to organise a National Labour Force.

27. We would emphasise special attention being paid in planning of all works programmes to areas which are backward in any way, *e.g.*, where communications are poor, climatic or other conditions unfavourable, the economy largely unmonetised, agriculture insecure, the standard of living low or which are inhabited by aborigines or other similar classes. These areas not only require the works programmes but also specially need the employment opportunities offered by them. We take it that when this attempt is made at deliberately opening or developing the backward tracts the economic, cultural or other adverse effects of the process will be guarded against in advance.

28. It is also important to provide a positive policy for the stimulation of additional employment opportunities for self-employed persons, particularly in view of the fact that the major portion of the additional employment visualised in the Plan is in this field. In this connection, we would recommend the development of a large number of small towns widely distributed over different parts of the country into industrial townships with planned provision for small-scale and light industries. Unlike the townships for refugees that had been set up without due care for their employment potential, the towns proposed for development should be selected after the most careful enquiry undertaken by competent persons, in each region or locality and after most careful examination of the raw materials, markets, and other relevant factors in the region. There was a good analogy for this in the trading estates that had been set up in England in the post-depression period, and they could well be set up in the first instance in the community project areas and National Extension Service blocks. Thus, a new link could be established between the rural areas and the urban areas, and what is called urbanisation would not only increase employment in the country but also add to its regional spread, promote regional self-sufficiency, encourage a fruitful inter-change between rural and semi-urban areas, and take economic development into the regions which need it the most, *viz.*, rural India. It must be emphasised, however, that these industrial townships in rural India will have to be planned from below and cannot come from the top. Planning of small scale industries, consumption goods industries, and processing industries involves the intelligent cooperation and participation of many thousands of people and can only be undertaken at the district level; the Centre can help with finance and technical aid, but the initiative and the planning must come from the people of the districts and regions concerned in the country.

29. Finally, there is the question of the relation between small-scale and large-scale industries in the field of consumption goods. As we have already pointed out, every attempt should be made to bring about the fullest possible utilisation of existing capacity in the factory consumption goods industries but we do not contemplate, for the Second Plan period

at any rate, any significant increase in their installed capacity. This is not only because we want to concentrate our scarce resources of foreign exchange and essential materials on the setting up and expansion of the heavy industries and economic overheads ; but also because we want to provide more employment opportunities for those who are already engaged in the small-scale and cottage industries and find employment for the new additions that are being made to the labour force every year. Hence the emphasis on small-scale and cottage industries in the Second Plan.

30. The fact remains, however, that these hand industries are technically inferior and cannot obviously face unaided the competition of factory industries. At the same time, the needs of development with its accent on increased productivity cannot be reconciled with a continuance of the present inferior technical level of the existing hand trades. It is therefore necessary to have a Common Production Programme that will provide a secure market for the products of these industries and at the same time provide for gradual improvement of techniques and skills among their workers. Details of such a programme will need careful working out, but it can be stated at this stage that there will have to be organised on a regional and a national scale co-operative and other forms of organization for the supply of raw materials and finance and for the marketing of finished products of the workers engaged in hand industries. A beginning will also have to be made in setting up a special sales organisation for these industries. At the same time, every attempt will have to be made to set up increasingly efficient norms of work, and facilities and incentives provided for reaching these norms. All these imply a tremendous challenge to the organisational talent of the country ; and on the degree of success with which this challenge is met will depend the success of the whole scheme of a socialistic pattern of society, with employment for all and decentralisation and wide distribution of both economic activity and economic advantages. We cannot emphasise too strongly the important, almost the crucial, place which this occupies in the Second Plan. A successful solution of this problem together with the setting up of the economic and social overheads including heavy industries envisaged in the Plan will make possible much faster and larger development in the next Plan period.

31. To sum up, the structure of the Plan that is visualised for the Second Plan period provides for increased capital formation and also for increased consumption. It emphasises the importance of economic overheads and heavy industries in creating the base for larger and faster economic development in subsequent years. It underlines the need for looking after employment and sets out a pattern of decentralised and small-scale economic activity that will not only deal with the problem of unemployment and of growing numbers but also with that of creating a socialistic pattern of society that can function within a democratic set-up and reconcile development and increased productivity with individual initiative and a large and fair field for all small units of economic activity. The structure that we have outlined cannot come by itself. It needs organisation for being brought into existence ; and in it lies a challenge to the organisational talent of our people.

III. POLICY AND INSTITUTIONAL IMPLICATIONS

32. In this part of the memorandum we consider the regulatory and institutional set-up required to implement the Plan. We assume as basic the social philosophy appropriate to Indian federal democracy progressing towards a socialistic pattern of society. In terms of economic organization and activity we interpret this as denoting the following salient characteristics. A society composed chiefly of small decentralised units of economic activity in which the increase in scale required in any activity is brought about chiefly through mutual co-operation, horizontal and vertical, and in which centralization and very large-scale operation are resorted to only to the extent necessary to derive appropriate advantage from modern technology. In such a society the role of the State assumes the following forms in the main : (i) Central planning, direction and conduct of economic activity to the extent necessary for rapid economic development and increase of welfare ; (ii) State assistance and participation in the formation and conduct of cooperative units ; and (iii) State action to eliminate or to counter the effect of the continuance of privilege or the exercise of monopoly power.

33. In considering the exercise of state authority we start with the assumption of a continuance of the existing forms of regulation and control of economic activity. In the context of this report, the most important of these are capital issue control, the regulation of establishment, location and operation of certain types of industrial units, control over the imports of capital goods and consumer goods, control over the allocation of products like cement and steel, control over the exports of selected commodities. The only recommendation we would make in relation to existing regulations is that the fullest coordinated use be made of them for a proper and detailed implementation of the Plan. It is also assumed that legislation will shortly be enacted which will more adequately regulate the activities of public companies, and in particular to deal with the problem of managing agency and the concentration of economic power that it creates in the private sector.

34. We do not suggest any radical departure from the Industrial Policy Declaration of 1948. In fact, the sphere of State activity indicated in that resolution will be more fully covered as a result of investment in this Plan. It may also be found necessary, during the plan period to include within the public sector some activities closely related to the present declared scope, such as, basic minerals. The proper organisation of coal production in the country and conservation and utilisation of coal resources may also require including that industry in the public sector. Similarly, the special importance that will now be attached to production of small establishments will make it necessary to include not only the generation but also the distribution of electric power fully within the public sector. While we do not recommend any significant extension of the public sector beyond the terms of policy accepted by Government, we must make it clear that there is no objection in principle to such extension. In fact, the limiting factor is one of being able to cope with the administrative burden that would result from such extension. The cost of compensation may also have to be considered. If, however, during the course of the Plan period, circumstances become either more favourable from the administrative point of view or if it is found that opportunities for monopolistic or quasi-monopolistic exploitation are increasing in the private sector, there should be no objection to a further extension of the public sector. State trading in exports of jute, for example, was

recommended many years ago by a representative committee consisting of administrators, businessmen, etc. In view of the peculiar position of these exports and the methods of training in them, it is worth examining again whether State trading in jute should not be undertaken.

35. We are not in a position to make specific recommendations at this stage, but we would certainly emphasise the need for Government to examine each possibility of extension of the public sector in any important activity where, because of the policy under the plan or other factors, a group of producers or traders are reaping special advantages.

36. While we do not suggest in the near future any general extension of the public sector, it would, certainly, be necessary for implementing the plan to extend the scope of the regulatory regime in particular directions. Thus confining to hand industries all increases in consumption goods during the Second Plan period will make it necessary to extend the operation of licensing legislation to include even processing activities. The best way of dealing with the situation would be for all State Governments to bring within licensing and regulatory legislation such establishments carrying out the processing and preparation of primary products and the production of consumer goods as are not covered by the existing Regulation of Industries Act.

37. A number of other regulations on consumption goods industries will follow from the common production plan for machine and hand industries in particular spheres. The division of market between machine and hand industry is sought to be maintained today in the case of cloth production by a system of excises and subsidies on the one hand and reservation of fields on the other. The principle of reservation may not be so easily applicable to all industries and in their case a comparatively stable relation between prices of hand and machine products could be maintained only through excises and subsidies. There may be doubts whether these purely fiscal measures will prove successful ; and if these doubts were justified, other measures may be required to implement effectively a common production programme. In any case, the organisation of increased production through hand industry will require considerable effort in distribution of supplies of technical and financial assistance to the dispersed producers and the collection and sale of their product. This would be largely done through co-operatives and as problems encountered will in part, be similar to those dealt with by the Rural Credit Survey Committee in the case of agricultural production, the same expedients could be used in this case as well. In relation to technical guidance, and purchase and sale, the problems of cottage industry may, however, be different and more difficult. Bringing about increased production through this agency will therefore require as we have already mentioned, very considerable organisational effort in the plan period. Any failure in this effort will create a difficult situation. On the one hand, there may be shortage of production by hand industry through inability of co-operatives to organise production or to carry out sales of products and their distribution. And, on the other, there may be profiteering by producers and traders in that situation. If such a situation arises, it may be necessary for the State to intervene and to consider the possibility of State trading of products. In the initial stages of the organisation of this production it may, however, be wiser not to undertake State trading in this sphere.

38. As the spheres common to machine and hand industry will cover a large number of consumption goods in general use, the prices and supplies of goods over this large sphere will have to be constantly under State observation and regulation. In a number of important producers' goods, such as cement and steel, the existing allocation controls will continue, and price controls could be imposed if necessary. This leaves mainly the prices of agricultural goods for consideration. In the present context, the stability of agricultural prices has special importance. Already Government have announced their intention and readiness to put a floor to prices of some agricultural products. Government's ability to do this effectively depends on their having a operative system which extends to all parts of the country. From this point of view, an early implementation of the recommendations of the Rural Credit Survey Committee regarding warehousing, processing and marketing of agricultural produce is of the utmost importance. It is only the setting up of the warehouses, etc., recommended by the Committee that will put the State in a position to meet emergencies. We recommended that the warehousing system should be used by the State for purchase and sales of buffer stocks of agricultural commodities not only for the purpose of dealing with any sharp falls in agricultural prices such as we are witnessing today but also with the objective of preventing any sharp seasonal fall or rise in prices. Need for action in this regard may arise either in all commodities all over the country or only in an individual important commodity in particular regions. Such a system of buffer stocks will not only serve the limited purpose of evening out seasonal fluctuations but would come in useful and serve even larger purposes if the occasion arises. For example, the system could be put to use in case of an adverse monsoon or a sharp inflationary rise in prices.

39. The Government of India has taken an important policy decision recently by its announcement regarding creation of a State Bank of India through nationalisation of the Imperial Bank and certain other State associated banks. We welcome this decision and strongly recommend its early implementation in full. It is of the utmost importance to bring into existence as early as possible a State Bank of India operating over the whole of the country at the level envisaged by the Rural Credit Survey Committee. The regulation of activities in the sphere of banking and through banks may have considerable importance in the planning effort. For this purpose early implementation of the policy announced recently is an important and essential step forward.

40. The inevitably increased importance of the public sector in economic activity makes the problem of increasing its efficiency of vital importance to the success of planned development. Though it is not correct to say that the efficiency of the public sector today is necessarily below that of the private sector, it is clear that in itself, it is not too high and further that it could with considerable advantage be greatly increased. No definite pattern of organisation of units in the public sector has yet been evolved in India. There is not enough experience in the matter, neither has any particular type shown definite success. We have no bias in favour of any particular type of organisation and feel that considerable research and experimentation on the operation of different types of units in the public sector will be extremely worthwhile. The experimentation need not be confined to purely public organisations but may well be

extended to public-*cum*-private organisations where the State holds full ultimate control and uses the private agency as a partner and as the agency of management. The general efficiency of administration is equally important consideration which requires equal attention.

41. We may draw attention to a danger that is inherent in the type of mixed economy we have *viz.*, unless adequate care is taken the slowest ship may set the pace of the convoy and inefficient units may get undue protection. The question of incentives and disincentives should be, therefore, very carefully studied and adequate and effective measures taken.

42. The State partnered co-operative seems now to be generally accepted as the most important type of organisation in the future of economic development in India. Observation of its development, adaptation and success for various types of activities and in various contexts is, therefore, of great importance.

43. One of the gravest obstacles to undertaking a more ambitious programme of development in most directions today is the general state of unpreparedness of our society for the effort in most directions. The most important feature of this are lack of trained personnel and of suitable organisations. The first lack is felt in all aspects of development of social welfare or related activities. Teachers, doctors, technicians of all kinds are found to be in short supply the moment any large expansion is contemplated. But even more important is the organizational backwardness. This is experienced in every sphere. It is felt in the administrative structure, its efficiency and its capacity to carry out additional responsibilities ; it is experienced in local governmental authorities ; it is seen in the lack of established and effective pattern for conduct of economic activity in the public sector. These difficulties are patent today in attempted development along established lines. They are felt all the more keenly when orientation of the economy, on the now agreed lines of decentralised self-employment or co-operative activity is attempted. The manifold advantages of such an organisation can be reaped only when the large work it involves by way of distribution of supplies and collection of product, of storage and finance, of technical guidance and administrative supervision is efficiently organized and carried out. The creation of such organisation is an immense national task without whose accomplishment the proper development of agriculture and rural industry in particular will be well-nigh impossible. One of the reasons why in our opinion we cannot aim higher today is this lack in many directions. One of the most important tasks of the next five year plan must, therefore, be to remedy this grave handicap and defect. The energies of government and of all constructive workers in the country must be turned in this direction so that at the end of the plan period the economy and the society will be in a position to take a much greater step forward and to achieve a rate of development which would not only be bold but spectacular.

44. We now turn to consideration of policies which are not only important for the execution of the Plan but are also important as indicating the determination of the State to progress towards the socialistic pattern. The first set of policy decisions to be considered in

this regard are those relating to land reform. The content of this programme has by now been fairly clearly determined. It consists mainly of four measures ; consolidation of holdings which has an important bearing on productive efficiency in agriculture, operation of the ceiling which makes available land for redistribution to landless labourers without unduly lowering the size of any unit, the floor to holdings which makes it impossible for units smaller than of certain size to be cultivated as independent farming units, and co-operative farming which would bring in all such uneconomic units into farms large enough to be operated efficiently. The content of the land reform programme has already been announced and has raised wide expectations throughout the country. The announcement has also had some adverse effects on the situation through the action of landholders, through evictions and the like, to safeguard their interests in anticipation of the policy. It appears to us of the most urgent importance for the State Governments all over the country to recognise certain basic principles of action in regard to all the four constituents of this programme, to formulate definite policies of action at as early a stage as possible and to implement them. The best course as well as the most logical, of course, is to bring the whole programme into operation simultaneously. The operation of the floor raises, however, certain difficulties, apart from the practicability of forming quickly an enormous number of co-operative farming societies. The difficulties are related to the extent of employment that is available in the economy. Similar difficulties however do not attach to that part of the programme that relates to the imposition of a ceiling on holdings and the consolidation of scattered holdings. We recommend therefore that immediate steps be taken to impose a ceiling on agricultural holdings and redistribute the land thus released to landless labourers. We also suggest that action be taken in regard to consolidation of holdings without delay. As early as possible when enough experience has been gained in the country-side regarding operation of other co-operative effort and when adequate employment has been generated, the other two features of the land reform programme should be put into operation.

45. The operation of the ceiling and redistribution of land to the landless will bring about considerable lessening of inequality in rural society. The acceptance of the idea of a ceiling on land must lead, in our opinion, logically to the acceptance of the parallel concept of a ceiling on all personal incomes for the urban and industrial sectors. This has been already mentioned by the Taxation Enquiry Commission and we feel it vital that a policy announcement regarding this be made in the Second Five Year Plan of Government. Two other recommendations of the Taxation Enquiry Commission we would endorse for immediate action towards lessening inequalities. These are : (a) a steepening of the estate duties and (b) imposition of the Capital Gains tax. We expect an appreciation of the values of all kinds of property because of the operation of a plan of development and feel it necessary that the above steps be taken at the beginning of the period of a bold plan. It may, further, be useful to conduct enquiries into increase of land values in urban areas and the spread in levels of salaries. In case of the latter, we would recommend the inquiry not to be confined to salaries of officials but to embrace within it salaries (and total spending power) of individuals in private business also.

46. Lessening of inequality is a two-fold process. One of its aspects is the lowering of unduly large incomes. An equally important or, perhaps in the long run the more important, aspect is that of increasing or making more secure the incomes of the poorest. In this connection, we would welcome greater progress, wherever possible, in the standardisation of wages and fuller implementation of the Minimum Wages legislation in the country, due regard being paid to the effect of wage increases on employment. Both should reduce the total range of differentials in wage payment. It is not possible at this stage to recommend any general social security schemes which would have wide application, or would materially lessen insecurity of incomes. We would, however, recommend exploration of the possibilities of the State offering life insurance schemes widespread throughout the country. In the absence of measures of social security as such, we must look to the fullest extension of social service expenditure for doing something in this behalf. However, if this expenditure is really to result in lessening inequalities and in materially improving the conditions of the most disadvantaged, special care must be taken by the State authorities to see that it is deliberately routed and administered in such a manner that its benefit, in the largest measures, go to the poorest, the most disadvantaged and the most insecure classes.

47. We have dealt so far with some of the policy implications of the size and structure of the Plan, as prescribed in the "Frame" for the Second Plan period. What we would emphasize in conclusion is that unless these policy implications are duly considered, and rapid and effective action taken thereon, the chances of successfully implementing either the size or structure of the proposed Plan will be seriously jeopardised. Even if the different parts of the Plan are fairly well balanced and the size of the effort involved is not beyond the country's capacity, it would be wrong to entertain optimistic expectations merely on the technical soundness of the targets proposed. Behind these targets, there are, initially major assumptions regarding the capacity of the country and especially of Government to put through the programme as proposed. For these assumptions to materialise, a big organisational effort will be called for. Planning does not mean merely a programme of large investment, especially not when the objective is not merely an increase in output but also the creation of a socialistic pattern of society. It is only when there is a firm legislative and administrative base that it is possible to think in terms of doubling the rate of progress in the Second Plan period, of increasing capital formation, of raising levels of living, and providing the machinery for accelerated development in the future. We cannot therefore emphasize too strongly the importance of facing up boldly and without hesitation the legislative and administrative implications of a bigger and a bolder plan. The Second Five Year Plan is a challenge to the nation. It requires effort and substantial efforts at that and on a large and organized scale. It requires austerity and restraint on the part not only of those whose incomes are high but even of those whose incomes are not so high. What is required is a national effort and a national effort can be forthcoming only if it is clearly visible to the people that there will emerge from it a new and desired type of society. Hence it is that we lay so much emphasis on the policy implications of the Plan-Frame that has been placed before us.

A NOTE OF DISSENT
on
THE MEMORANDUM OF
THE PANEL OF ECONOMISTS

by

PROF. B. R. SHENOY

April 22, 1955

THE SECOND FIVE YEAR PLAN
A NOTE OF DISSENT ON THE BASIC CONSIDERATIONS
RELATING TO THE PLAN FRAME

I am unable to subscribe wholly to the views of my colleagues on (1) the Size of the Plan, (2) Deficit Financing as a means of raising real resources for the Plan, and (3) certain Policy and Institutional Implications of the Plan Frame. I may set out, briefly, my views on these subjects.

I. SIZE OF THE PLAN

2. The Plan Frame is built on the basis of a 25 to 27 per cent increase in the national income in five years. The targets of production in the several sectors, which correspond to this rise in income, would require an increase in net investment (or savings) from 6.75 per cent of the national income in 1955-56 to 10.95 per cent in 1960-61. This relationship yielded a figure of a total net investment of Rs. 5,600 crores in five years ; Rs. 3,400 crores of this expenditure would be in the public sector and Rs. 2,200 crores in the private sector.

3. The total developmental outlay corresponding to a net investment of Rs. 3,400 crores in the public sector would be Rs. 4,300 crores. Adding to this an expenditure of Rs. 4,500 crores outside the Plan, the total outlay of the Centre and the States would be Rs. 8,800 crores in five years. The Plan Frame proceeds to finance this expenditure in the following manner :—

	(Crores of Rupees)
1. Revenue and other current Receipts at the current rate of 8.5% of the national income	5,200
2. Railway surplus	200
3. Loans and Small savings	1,000
4. Foreign assistance	400
5. Additional taxation, compulsory savings, and higher profits from government enterprises	800—1,000
6. Deficit Financing	1,000—1,200
TOTAL	8,800

4. If we separate from the above the total developmental outlay on the Plan (Rs. 4,300 crores) the resources for the public sector of the Plan would be derived probably as under :—

	(Crores of Rupees)
1. Loans and Small Savings	1,000
2. Foreign assistance	400
3. Revenue Surplus on the basis of Revenue Receipts at the current rate of 8.5% of the national income	900
4. Additional taxation, compulsory savings, and higher profits from government enterprises	800—1,000
5. Deficit financing	1,000—1,200
TOTAL	4,300

5. My colleagues have stated that the increase in investment required for the Plan Frame is "fairly ambitious" and they "stress that the effort involved in this increase is considerable, and will strain the economy a very great deal" (para. 7). Earlier, however, they have observed that "given a determined bid to put forth a maximum measure of effort", the national income objective, which this rate of increase in investment would yield, "can be attained" (para. 4). This, to my mind, does not adequately indicate the risks which an investment attempt on this scale may involve (unless foreign assistance becomes available in an incomparably larger measure than envisaged in the Plan Frame). To force a pace of development in excess of the capacity of the available real resources must necessarily involve uncontrolled inflation. In a democratic community where the masses of the people live close to the margin of subsistence, uncontrolled inflation may prove to be explosive* and might undermine the existing order of society. In such a background one cannot subsidise communism better than through inflationary deficit financing. Probably the greatest enemy of the Kuomintang in China was the printing press. Alternatively, if appropriate "physical measures", familiar to a communist economy, were adopted (in an effort to prevent inflation) we would be writing off, gradually or rapidly, depending upon the exigencies, of the Plan, individual liberty and democratic institutions by administrative or legislative action. We should be therefore, forewarned of the dangers of an over-ambitious Plan. A wide gap between targets and achievements as has been hitherto the case with the first plan was a third possibility. This depended, however upon the rigour with which we may resist temptations for inflationary finance, and the pressure to encroach upon the liberty of the individual. Such resistance may prove to be difficult under the natural enthusiasm to reach the targets. It may entail, moreover, some wastage incidental to a revision (to match the available resources) of a plan in progress which had been based on a larger blue print.

6. The Plan Frame begins by prescribing the increase in national income which the Plan would set to achieve. Its authors, then, proceed to find the real resources necessary for the corresponding rate of investment. In making the national budget it is permissible to determine expenditure first and, then, raise equivalent funds, as the Receipts of the State form but a part of the total national income. The budget can grow by drawing on the rest. This procedure cannot be applied to the budget of a Plan, which embraces the entire monetised saving and investment activity of the nation. Here the availability of real resources must be assessed first and the investment plan must match it. In a communist economy the volume of savings may be made to vary within fair limits by restricting allocations to the consumer trades. Within these limits a communist plan can determine expenditure first, and, then, proceed to find the requisite resources. In a democratic society the scope for variation in savings, which is largely the result of individual choices, is comparatively limited.

*From the standpoint of social security, the incidence of further inflation on the real incomes of the constable in the Police Forces and of the *Jawan* in the Defence Services should be borne in mind. This aspect of the matter must not be dismissed lightly under the thought that dearness allowances would provide adequate compensation. The salary and allowances of a constable in the Police Force, I understand, varied between Rs. 86 and Rs. 100 p. m.

7. The availability of real resources must depend on the reliability of the estimates of saving. Under no circumstances can total net investment (excluding external assistance) exceed the total net savings of the community. Revenue surpluses, surpluses of State business undertakings, loans, ploughing back of profits, deficit financing, credit creation, and so on, are but devices of appropriating the savings of the community for purposes of the Plan. There is no device of creating real resources which are not saved.

8. A paper on "Capital Formation in India" supplied to the Panel of Economists estimates net domestic capital formation in India, in the recent past, as under :—

Net Domestic Capital Formation in India

	(1)	(2)	(Rs. crores) (3)
	Net Domestic Capital formation	National Income	1 as % of 2
1948-49 . . .	446	8,580	5.2
1949-50 . . .	524	9,000	5.8
1950-51 . . .	589	9,500	6.2
1951-52 . . .	672	10,000	6.7
1952-53 . . .	659	9,800	6.7
1953-54 . . .	719	10,500	6.8

9. During the first three years of the First Five Year Plan, net capital formation, as a percentage of national income was more or less stationary, the increase in the national income being presumably absorbed, in large part, partly by an increase in the population and partly by an increase in consumption. Relatively to 1949-50 capital formation (as a percentage of national income) in 1953-54 rose by 17.24 per cent, an annual increase of 4.56 per cent. Under the Plan Frame net capital formation (10.95%) at the close of the Second Plan (1960-61) would be 61.98 per cent higher than (6.75%) at the close of the First Plan (1955-56) or an annual increase of 12.40 per cent.

10. The over-ambitious character of the Plan Frame is also reflected in the rate of increase it aims at in the national income. Allowance being made for favourable monsoons, the increase in national income during the First Plan is estimated at 12 to 13 per cent, or an annual increase of 2.4 to 2.6 per cent. The corresponding increase in the Plan Frame is 5 per cent per annum or 25 to 27 per cent in five years.

11. Statistics of the growth of national income in certain overseas countries, quoted by the Plan Frame, show that in Canada, Switzerland and Germany the rate of growth in national income generally approximated to the rate of growth experienced in India during the First Five Year Plan. In U.S.A. the rate of growth was 4.5 per cent until 1913 and 3 per cent from 1929 to 1950. Both in per capita income and the capacity to save we are far behind these countries. In the Soviet Union, Poland, Czechoslovakia, Hungary and Bulgaria, the rate of

growth in recent years is stated to vary between 12 to 16 per cent. If these statistics are comparable, the more rapid progress of communist economies reflects the relative efficiency of totalitarian devices.

12. Judging from our own recent experience, and also the experience of other democratic countries, the available real resources (savings) for development cannot for sometime be expected to be of an order that would permit anything like a doubling of the rate of growth in national income. The current rate of savings in India is generally estimated at 7 per cent or under of the national income. During the past five years it has risen by about 1 per cent. It would be too optimistic to assume that the rate of increase may be accelerated in the next five years. A reduction in the inequalities of income distribution, which is the declared policy of the Government, would tend to reduce overall savings. The consumption of food of the vast masses of the people being both below the national average and below the minimum nutritional standards, it has been estimated that about 50 per cent of an increase in consumer expenditure is liable to be utilised in India on foodgrains. In conformity with traditional experience a succession of good harvests, which we have experienced, may be followed by a couple of years or so of bad or indifferent harvests. Under the circumstances it may not be safe to assume a rate of saving of much higher than 8 per cent at the end of the next five-year period. The possibility of this conjecture proving too high cannot be ruled out. The size of the Plan needs to be, therefore, revised to match the real resources as indicated by this rate of savings and the estimate of the rate of increase in national income should be adjusted to conform to the investment equivalent to this rate of saving.

13. The rate of increase in income would depend upon the bias of the Plan for labour intensive schemes and for cottage industries. The probable magnitudes of the investment and of the growth in income remain to be worked out. This it is not possible to do immediately. On a rough estimate the order of magnitude of the investment would be probably about Rs. 3,500 to Rs 4,000 crores. Considering that the total investment in the public sector in the three years of the First Plan did not exceed Rs. 885 crores (38·65 per cent of the target of Rs. 2,290 crores for five years), this is not too low a target to aim at in the Second Five Year Plan. Investment in the public sector may roughly correspond to the target fixed for the First Plan. If at the end of the five-year period the actual investment, *at constant prices* should be about 70 per cent of the target, the investment in the public sector of the Second Plan would be about 43 per cent higher than that in the First Plan.

14. As no plan can be bigger or bolder than the available resources, the size of the investment programme should be reviewed periodically to ensure that it keeps within the limits of savings. If such a review should reveal a shortage of resources it would be short-sighted to fill the gap by credit creation or deficit financing as this will be self-defeating. A deficiency of total real resources for development will get manifested, in the sphere of finance, by a failure to secure finance otherwise than through an excessive creation of credit, or deficit financing. The inability of the Plan Frame to place more than about 75 per cent of the resources required for the Plan under the usual sources and the reliance on deficit financing for the rest is broad evidence that the size of the Plan far exceeds the available savings.

15. The deficiency of resources, in fact, may be larger than the magnitude of the deficit financing, as the assumed Receipts from other sources may prove to be over-optimistic. To mention one item, it would appear exceedingly unlikely that from an average of Rs. 45 crores per year during the past seven years, the Revenue surplus would jump up to an average of Rs. 180 crores per year in the Second Plan, the figure assumed in the Plan Frame. The available real resources were inadequate even for the comparatively moderate First Plan. This is reflected in the disparity between achievements and targets. Economic development is not merely a matter of credit creation or deficit financing. Scarcity of savings manifest themselves in a scarcity of the needs of production, and in administrative and organizational difficulties, which limit the pace of development and which credit creation cannot correct.

16. Indian poverty and the massive rural under-employment are conceivably the result of a continued shortfall of savings and investments below the demographic rate (or a rate of investment necessary to maintain per capita income undiminished in a growing labour force). It is not to be expected that full solution of this problem would be possible in five years. The employment potential of the First Five Year Plan has been estimated at 9 to 9.5 million persons. This is roughly equal to the natural growth in the labour force during the period. We may presume, therefore, that with a higher rate of investment, than during the First Plan period, the Second Plan would begin to provide relief to the under-employed in addition to absorbing the annual increase in the labour force. The unemployment position may be worsened if the programme of investment proving over-ambitious inflation should develop, as this would dissipate savings and, in due course, reduce the employment potential of a given volume of savings.

17. The size of the Plan Frame has been unduly inflated as result, on the one hand, of an over-optimistic growth in national income, which it aims at, and, on the other, of an unduly high average rate of saving as applied to this assumed growth in income. A much lower figure would result if both these rates were more realistic projections of Indian experience of the recent past. Though a certain measure of accelerated progress may result as incomes grow and savings increase, a steep upward movement from a background in which the mass of the people live on the margin of subsistence may not be possible except in a totalitarian regime.

II. DEFICIT FINANCING

18. The case for deficit financing, briefly, would appear to be that, (1) for "initiating a process of higher investment and higher incomes by fuller utilization of unemployed and under-utilized resources" credit must be taken "in advance for the additional savings" that will be forthcoming, in the future, from the larger incomes, and that "some initial credit creation, therefore, is an essential part of a development programme" (Paper No. 2, Section II); (2) that "a larger money supply will be needed as the monetised sector expands relatively to the non-monetised sector" (Paper No. 2, in Section II); (3) that a larger money supply will be needed with an increase in the national income; (4) that, there being no current inflationary pressures in the economy, there was no danger in undertaking deficit financing in a limited measure; and (5) that the apparently large budgetary deficits of recent years have not produced adverse consequences.

19. My colleagues have cautioned "against any tendency to undue optimism as regards the extent to which the use of deficit financing may avoid the awkward necessity of a deliberate

endeavour to mobilise resources" (p.4). I wish to join them in this cautioning. I also generally agree with (2), (3) and (4) above as offering justification and scope for a certain measure of deficit financing.

20. With regard to (1) above, a distinction must be made between unemployment in industrial economies and under-employment in under-developed economies. A mistaken analogy between them has been responsible for erroneous policy approach in underdeveloped economies. The problems of the two economies differed in fundamental respects. In under-developed economies the only factor of production that was in abundance was unskilled labour. There was a scarcity of the other needs of production machinery, materials, and skilled personnel with the technological and managerial know-how. This reflected continued below the demographic rate of saving and investment. The simplest form of investment needed some equipment and technical know-how at some stage. In industrial economies, on the other hand, the rate of saving being generally above the demographic rate, unemployment of labour was accompanied by unemployment or under-utilization of the complementary real resources of production. Credit creation could bring two together. Deficit financing or credit creation here is a device of mobilizing the real resources. We cannot seek in this a solution to the problem of development of under-developed economies. In the latter it was a question of a scarcity of savings, for which created money was no substitute. Under-employment in under-developed economies, thus, offered no criterion for deficit financing in the way unemployment in the industrial economies offered such criterion.

21. A paper on "Installed Capacity and its Utilization in Indian Industries" (Paper No. 9 of Section III) presented to the Panel shows that appreciable percentages of unutilized capacity exist in a number of industries including jute, sugar, certain heavy chemicals, machines and machine tools. It is conceivable that there may exist, in the case of some at least of these industries, complementary skilled personnel, which are unemployed or under-employed; there may also exist in the economy the materials of production required to employ these personnel. The reasons for the partial idleness of the plants may vary. This would require individual studies on these industries. In some cases it may reflect export difficulties or competition from imports, which, conceivably, may be related to the over-valued exchange rate. Deficit financing or credit creation cannot meet the needs of such cases. The economic significance of this unused capacity to the total activity of even the organized private sector would be negligible. Some of them may justify extension of credit by the banking system or by the State Credit Corporations. They cannot be said to provide a case for deficit financing of the public Sector.

22. Regarding (5) the amount of the deficit financing with a monetary effect undertaken since August 15, 1947 to March 31, 1954 has been comparatively moderate. Excluding the purchase of sterling by the Government in 1948 against *ad hoc* Treasury Bills, which had no monetary impact, and allowance being made for the variations, in the public debt holdings of the Reserve Bank and the commercial banks, the deficit financing of the period averaged about Rs. 50 crores per annum. Between 1947-48 and 1953-54 the Wholesale Price Index rose from 308 in the former year to 435 in 1951-52 and stood at 398 in 1953-54. Part of the rise in the price index is may be due to the activation of

latent inflation. But its effect could not have lasted beyond the early part of this period. The amount of the latent inflation in India was in any case moderate. It would seem significant that notwithstanding the moderate amount of the deficit financing, prices continued to rise until 1951-52 and were about 29 per cent higher at the end of the period relatively to the beginning of the period. This experience lends support to our estimate, in paragraphs 24 and 25 below, of the magnitude of deficit financing which may be deemed safe and necessary.

23. My colleagues consider that for a year deficit financing at a rate of Rs. 200 crores per annum is safe—and even necessary—and for the five-year period they would put it at within Rs. 1,000 crores. I consider these figures far too excessive. The formula on which they are based is not known.

24. Deficit financing does not create real resources. Together with the issue of loans, collection of Small Savings, etc., it is one of the devices of appropriating, for the public sector, the real resources which exist in the economy. The necessity for deficit financing arises from the fact that an individual converts a part of his real income into cash balances, the rest of it being either consumed or invested (through the stock exchange or otherwise). The cash balances, like the investments and the amounts spent on consumption, tend to grow with the growth in income. As they form a part of the savings there exist somewhere in the economy equivalent real resources. Deficit financing provides the individual with the cash balances and acquires the real resources for investment in the Plan. If the demand for the increase in cash balances is not adequately met, prices would decline and there may ensue unemployment. Part of the cash balances would be provided by the banking system through the creation of credit. In this case the equivalent real resources would be acquired by the private sector, in whose favour the banking system would create credit.

25. The amount of the deficit financing and the amount of the credit creation should be together limited to the *increase* in the cash balances. The rate of increase in the cash balances would depend upon the rate of increase in the Indian national product during the Five Year Plan. An estimate of the magnitude of the credit creation and of the deficit financing under this head would require a closer study than is immediately possible. The Bernstein Fund Mission estimated deficit financing and credit creation by the banking system at about Rs. 33-1/3 crores per annum for the last three years of the First Five Year Plan. Assuming constant prices, we may place it at a round figure of Rs. 35-40 crores per annum for the next Five Year Plan. This is only a conjecture. But it indicates the order of magnitudes involved. What part of this amount would constitute deficit financing and what part credit creation by the banking system would depend upon the ratio in which the increase in the cash balance real resources of the public sector would be divided between the public and private sectors.

26. To the amount of the deficit financing under this head must be added the sterling releases acquired for the public sector, to arrive at the total figure of the deficit financing that might be safely undertaken. The total amount of the sterling releases during the five-year period has been placed at Rs. 100-150 crores by the Plan Frame. Part of this would have to be allocated to the private sector and will be matched by equivalent credit creation

by the banking system. If we may assume a division of the cash balance resources and the sterling releases between the public and the private sectors, respectively, in the ratio of 2:1, the order of magnitude of the aggregate deficit financing would be Rs. 180-235 crores for the five years, or an annual rate of Rs. 35-47 crores. Post-Independence Indian experience (see para 22 above) lends support to the comparative safety of this order of magnitude of deficit financing.

27. Since the precise amount of the deficit financing is contingent upon the actual rate of increase in the national product and the actual withdrawals from the cash reserves, both of which may be subject to wide variation in an economy where weather conditions significantly influence output and prosperity, it may not be prudent finance to take advance credit for the amount of the deficit financing even if the order of magnitude were larger. The preference of the public for cash balances may, moreover, change with their confidence in the honesty of the rupee. Under the circumstances this sources should be held in reserve to help meet possible shortfalls in the receipts from other sources.

28. I realise that this is less than cat's meat before the order of magnitude of the deficit financing proposed in the Plan Frame and that approved by my colleagues. But, if the above analysis* is correct, I do not see how a significantly different conclusion may be arrived at. Even on the assumption of a doubling of the rate of growth of the national income, the demand for the additional cash balances cannot be of an order to justify deficit financing on a scale equivalent to 50-60 % of the money supply. If a third of the central bank money proposed to be put into circulation through deficit financing went to augment the reserves of commercial banks, and if they built on it a volume of credit six to seven times, the total money supply at the end of the Plan period may be more than double the money supply at the beginning of the period. This would be clearly inflationary. An increase in the rate of growth of national income from 13 per cent to 27 per cent would not require a doubling of the total money supply.

29. Deficit financing is essential in an under-developed economy to permit full use of the scarce real resources. By the same token deficit financing should stop severely short of the point at which inflation begins. Inflation does not, on balance, add to the aggregate real resources. It creates wasteful or socially less useful demands on the limited savings. Investment gets diverted into luxury trades to meet the demand for their products resulting from inflation incomes. It diverts an undue proportion of savings into urban property and real estate, into gold hoards and jewellery, and into foreign exchange, as a result of the effort of the savers to protect the value of their savings. The resources available for the Plan would be, as a result, correspondingly less, and overall economic development would be impeded.

30. Inflation tends to be self-perpetuating. With the rise in prices and wages, the original estimates of the cost of the projects taken in hand will be out of date. More deficit financing would be necessary for their completion. And, as they cannot be left half finished, there would be a pressure for further deficit financing. At any given moment, the whole of the currently available savings being invested either in the public or the private sector, or out-

*For fuller details of this analysis see my paper on "Deficit Financing and India Economic Development" (Paper 8 of Section VI.)

side the Plan, there would be no idle savings to draw upon. Real resources would have to be drawn into the Plan by force, which would render the distortions and wastages referred to above unavoidable. This takes away from the practical value of the caution, that the inflationary situation should be kept under watch. Once inflation begins, it tends to gather momentum, and while it runs its course we are apt to be more or less helpless witnesses. The best protection against inflation is to prevent it by keeping the investment programmes within the available real resources.

III. POLICY AND INSTITUTIONAL IMPLICATIONS

31. In this section we shall deal with legislative and administrative measures, taxes on lower income groups, extension of nationalisation, continuance of controls, price support of agricultural produce, and the proposed National Labour Force.

(i) Legislative and Administrative Measures

32. No plan can be bigger or bolder than the available real resources. The Taxation Enquiry Commission has estimated net savings in India at about 7 per cent of the national income in 1953-54, which is about Rs. 730 crores. This is an overall figure and, therefore, includes savings utilised for capital formation in the organized private sector (about Rs. 75 crores), public savings, urban savings, rural savings, and also non-monetised savings. Other estimates of savings are more or less of the same order. To the extent this estimate is reliable, it is a measure of the total permissible investments in India. Any attempt to exceed this limit would raise prices, and would impede overall economic development. Consistently with individual freedom and democratic institutions, there is no device of significantly adding to the volume of the flow of savings, though, with proper inducements (which should include an honest rupee and an unpegged interest rate), it may be possible to stimulate the flow somewhat. The situation, however, may be significantly different under a totalitarian regime which may impose authoritarian reductions in consumption. Overall savings, then, are no longer dependent upon individual choices. I presume that planning in India would be consistent with democracy and democratic institutions.

33. I am unable to agree to the following recommendation of my colleagues :

“It is only when there is a firm legislative and administrative base that it is possible to think in terms of doubling the rate of progress in the Second Plan period, of increasing capital formation, of raising levels of living and providing the machinery for accelerated development in the future. We cannot, therefore, emphasise too strongly the importance of facing up boldly and without hesitation to the legislative and administrative implications of a bigger and a bolder plan” (para 47).

I apprehend that reliance on legislation and administrative measures to increase the rate of saving which will permit a bigger and bolder Plan, may, by degrees undermine our democratic social order, which would be too high a price to pay for accelerated economic development. Legislative and administrative action should be directed to ensuring the specially most effective uses of democratically generated savings, rather than risk undue infringements of the liberty of the individual, without which, to quote our Prime Minister, “We lose what is the greatest value in life”, it would appear preferable to explore the scope for more

ample but unincumbered, foreign aid and foreign loans and a larger flow of unincumbered foreign private capital to supplement domestic saving for accelerated economic development. In view of the vast scope of profitable investments, this would be imminently worthwhile, the net profits of the projects may be expected more than to cover the amortisation of the foreign capital within a reasonable period. Economic history does provide instances of national economic development being financed by foreign capital in the early stages with no loss or sacrifice of sovereignty.

(ii) Taxes on Lower Income Groups

34. There is hardly room for a further reduction in the standard of living of the lower income groups in India. Finance for the Plan must be raised from the middle and the upper income groups. Measures of taxation and other devices which would tend to reduce further the consumption of the lower income groups should be avoided. I am unable, therefore, to agree to my colleagues' recommendation to amend Article 286 (3) of the Constitution in order to permit taxation of articles "essential to the life of the community" (para 9). Amendments to the Constitution, which should be rare, should much rather be in the direction of adding to the liberties, privileges and rights of the common man than otherwise.

(iii) Extension of Nationalisation

35. I agree with my colleagues that the scarcity of administrative and specialised personnel, and the necessity of conserving savings for the Plan are factors against extension of nationalisation. But they have no objection for such extension on principle. I would oppose general extension of nationalisation on principle. Nationalisation should be ordinarily limited to public utility concerns and to concerns involving national security. Otherwise State intervention should be concerned with the prevention of monopolies or quasi-monopolies. Efficient management of business and industrial concerns in a competitive market economy is a highly specialised function and demands qualities which a civil servant is not required to, and in the ordinary course of his training may not, acquire. This function is best left to private entrepreneurs, in the prevailing socio-economic order which is dominated by the market economy and the pricing system.

(iv) Continuance of Controls

36. I do not feel convinced of the economic importance of continuing the remnants of controls. Decontrols have proved a noteworthy success. Controls and physical allocations are not a necessary adjunct to planning. The distribution of productive resources, including the ratios in which they are used are subject to variation and depend upon diverse technological, economic and price considerations. It is quite impossible to take into account these complex and changing considerations and arrange anything like a satisfactory allocation of resources. There are great advantages in allowing freedom to the economy, and to the price system in the use and distribution of the needs of production. I am unable to agree with my colleagues that a case exists for continuing what controls now remain. Steps should be taken to remove controls as early as may be possible. Controls and allocations are an essential characteristic of communist planning. They do not very well fit in under planning in a free enterprise market economy.

(v) Price-support of Agricultural Produce

37. I wish to join my colleagues in the matter of the urgency and importance of completing speedily the scheme for licensed ware-houses, and for the provision of credit and marketing facilities to farmers. My colleagues have stated that the ware-housing system "should be used by the State for purchase and sales of buffer stocks of agricultural commodities not only for the purpose of dealing with any sharp falls in agricultural prices such as we are witnessing to-day but also with the objective of preventing any sharp seasonal fall or rise in prices" (para 38).

38. In theory it may be possible to distinguish between seasonal price movements from the long-term price trends, and to prescribe that seasonal fluctuations should be smoothed out by State purchases in times of harvest and sales between harvests. In practice, however, such distinctions may prove to be difficult and seasonal interventions may turn into long-term price support operations.

39. Price support of agricultural produce in India is a risky venture and we should be forewarned of the inherent dangers of it. About 50 per cent of Indian national income is drawn from Agriculture. A policy of price support is, in essence, a subsidy by the rest of the community to the producers of the price-supported commodity. In countries where agriculture is a minor sector of the national economy, the incidence of the subsidy may be spread out thinly on the larger sector of the economy and the proceeds may provide substantial relief to farmers. The reverse would be the case in India. The strain of the subsidy will manifest itself in a shortage of budget resources for the open market purchase and storage of agricultural produce. This, in due course, would lead to either abandonment of the price-support policy or inflation. In either case damage would result. If the dilemma does not appear in one season is likely to come in the next, as successful price support would stimulate production. In the Indian context a policy of price support of agricultural produce may force the economy down the inclined plane of inflation. Even in the United States, where agriculture is a minor sector of the national economy, price support has only survived. It has not succeeded. It has led to undue stockpiling of agricultural commodities and, in the past, had involved a great deal of wastage of stocks through deterioration. Selective price support policy is a poor answer to this difficulty. The distinction between crops would be invidious, the relief provided may prove to be a token, and it might cause a distortion in the pattern of agricultural production and economic instability.

40. The price situation in India today was too complex to be resolved by price support of agricultural commodities or other inflationary measures such as a deficit financing. The price decline was neither universal nor uniform. The prices of some major commodities had moved in opposite directions. The fall was heaviest among foodgrains, oilseeds, and black pepper. Some agricultural produce, e.g., tea, raw hides and lac, which were export goods, and raw jute, among import goods, had risen almost as high as some other agricultural prices had fallen. The prices of manufactures were either steady or showed

a slight upturn on the average. The cost of living index was either steady or had fallen only slightly. In a background of dissimilar price movements, simple monetary remedies may aggravate the complexity and difficulty of the price structure. It may, on balance, adversely effect the employment position by stiffening the already rigid cost structure. Price support and deficit financing were no remedies to individual over-production to export difficulties attributable to quality and to domestic costs, or exchange overvaluation. Price support and deficit financing might, in fact, aggravate these maladies.

41. The complex problems of the prevailing price situation emphasise the importance of economic rationalisation, for progress with stability, whereby the fiscal, the investment, the monetary, the interest rate, the tariff, and the exchange rate policies are rendered mutually consistent and harmonious.

(vi) National Labour Force

42. I apprehend more risks than I see advantages in the proposed National Labour Force. It may create a privileged class of workers, who may prove to be relatively more expensive to keep and to move. The availability of this force may impede relief to the regional underemployment problems. The necessity for such a force may not arise until labour becomes a bottleneck in economic development.

II. THE PLAN FRAME

DRAFT RECOMMENDATIONS
FOR
THE FORMULATION OF THE SECOND FIVE YEAR PLAN
1956—1961

by
P. C. MAHALANOBIS

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March 17, 1955

PREFACE

1.1 The paper dated March 17, 1955 was prepared as a *draft of a "draft Plan-frame"* and had been circulated as such and is subject to revision by the Planning Commission.

2. The general objectives and policy and administrative questions (which are discussed in Chapters One and Six) can be considered on their own merits.

3.1 The quantitative estimates were worked out with two chief aims in view, namely,
(a) an increase in national income of 5 per cent per year ; and
(b) creation of new employment by way of gainful occupation or jobs for 11 million persons over the plan period.

3.2 Certain basic allocations of investment were made between investment goods and consumer goods industries. It is necessary to maintain this general pattern of investments but there is scope for adjustments in details.

3.3 The draft Plan-frame is, therefore, not rigid and can be modified, but there are inter-relations between its different parts so that a change of the target in one item may require consequential changes in other items.

4.1 Background information relating to the physical targets and financial estimates (Chapters Two, Three, Four and Five) will be found in the accompanying paper prepared jointly by the Economic Division of the Planning Commission, the Economic Division of the Ministry of Finance, the Central Statistical Organization, and the Indian Statistical Institute.

4.2 The draft of the draft Plan-frame and the above joint paper are consistent with each other but are not identical.

4.3 The Report of the Panel of Economists dated 10 April 1955 has reference to both the above papers.

5.1 Within the general pattern of investments (explained in para 3) an attempt was made to fit in the physical targets on the basis of information that was readily available in the Planning Commission and in the Ministries concerned.

5.2 The draft Plan-frame does not attempt to go into details. In some cases, information was not available ; and time was short. Also, it was not necessary to make the list of targets exhaustive or complete in every respect because, as explained in para 3, there is scope for adjustments in details without disturbing the main structure of the Plan-frame.

6.1 The targets are sometimes given as equivalent aggregates within which there can be substitution of components.

6.2 Estimates of financial outlay are to be taken as *net*.

6.3 Construction costs are to be taken as the direct costs of materials, of labour, and of essential technical supervision. It is assumed that excessive margins for intermediaries and other forms of waste will be eliminated.

6.4 It is assumed that promotional and field agencies and services would be integrated and co-ordinated to prevent unnecessary duplication.

6.5 It is assumed that non-official public organizations would be used wherever possible to decrease overhead expenses and stimulate public interest and participation in the fulfilment of the Plan.

7.1 If the basic approach of the present draft is approved, it is suggested that the paper should be revised as necessary and then issued in the revised form as the draft Plan-frame for the formulation of projects.

7.2 After the individual projects are received, further changes and adjustments should be made as necessary to get ready, as quickly as possible, a definitive plan which would be internally consistent and would be capable of attaining the desired objectives.

April 28, 1955

P. C. MAHALANOBIS

EXPLANATORY NOTE

Introduction

1.1 The Second Five Year Plan is due to begin on April 1, 1956. The approach in the Second Five Year Plan is to take a perspective view of development over a long period of years, and at the same time to solve immediate problems like unemployment as quickly as possible. Planning would be, therefore, flexible and would always keep a wide time horizon in view ; and at the same time detailed annual plans would be prepared and necessary adjustments made at shorter intervals in the light of experience.

1.2 Proper attention must be given to the physical aspects of the Second Five Year Plan. The requirements of each project must be estimated in real terms at the stage of planning and must be forthcoming in right quantities at the right time at the stage of implementation of the project. Also, the products and services resulting from the completion of a project must be fully and promptly utilized to further the execution of other projects and the progress of the plan as a whole.

1.3 A plan in a mixed economy must be comprehensive and cover both the public and the private sector. To achieve a balanced growth, the activities of the private sector must conform in a general way to the programme of production of the plan as a whole. In an expanding economy the private sector would have an assured market which would facilitate decisions by reducing risks and uncertainties. Also, the over-all programme would be laid down in broad aggregates so that there would be wide scope for adjustments in details at the discretion of the private sector.

1.4 The physical targets of production must also be balanced in terms of money. Incomes are generated in the very process of production ; and supplies are utilized through market operations. Planning requires that aggregate incomes should be balanced with expenditure, savings should match investments, and the supply, and demand of individual goods and services should be balanced in terms of money so as to avoid any inflationary rise of prices or undesirable shifts in prices. Physical and financial planning are different aspects of the same reality.

Plan-frame

2.1 The enclosed paper contains chapters on main aims and objectives ; provisional targets of production ; investment and development expenditure ; expected changes in employment and income ; finance and foreign trade ; and planning organization and administration to supply a tentative frame-work for the formulation of the Second Five Year Plan.

2.2 It is requested that the Central Ministries, State Governments, and other project-making authorities should use the provisional figures given in the paper as a general Plan-frame for the formulation of schemes and projects taking care to make estimates in both physical and financial terms, and to forward them to the Planning Commission as they become ready.

2.3 When the individual schemes and projects have been received in the Planning Commission, the aggregate balances would be examined and adjusted as necessary until an integrated plan is evolved which will be internally consistent and balanced in both physical and financial terms. Estimates of demand and supply are bound to be approximate to begin with ; and would have to be worked and re-worked to secure a proper balance.

2.4 It is recognized that while projects are being prepared there would be need of a two-way flow of information as well as of consultations between project-making bodies and the Planning Commission. The present recommendations would supply the initial base for such consultations and discussions.

Time Programme

3.1 The programme for the first year (April 1956-March 1957) of the Second Five Year Plan must be completed by October 1955. This first year's programme would contain much carry-over from the First Five Year Plan and some new items for which projects are ready or are in an advanced stage of preparation. It is requested that projects for 1956-57 (including the carry-over from the First Five Year Plan) should be sent to the Planning Commission as soon as possible and not later than.....1955.

3.2 The Second Five Year Plan must be ready (in outline form) by March 1956. Projects for the remaining period of the Second Five Year Plan should therefore be sent to the Planning Commission as they become ready and in case not later than.....1955.

Prescribed Form for Projects

4.1 Information on projects should be given in the form prescribed in the Appendix*

4.2 Some of the projects would have to be submitted necessarily in a general form at the present stage ; and working details would be prepared after it is decided that they would be included in the plan. Nevertheless, it is essential that preliminary information should be given in the prescribed form even if the estimates are of an approximate nature because a technical examination of the projects would not be possible in the absence of such information.

4.3 The Planning Commission would be glad to supply further information in this connection and help in the preparation of schemes and projects.

* To be issued separately.

Chapter One⁷

GENERAL AIMS AND OBJECTIVES

The First Five Year Plan

1.1 At the beginning of the First Five Year Plan the country was still dislocated by war and partition. There was shortage of food and raw materials. There were signs of inflationary pressures after hostilities have started in Korea. In this situation it is understandable that the targets of the First Five Year Plan were kept modest. Judged in this context, the progress achieved so far may be regarded as satisfactory.

1.2 There are, however, disquietening features. Agricultural prices are declining. Unemployment, especially in urban areas, is increasing. Even the modest expenditure targets in the First Five Year Plan have not been fully achieved on account of delays in preparing projects, inadequate administrative organisation, and lack of sufficient facilities to give training to technical personnel.

The Need of a Bold Plan

2.1 The population of India is increasing roughly at the rate of 4.5 millions per year. With a proportion of about 40 per cent in the labour force, about 1.8 millions of persons enter the labour force every year. In addition, a large number of persons are without employment in urban areas and a great deal of under-employment exists in villages. Planning must be bold enough to provide new work for about 1.8 million new entrants into the working force every year and also to offer more work to the large number of persons who are without jobs or who are under-employed at present.

2.2 The level of living is extremely low. Expenditure on consumer goods per person is about Rs. 22 per month of which about Rs. 13 is spent in cash and about Rs. 9 is the value of consumption of home-grown food and home-made articles. Housing is primitive in villages and extremely short in urban areas. The supply of nutritive foods is meagre although nearly two-thirds of the total expenditure is spent on food items. The expenditure on education per person is only about four annas, and on health less than seven annas per month.

2.3 The above estimates are for all classes taken together. The position of the poorer section is much worse. Half the population of India or 185 millions of persons spend less than Rs. 13 per month on consumer goods and possibly half of this amount is consumed in kind or in the form of home-grown food and home-made articles. Of children in the school going age, less than half attend at the primary stage, and less than one-fifth at the secondary stage. There is probably less than one qualified physician per 30,000 inhabitants in the villages.

General Objectives of the Second Five Year Plan

3.1 There is a large pool of idle man-power, and many are without jobs; also about 1·8 millions of persons would be added to the working force every year. The country has large resources of water for hydro-electric and irrigation projects; coal, iron ore and other important minerals; forests, fertile land and cattle. The aim of planning must be to utilize these resources to increase rapidly the level of production and thus of national income.

3.2 Conditions are favourable in many ways. There is economic stability and confidence in Government. Unemployed manpower and unexploited resources can be brought together to increase both consumption and investment simultaneously. India's prestige is high at the international level. Finally the Congress Party and Government have decided that the time has come for economic development on a socialistic pattern.

3.3 The Second Five Year Plan is therefore being formulated with the following objectives in view:

- (1) to attain a rapid growth of the national economy by increasing the scope and importance of the public sector and in this way to advance to a socialist pattern of society;
- (2) to develop basic heavy industries for the manufacture of producer goods to strengthen the foundations of economic independence;
- (3) to increase the production of consumer goods as much as possible through the household or hand industries; and to provide an adequate market for the products;
- (4) to develop factory production of consumer goods in a way not competitive with hand industries;
- (5) to increase productivity in agriculture; and to speed up agrarian reforms with an equitable distribution of land to peasant cultivators so as to stimulate the increase of agricultural production and of purchasing power in rural areas ;
- (6) to provide better housing, more health services, and greater opportunities for education especially for the poorer sections of the population;
- (7) to liquidate unemployment as quickly as possible and within a period not exceeding ten years; and
- (8) as the result of such measures to increase national income by about 25 per cent over the plan period, and achieve a more equitable distribution of income.

3.4 The basic strategy would be to increase purchasing power through investments in heavy industries in the public sector and through expenditure on health, education and social services; and to meet the increasing demand for consumer goods by a planned supply of such goods so that there would be no undesirable inflationary pressures. Planning would be thus essentially a feed-back process of matching a continuously increasing (planned) demand by a continuously increasing (planned) production giving rise to a steadily expanding economy.

Heavy Industries

4.1 In the long run, the rate of industrialization and the growth of national economy would depend on the increasing production of coal, electricity, iron and steel, heavy machinery, heavy chemicals, and the heavy industries generally which would increase the capacity for capital formation. One important aim is to make India independent, as quickly as possible, of foreign imports of producer goods so that the accumulation of capital would not be hampered by difficulties in securing supplies of essential producer goods from other countries. The heavy industries must, therefore, be expanded with all possible speed.

4.2 The new producer goods industries would be developed mainly in the public sector. The private sector would continue to play an important part in the development of basic industries like cement, chemicals, etc.

4.3 The heavy industries being capital intensive would, however, give relatively little scope for employment, and would also generate a large demand for consumer goods which they themselves would not be able to supply.

Household and Hand Industries—

5.1 The increasing purchasing power and consequential demand for consumer goods must be met by increasing the supply of such goods as much as possible through the expansion of household or hand production. This would also quickly generate a large volume of work all over the country.

5.2 Construction work (roads, houses, irrigation and flood control projects, etc.) by hand would also be increased which would create a good deal of employment and generate demands for consumer goods.

5.3 The greater the marketable surplus of consumer goods in the household or hand industries the greater will be the possibilities of investments in heavy industries without any fear of inflation.

5.4 By expanding the household and hand industries and construction work, the aggregate national consumption would increase continually. Also, relatively more employment would be created among the poorer sections of the people so that the greater portion of the increase in income would go to them.

Factory production of Consumer Goods

6.1 The production of consumer goods in factories requires heavy investment of capital per engaged person and in many cases competes with the household or hand industries. Until unemployment is liquidated or brought under control, it is necessary to prevent competition between factories and household or hand industries by not permitting investments to be made in such consumer goods factories as would prevent expansion or lead to a shrinkage of employment in the hand industries.

6.2 In the immediate future the factory production of consumer goods would be expanded (where it is not competitive with hand industries) to increase the supply of essential goods (like anti-biotics, fine drugs, etc.) or of goods for export to earn foreign exchange.

6.3 It is recognized that the price of hand-made goods would be often higher than the price of factory-made goods of comparable quality. Appropriate excise duties (which would be selective) would be imposed on factory products to maintain desired price parities with hand-made goods in such cases.

6.4 Once mass unemployment has gone, the aim would be to provide cheap power and small machines to the household sector and hand industries to increase productivity per worker and hence the total national product. At this stage the factory production of consumer goods would also be increased.

Agriculture and Allied Pursuits

7.1 The fixation of ceilings and procedural arrangements for the redistribution of land to peasant cultivators must be decided at an early date in each State in accordance with general principles and standards settled on an all-India basis, and the redistribution must be completed by 1958. This would make visible important structural changes in the economy resulting in stimulation in agricultural production, provision of a large market for the growing output of industry and handicrafts; and would also transfer a part of the national income from recipients who use it largely for luxurious consumption to recipients who will use it for productive purposes and for raising their low standard of life.

7.2 The National Extension Service Blocks (and Community Projects where possible) would be extended all over the country to help and speed up the improvement of living conditions in rural areas.

7.3 Because of the urgent need of increasing the production of foodstuffs and raw materials, the highest priority would be given to the setting up of a State Bank, as recommended in the Report of the Rural Credit Survey Committee, for the supply of agricultural credit.

7.4 The same or an associated system would be used for the supply of credit, raw materials, and marketing facilities to the household and hand industries through an organization of co-operatives with the support (or the direct participation or partnership) of Government.

7.5 As an increase in the caloric value is not enough for a balanced diet, concerted efforts must be made to increase the supply of food of higher nutritive and protective value such as fruits and vegetables, milk and milk products, eggs, fish, meat, etc.

7.6 Continuing efforts must be made to increase the production of milk products by improving the quality of cattle through the introduction of better breeds, by increasing the production of fodder crops and cattle feed, and by providing better veterinary services by increasing the number of trained veterinary surgeons and veterinary assistants.

Health

8 There must be a rapid increase in the care of health. A national health service would be established in the rural areas with paid health assistants in charge of a group of villages who would work in contact with fully trained physicians. The number of dispensaries and hospitals, and facilities for medical training would be increased in urban areas.

Education

9.1 There must be a rapid increase in literacy, improvement in the pay of teachers, and better organization of education at all levels.

9.2 On the basis of merit, able students, at all levels and in increasing numbers, must be provided with adequate living and educational expenses to enable them to receive education up to the highest standard according to capacity without regard to sex, creed, caste, or social status of the parents. Special educational scholarships and facilities must also be provided for women and backward groups and communities.

Social Security and Welfare

10.1 Existing social security schemes such as Employees, State Insurance and Provident Fund schemes would be expanded. A scheme for unemployment benefit in the form of paid attendance at training centres with placement facilities would be introduced in urban areas.

10.2 There must be increasing provision for the social welfare of children (foundling homes, creches, nursery schools, health and recreation centres, etc.), of women (houses for widows, destitute and deserted women; maternity, health and family planning centres), of juvenile delinquents (remand homes, schools, after-care hostels, etc.), of the handicapped (homes, schools and workshops for the blind, the deaf and the dumb, the crippled, and the mentally deficient or ill), and homes for the aged and the infirm.

Sports and Cultural Pursuits

11 Increasing facilities must be provided for sports and health activities, educational and cultural broadcast and cinema; and the promotion of literature, music, drama, art and other cultural pursuits.

Housing

12 Better housing must be provided especially for factory workers and poorer sections of the people in urban areas.

Social Overheads

13 Expenditure on housing, health, education, social security and welfare, sports and cultural pursuits, and housing would necessarily increase purchasing power and create additional demand for consumer goods which must be met by increasing the production of additional consumer goods through household and hand industries in the first instance.

Balanced Development and Controls

14.1 With the stepping up of production of both producer and consumer goods, it would be necessary to provide for adequate increases in the supply of electricity and fuels, irrigation, transport, and communication. Proper balances must be maintained between different sectors so that production is not hampered by bottlenecks.

14.2 The aim of planning would be to avoid shortages giving rise to inflationary pressures on one hand and over-production with falling prices on the other hand. In the case of falling prices, especially of consumer goods, the demand would be stimulated promptly by increasing purchasing power through investments in the public sector and through expenditure on social services and by open market operations by Government.

14.3 Government would acquire and keep adequate reserves of foodgrains and important raw materials produced by agriculture to provide against emergencies of short crops in bad years and to maintain prices profitable to peasants in years of exceptionally plentiful crops. This would maintain a minimum level of peasant incomes, stimulate production, and promote the welfare of both peasants and the working class in urban areas.

14.4 Shortages may, however, develop in the short run which would be dealt with as they arise by appropriate methods such as Government intervention in the market, Government trading, physical controls, rationing, and similar measures. Also, the production programme would be adjusted as necessary to restore equilibrium between supply and demand as quickly as possible.

14.5 Rationing of foodgrains, clothing, and similar essential commodities would be avoided. Control over consumption, when necessary, would be related to the shortages of specific physical resources.

Regional Development

15 Special attention must be given to regional development to reduce disparities in economic opportunities and the level of life between different States.

Technical Training and Scientific Research

16.1 A bold plan will require a rapidly increasing technical staff to prepare the various projects as well as to implement them. Training facilities must be expanded sufficiently quickly to turn out technical and scientific personnel in adequate number of at all levels.

16.2 Scientific and technological research would be expanded and oriented to serve the needs of national development in an effective manner. The National Laboratories, Universities and other scientific institutions and organizations, must undertake coordinated researches in accordance with national needs.

16.3 Fundamental research as well as training in research must also be encouraged at the same time to foster the accumulation of basic knowledge and skill for the expansion of applied and technological research.

16.4 The survey of natural resources, especially prospecting for oil and minerals, must be greatly and rapidly increased through State organizations.

Expansion of the Public Sector

17.1 Key industries would be established and developed in the public sector generally in accordance with the Industrial Policy Declaration of 1948 as interpreted in December 1954. Government would also take up the factory production of certain consumer goods which are of strategic importance for the growth of the national economy.

17.2 The public sector must be expanded rapidly and relatively faster than the private sector for steady advance to a socialist pattern of economy. In order to make available large capital resources for investment and national development and to facilitate the implementation of the Plan, Government will be prepared to enter into such activities as banking, insurance, foreign trade or internal trade in selected commodities.

17.3 Government would also promote enterprises in partnership with the private sector so that, although Government would hold a controlling share, initiative can be left to private management subject to policy decisions by Government.

The Private Sector

18.1 A large majority of the population would be engaged in household production in agriculture, in hand industries and in various services which would continue to remain private.

18.2 As the planned demand would have to be matched by the planned production, it would be necessary for the private sector to conform in a general way to the overall programme of production as provided in the Plan. The private sector would be helped by Government by the supply of credit, raw materials, and marketing facilities to undertake production in accordance with the Plan.

18.3 Inducements (such as tax exemption or preferential permission for capital issue) would be given to channel the profits of the private sector into desirable forms of investments in both private and public sectors or in Government bonds and securities.

18.4 The private sector would enjoy the advantages of an assured and a growing market in an expanding economy, and thus of reduced risks and uncertainties.

Finance and Foreign Exchange

19.1 Large financial resources would be required for the Second Plan. A small portion would come from sterling balances or foreign loans and aid; and the bulk of the resources must be found from within the domestic economy.

19.2 The tax system would be directed to collect an increasing part of the growing national income in order to permit greater capital formation in the public sector and to finance an expansion of social services.

19.3 The public sector would be extended to industrial and commercial activities where necessary for raising resources for public purposes.

19.4 Deficit financing would be undertaken on the scale necessary to bring about the greatest possible expansion of production without introducing permanent and all-embracing rationing of essential commodities.

19.5 Conspicuous consumption would be discouraged by graduated excise duties; and a more equitable distribution of income would be assured by taxes on property and un-earned income.

19.6 Excise duties would be levied to raise additional resources and also to maintain desired price parities between different sectors.

19.7 Steps would be taken to promote exports; and the import of non-essential and luxury goods would be discouraged by heavy duties in order to release foreign exchange resources for more urgent needs.

Chapter Two

TARGETS OF PRODUCTION

1.1 The targets of production (mostly in physical quantities) of some important items are shown in Table 1. The physical unit is given in col. (2) and actual production for 1950-51 and 1953-54 in cols. (3) and (4) respectively. Estimates for 1955-56 and planned target for 1960-61 together with the estimated increase (in percentage) during the plan period are shown in cols. (5), (6) and (7) respectively.

1.2 The above targets are provisional. Estimates of requirements and likely supplies have been examined in a general way on available information. The next task is to carry out a detailed check and make necessary adjustments on the basis of projects to achieve internal consistency in the form of a balanced supply and demand of material and labour resources. Such balancing must also have a proper phasing over time so that neither serious bottle-necks nor excessive supplies emerge at any stage of the Plan.

1.3 Explanatory notes are given on some (but not all) of the items mentioned in Table 1. The number shown within brackets after each item gives the serial number of the same item in Table 1.

Electricity (1)

2.1 Planned electrification must be a main link in economic development in India. The hydro-electric projects started in the First Plan must be continued on an increasing scale in the Second Plan.

2.2 Regional grid-systems combining both thermal and hydel power stations must be planned to secure the best use of local fuels (low grade coal, lignite, etc.) and of installed capacity by large consumers (electric-intensive industries like aluminium, alloy-steels, etc.) keeping in view the development of a future super-grid for India as a whole.

2.3 Small power stations (hydel and diesel) would also be developed for urgent requirements in small towns and rural areas.

2.4 The use of electricity for small-scale and household industries, irrigation by tube-wells, etc., must be steadily increased.

2.5 The production of electricity must forestall the growth of industrial production; and the installed capacity must increase from 2.8 million kilowatts in 1953-54 to 6 million kilowatts in 1960-61, that is, must be more than doubled. Also, the utilization of capacity must be increased.

Coal (2)

3.1 The production of coal must be increased from 37 million tons in 1955-56 to 60 million tons in 1960-61 (an increase of about 62 per cent) which would be difficult to achieve but should not be impossible.

3.2 There is great wastage at present of high grade coking coal of which supply is short. Necessary Government action must be taken without any delay to prevent such wastage and to promote better conservation.

Synthetic Petrol and Products (3)

4.1 India is short of petrol and meets most of its requirements by imports. In addition to increasing oil-prospecting as quickly as possible, a State plant to produce about 300,000 tons of synthetic petrol must be installed during the Second Plan, and future production must be increased as necessary.

4.2 The above plant must also be used to establish a base for the development of associated chemical industries.

Steel (4)

5.1 India has vast resources of iron ore; and increasing production of steel must be made an important link in economic development. The installed capacity would be increased to 6 million tons and production to 5 million tons by 1960-61.

5.2 Necessary action (in the way of establishing a heavy machinery industry and promotion of metallurgical research) must be taken in the Second Five Year Plan to build up the base for the future expansion of the installed capacity of steel by at least one million tons per year from 1961.

5.3 Increasing production of steel would supply a secure foundation for the fabrication of plants and machinery of all kinds, expansion of construction work and of railways and transport generally. If necessary, steel can also be exported to neighbouring countries which are in urgent need of it.

Aluminium (7)

6.1 India has large reserves of bauxite and the production of aluminium must be rapidly increased to take the place of copper which is in short supply and mostly imported. Increasing production of aluminium would, in its turn, facilitate electrification; and the production of both electricity and aluminium must be continuously increased at the same time.

6.2 The production of aluminium should be increased from about 5 to 40 thousand tons during the plan period. One or more aluminium plants must be established in the public sector for this purpose.

Manganese Ore (8)

7 The extraction of manganese ore must be increased and some of the ore must be converted into ferromanganese before export so as to retain a part of the value created by semi-manufacture.

Cement (9)

8 The production of cement must be increased from 4.6 to 10 million tons or more than doubled during the Second Plan period. The production of other building materials must be increased proportionately to avoid shortages and bottlenecks in construction work.

Fertilizers (10)

9.1 The production of nitrogenous fertilizer must be increased by about three times by establishing at least three more factories of roughly the same capacity as Sindri.

9.2 Fertilizer production must also be steadily and continuously expanded along with irrigation to secure a rapid increase in the outturn of agricultural crops in future.

Heavy Chemicals (11)

10 The production of sulphuric acid, soda ash and caustic soda must be increased by 1960-61 to roughly four times of the actual production in 1953-54.

Heavy Machinery (12)

11.1 For rapid industrialization it is essential to fabricate plants and machinery at home. To instal a plant for the production of one million tons of steel per year it is necessary at present to import machinery worth about Rs. 40 or Rs. 45 crores from outside. Provision has been made for investment of Rs. 150 crores to establish large engineering workshops to fabricate machinery needed for producer goods plants. An immediate aim would be to manufacture every year most of the machinery required for installing a one million ton capacity steel plant.

11.2 Investment of Rs. 40 crores is contemplated for establishing plants for the manufacture of heavy electrical equipment.

11.3 The production of machinery for the manufacture of consumer goods (textiles, etc.) must be roughly doubled during the plan period, and an investment provision of Rs. 50 crores has been made for the purpose.

Railway Rolling Stock (13)

12 The annual production of locomotives must be increased from 100 to 400 ; of wagons from 7,000 to 20,000; and of coaches from 800 to 2,000 per year so as to attain self-sufficiency in rolling stock by the end of the plan period.

Jute Textiles (14)

13 Immediate steps should be taken to ensure a fuller use of the existing capacity and to see that by 1960-61 the full rated capacity is utilised.

Factory-made Consumer Goods

14.1 The factory production of essential consumer goods would be increased in such a way as to prevent competition with the household and hand industries.

14.2 *Cotton Textiles (15)*—Production would be increased to 5,500 million yards per year by 1960-61, the additional production being used mainly for exports. (The remaining part of the internal demand would be met by hand-made cloth.)

14.3 *Woollen Textiles (16)*—Manufacture of woollen textiles should increase by about 25 per cent during the Second Plan period.

14.4 *Sugar (17) and Vegetable oil (18)*—The production of sugar must be increased (preferably through co-operatives) by about 50 per cent and reach 2·1 million tons. A rise by about 33 per cent of the production of vegetable oil will be necessary.

14.5 *Paper (19), bicycles 20, sewing machines (21) and electrical goods (22)*—Production must increase by roughly between 40 per cent and 100 per cent to meet anticipated increase in demand and also partly for export.

Hand-made Consumer Goods

15.1 Every effort must be made to expand the hand production of consumer goods to provide a marketable surplus to meet the increase in demand.

15.2 *Khadi and handloom (23)*—Production would be increased to 3,200 million yards (from the level of about 1,200 million yards in 1953-54).

15.3 Production of other hand-made articles must be increased by from 20 per cent to 40 per cent.

Agriculture and Allied Pursuits

16.1 The production of *cereals (28)* must be increased from 56 million tons (in 1953-54) to 63 million tons in 1960-61, and of *pulses (29)* from 10 to 13 million tons. This would make

the country self-sufficient in foodgrains at a somewhat higher standard of consumption than at present.

16.2 *Cotton (37)*—Output must increase by 38 per cent to 5.8 million bales so that the net import of cotton can be considerably reduced by 1960-61.

16.3 *Sugarcane (34)*—Output must increase to 7.5 million tons of raw sugar (50 per cent increase).

16.4 *Milk (37)*—Production of milk and other edible animal husbandry products should go up by about 25 per cent.

17.1 *Irrigation (41)*—In order to achieve the agricultural targets mentioned above, the total irrigated area must increase from 70 to 100 million acres.

17.2 Special attention must be given to devising suitable measures for flood control.

National Extension Service and Community Projects (42)

18 Vigorous organization and persistent efforts would be required for the expansion of production in agriculture and in household and hand industries. NES blocks, which can supply a convenient machinery for this purpose, must cover the entire country by the end of the Second Plan.

Transport

19 *Railway tracks (43)* would be increased by 3,000 miles (9 per cent increase); *passenger miles (44)* and *freight miles (45)* by 30 per cent and 40 per cent respectively. *National highways (46)* would be increased from 12,500 to 17,500 miles (40 per cent increase) and *State roads (47)* from 20,000 to 35,000 miles (75 per cent increase). *Shipping tonnage (48)* would increase from 525,000 (in 1953-54) to about 1,500,000—an increase of 185 per cent.

Education

20.1 The number of pupils in schools between the ages of 6 and 14 would increase from about 29 millions in 1955-56 to about 46 millions in 1960-61.

20.2 The expenditure on *technical training, higher education and research (53)* must increase by 75 per cent.

Health

21.1 The number of *hospital beds* (54) must increase from 112,000 in 1953-54 to 250,000 in 1960-61; and the number of *registered doctors* (55) from 65,000 in 1953-54 to 90,000 in 1960-61.

21.2 Two new cadres of junior and senior *health assistants* (56) would be created with two levels of training of two years and 4 years respectively. Each junior health assistant would be placed in charge of a group of 10 villages or one NES block and one senior health assistant would be in charge of 5 such groups or 5 NES blocks together with one registered doctor in charge of two such units or 10 NES blocks in such a way that the whole of the rural area is covered by the end of the Second Plan.

Urban Housing (57)

22 The number of urban houses must increase sufficiently to provide additional accommodation for 3 million families during the Second Plan.

TABLE I—*Targets of Production for the Second Five Year Plan*

1956-57 to 1960-61

Name of item	Unit	Actuals		Provisional estimates		
		1950-51	1953-54	1955-56	1960-61	percentage increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Factory Producer goods</i>						
1. electricity	m. kw	2.3	2.8	3.5	6.0	71
2. coal	m. tons	32	36	37	60.0	62
3. synthetic petrol	th. tons	nil	nil	nil	300	..
4. steel	m. tons	1.1	1.1	1.3	5.0	285
5. pig iron (for foundries)	m. tons	—	—	0.4	1.8	350
6. iron ore	m. tons	3	4	4	13	225
7. aluminium	th. tons	3.7	3.8	5	40	700
8. manganese ore	m. tons	1	2	2	3.5	75
9. cement	m. tons	2.7	4.0	4.6	10.0	108
10. fertilizers—						
(a) nitrogenous	th. tons nitrogen	9.2	61.4	90	560	300
(b) superphosphates	th. tons	55	66	100	200	100

TABLE I—Contd.

Name of Item	Unit	Actuals		Provisional estimates		
		1950-51	1953-54	1955-56	1960-61	percentage increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)
11. heavy chemicals—						
(a) sulphuric acid . . .	th. tons	99	120	150	450	200
(b) soda ash . . .	th. tons	45	56	75	200	167
(c) caustic soda . . .	th. tons	11	25	33	100	203
12. heavy machinery to fabricate plants—						
(a) steel and producer (investment) . . .	Rs. crores	nil	nil	nil	150	—
(b) electrical equipment (investment) . . .	Rs. crores	nil	nil	nil	40	—
(c) consumer goods . . .	index	—	—	100	200	100
13. railway rolling stock—						
(a) locomotives . . .	nos.	nil	86	100	400	300
(b) wagons . . .	nos.	1095	6892	7000	20000	186
(c) passenger coaches . . .	nos.	479	786	800	2000	150
14. jute textiles . . .	th. tons	892	864	1000	1200	20
Factory consumer goods—						
15. cotton textiles . . .	m. yds.	3718	4906	5000	5500	10
16. woollen textiles . . .	m. lbs.	18	20	20	25	25
17. sugar . . .	m. tons	1.1	1.1	1.4	2.1	50
18. vegetables oil . . .	m. tons	1.2	1.4	1.5	2.0	33
19. paper . . .	th. tons	114	137	140	200	43
20. bicycles . . .	thousands	101	290	500	1000	100
21. sewing machines . . .	thousands	33	68	90	150	67
22. Electrical goods . . .	index	—	—	100	166	66
Hand-made consumer goods—						
23. khadi and hand-loom . . .	m. yds.	742	1200	1600	3200	100
24. soap . . .	th. tons	—	—	28	40	43
25. footwear . . .	m. pairs	—	—	80	100	25
26. food industries . . .	index	—	—	100	120	20
27. metalwares . . .	index	—	—	100	133	33

TABLE I—Contd.

Name of item	Unit	Actuals		Provisional estimates		
		1950-51	1953-54	1955-56	1960-61	percentage increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Agricultural and associated pursuits—</i>						
28. cereals	m. tons	41·7	56·1	56	63	13
29. pulses and grams	„	8·3	9·6	10	13	30
30. total foodgrains	„	50·0	65·0	66	76	15
31. oilseeds	„	5·1	5·6	5·6	7·0	25
32. cotton	m. bales	2·9	3·9	4·2	5·8	38
33. Jute	m. bales	3·3	3·1	5·0	5·4	8
34. sugarcane (raw sugar)	m. tons	5·6	4·6	5·0	7·5	50
35. tobacco	th. tons	257	256	250	300	20
36. tea	m. tons	607	675	675	750	11
37. milk	index	—	—	100	125	25
38. wool	m. lbs.	—	—	40	50	25
39. timber	index	—	—	100	130	30
40. fish	„	—	—	100	125	25
<i>Rural development</i>						
41. irrigation	m. acres	50	58	70	100	43
42. NES and community projects	no. of blocks	—	479	1200	5600	367
<i>Transport</i>						
<i>Railways—</i>						
43. mileage	miles	—	—	34,500	37,500	9
44. passenger miles	index	—	—	100	130	30
45. freight index	ton miles	—	—	100	140	40
<i>Roads—</i>						
46. national highways	th. miles	11·9	—	12·5	17·5	40
47. State roads	„	17·6	—	20·0	35·0	75
<i>Shipping—</i>						
48. tonnage	thousand	391	525	610	1,500	146
<i>Social services</i>						
<i>Education—</i>						
49. pupils : age 6-11	nos. lakhs	187	—	236	380	—
50. pupils : age 11-14	„	34	—	51	80	—
51. percentage of students in age groups : 6-11	„	42	—	50	75	50

TABLE I—Contd.

Name of item	Unit	Actuals		Provisional estimates		
		1950-51	1953-54	1955-56	1960-61	percentage increase
(1)	(2)	(3)	(4)	(5)	(6)	(7)
52. percentage of students in age groups : 11-14 . . .	nos. lakhs	14	—	20	30	50
53. technical training, higher education and research . . .	Rs. crores] index	—	—	100	175	75
Health—						
54. hospital beds	thousand	107	112	125	250	100
55. doctors (registered)	thousand	—	65	70	90	29
56. health assistants	index	—	—	100	300	200
Housing—						
57. urban houses	lakhs	101	—	120	150	25
Communications—						
58. post offices	thousands	37	47	53	78	47
59. telegraph offices	thousands	36	39	48	70	46
60. telephones	thousands	168	220	300	600	100

APPENDIX (PROVISIONAL)

COMMODITY BALANCES IN 1960-61

1 Attempts have been made to see, in a rough way, that the targets given in Table 1 are consistent. This appendix gives relevant information for five major commodities : electricity, coal, steel, cement, and heavy chemicals.

Electricity

2 The consumption of electricity in 1960-61 is expected to be 20,000 million kilowatt hours (kWh) which should be possible to secure from an installed capacity of 6 million kilowatts (mkW) with a slightly higher rate of utilization than the present rate. The following allocation of power in millions kwh is envisaged in 1960-61 : iron and steel (2500), aluminium (1300), cement (1100), cotton textiles (15000), fertilizers (1000), all other industries (2500) and light, small power, traction and all other uses (7000) — total (20,000).

Coal

3 The industrial development envisaged would require at least 60 million tons of coal. The allocation in million tons in 1960-61 is expected to be as follows: railways (14.0), electricity (5.0), iron and steel (15.0) cement and bricks (5.0), cotton textiles (1.5), jute mills (0.5), paper (1.0), fertilisers (1.0), other industries (4.0), bunker and steamer service (2.0), domestic (7.5), synthetic petrol (1.5) and all other uses (2.0)—total (60.0).

Steel

4 The rough pattern of utilization in million tons in 1960-61 is given below: steel processing industries (1.5), railways (0.8), industrial development schemes both public and private (0.8), other Government development schemes including multipurpose and State irrigation projects (0.2), construction (0.5), industrial maintenance and packing (0.3), defence and roads (0.1) and all other uses including export (0.7)—total (5.0).

Cement

5 The allocation envisaged in million tons in 1960-61 is as follows: all construction (6.4), cement products (0.4), railways (0.5), roads (0.3), multipurpose and State irrigation projects (1.8) and all other uses including export (0.6)—total (10.0).

Heavy Chemicals

6.1 Balances have been worked out for sulphuric acid, caustic soda and soda ash.

6.2 *Sulphuric acid* The allocation in 1960-61 in thousand tons will be as follows: ammonium sulphate (60), superphosphate (110), iron and steel (90) and all other uses (190)—total (450).

6.3 *Caustic soda* The allocation in 1960-61 in thousand tons will be as follows: soap (30), textiles (20), paper (15), aluminium (5) and all other uses (30)—total (100).

6.4 *Soda ash* The allocation in 1960-61 in thousand tons will be as follows: glass (100), textiles (10), silicate of soda (10), paper (10), other chemicals (25) and all other uses (45)—total (200).

Chapter Three

INVESTMENT AND DEVELOPMENT

Allocation of Investment

1.1 The allocation of investment (or net capital formation) by broad sectors is shown below in Table 2.

TABLE 2—Allocation of Investment (Rs. crores)

Sector (1)	Public (2)	Private (3)	Total (4)	Percentage (5)
1. Electricity	450	50	500	8.9
2. Industry	1,000	400	1,400	25.0
3. Transport & communication	860	50	900	16.1
4. Agriculture and irrigation	750	200	950	17.1
5. Construction	250	1,100	1,350	24.0
6. Stocks	100	400	500	8.9
TOTAL	3,400	2,200	5,600	100.0

1.2 Electricity includes both hydro-electric and thermal power stations. Industry includes the household and hand industries. Construction includes residential houses, schools, hospitals and public buildings.

1.3 Strictly comparable figures are not available for the First Five Year Plan, but the total investment in the public sector as planned was roughly Rs. 1600 to Rs. 1700 crores and the same amount was estimated for the private sector. Thus investment or net capital formation through the public sector in the Second Plan would be about double of the planned estimates in the First Plan; and the estimated investment in the private sector would be about 40 per cent higher.

Allocation by Industries

2.1 The break-down of investment by important industries is shown in Table 3.

TABLE 3 — *Allocation of Investment by Industries*

Industry	Investment (Rs. crores)	Percentage
(1)	(2)	(3)
1. Iron and steel	425	30·4
2. Synthetic petrol	80	5·7
3. Heavy machinery to fabricate plants for:—		
(a) steel and producer goods	150	10·7
(b) electrical equipments	40	2·9
(c) consumer goods	50	3·6
4. Cement, chemicals, etc.	100	7·1
5. Existing State enterprises	50	3·6
6. Aluminium	30	2·1
7. Minerals and prospecting	75	5·4
8. Fertilizers	100	7·1
9. Factory consumer goods	100	7·1
10. Household and hand industries	200	14·3
TOTAL	1,400	100·0

2.2 The provision for iron and steel includes expansion of capacity of existing plants; three new plants (Rourkela, Madhya Pradesh and one more); factories for the production of pig iron for foundries, and miscellaneous items.

2.3 Along with the installation of one synthetic petrol plant, necessary action must be taken to train personnel and build up experience through pilot plants for the establishment of associated chemical industries.

2.4 The production of electrical appliances would include electrical machinery (such as turbines, generators, transformers, transmission equipment, etc.) required for hydro-electric and thermal projects.

2.5 The heavy machinery industry to be established in the public sector must be able by 1960-61 to fabricate machinery required to instal every year a steel plant of a million ton capacity or plants to manufacture producer goods of roughly equivalent value.

2.6 The aluminium industry must be developed to make the country independent of imports of copper by 1960-61; and must continue to be further expanded in future.

2.7 Geological surveys and especially prospecting for oil and minerals by Government organization must be rapidly expanded. Mining operations must also be greatly expanded. A provision of Rs. 75 crores has been made for this purpose,

2.8 Rs. 100 crores have been provided for the installation of fertilizer plants with capacity equivalent to roughly four times the current production at the Sindri factory.

Household and Small Industries

2.9 The greatest importance is attached to the expansion of the household and hand industries as this would be the principal method of liquidating unemployment and also of creating a marketable surplus of consumer goods to meet the increase in demand arising from investments in heavy industries construction work, and expenditure on social services. Rs. 200 crores or Rs. 40 crores per year have been provided for this purpose.

Public Development Expenditure

3.1 In the First as well as in the Second Plan certain items of current expenditure have been included in addition to provision for investment. This is shown in the following Table 4.

3.2 Comparable figures for the First Five Year Plan are given in Cols. (6) and (7). The total development expenditure of Rs. 4,300 crores in the Second Plan is just short of double the planned development expenditure of Rs. 2,248 crores in the First Plan.

TABLE 4 —Public Development Expenditure

Sector	Second Plan				First Plan	
	investment	current	total	percent	percent	total
	(Rs. crores)	(Rs. crores)	(Rs. crores)			(Rs. crores)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Electricity	450	..	450	10.5		
2. Agriculture, irrigation and rural development	750	200	950	22		
3. Sub-total			1,400	33	44	990
4. Industry & minerals	1,000	100	1,100	26	8	178
5. Transport and communication	850	100	950	22	24	536
6. Construction and social services	250	500	750	17	24	544
7. Stock	100	..	100	2	..	..
TOTAL	3,400	900	4,300	100	100	2,248

3.3 In the Second Plan there is a much larger actual expenditure for industrial and mineral development (Rs. 1,100 crores against Rs. 178 crores in the First Plan); and the relative proportion is also much higher (26 per cent of total development expenditure in the Second Plan against 8 per cent in the First Plan). The actual expenditure in the Second Plan is greater but the relative expenditure (as a proportion of the total) is less in all the other sectors.

Total Development Expenditure

4.1 In addition to the current development expenditure included in Table 4, there are current expenditures for purposes of development not included in the Plan. The position is shown in Table 5 below.

TABLE 5—Total Government Expenditure (Rs. crores)

item	1955-56 (estimated)	1960-61 (estimated)	total Second Plan
(1)	(2)	(3)	(4)
1. Non-development (defence and civil administration)	625	725	3,400
2. Development :—			
(a) not in the plan	200	225	1,100
(b) in the plan	600	1,100	4,300
3. Sub-total	800	1,325	5,400
TOTAL	1,425	2,050	8,800

4.2 The total Government expenditure is expected to increase from Rs. 1,425 crores in 1955-56 to about Rs. 2,050 crores in 1960-61; the total development expenditure would increase at the same time from Rs. 800 crores to Rs. 1,325 crores; and the development expenditure included in the Second Five Year Plan would increase from Rs. 600 crores to Rs. 1,100 crores.

4.3 The total Government expenditure during the Second Five Year Plan is expected to be Rs. 8,800 crores out of which Rs. 3,400 crores would be non-development (defence and civil administration), Rs. 1,100 crores development expenditure not included in the Plan, and Rs. 4,300 crores development expenditure included in the Plan.

Chapter Four

EMPLOYMENT AND INCOME

Employment

1.1 In India a very large number of families (comprising a majority of the population) are self-employed, many of which use their labour power only partially and thus suffer from chronic under-employment. They must be provided with opportunities of doing more work and thus increasing their income.

1.2 In the urban areas there is a large number of persons without jobs and seeking work for whom new employment must be created. New work must also be found for roughly 1.8 millions of persons who, on an average, would enter the working force every year (calculated on the basis of a labour force composition of 40 per cent of a net average increase in population of 4.5 millions per year).

2.1 The programme of production, investment, and development (discussed in Chapters Two and Three) is expected to generate a volume of employment shown in Table 6.

TABLE 6—*Estimated Volume of Employment in 1960-61*

Sector	(in millions)		increase	
	1955-56	1960-61	actuals (in millions)	per cent
	(1)	(2)	(4)	(5)
1. Agriculture & allied pursuits	109.5	111.0	1.5	41
2. Mining & factory establishments	4.0	5.7	1.7	42
3. Household enterprises & construction	12.0	15.0	3.0	25
4. Communication, railways, banks, insurance	1.6	2.0	0.4	25
5. Wholesale and retail trade, transport (other than railway), etc.	10.0	12.0	2.0	20
5. Professions, services (including Govt. administration) and the rest	14.9	17.3	2.4	16
TOTAL	152.0	163.0	11.0	7

2.2 If the targets of production are realized then the problem of unemployment should be brought under control by the end of the Second Five Year Plan. Because of the rapid rate of industrialization proportionately the biggest increase of employment, about 45 per cent, would occur in mining and factory enterprises. The household and hand industries, communication, transport, trade, etc., would have an increase of about 20 per cent or 25 per cent and the professions and services of about 16 per cent. Even in the Second Plan labour would not begin to be drawn away from agriculture and allied pursuits, but would increase at a small rate of the order of only 1.5 per cent, which would still mean an increase of 1.5 million persons in the labour force in this sector.

Income

3.1 The net domestic output at 1952-53 prices had increased from Rs. 91.9 abja in 1950-51 (the base year of the First Five Year Plan) to about Rs. 103.1 abja (provisional estimate) in 1953-54. This represents an increase of Rs. 11.2 abja or 12.2 per cent in 4 years or just over 3 per cent per year. A part of this increase was probably due to exceptionally good agricultural crops in 1953-54 and another part possibly to a partial correction of the previous under-estimation of crops. If allowance is made for these factors the real increase would be probably about 10 per cent in 4 years.

3.2 In the Second Five Year Plan the rate of investment and development would be roughly double that of the First Plan. The rate of increase of income is also expected to be roughly double or about 5 per cent per year. The same estimate has been generally corroborated from more detailed calculations by sectors on the basis of the investment and development programme.

3.3 The expected increase in national income is shown in Table 7.

TABLE 7—Domestic Product of the Indian Union at 1952-53 prices (Rs. abja-100 crores)

Sector	actual 1950-51	estimates		increase per cent
		1955-56	1960-61	
(1)	(2)	(3)	(4)	(5)
1. Agriculture and allied pursuits	45.2	52.8	63.4	20
2. Mining and factory enterprises	6.6	9.0	15.0	67
3. Household enterprises & construction	9.3	10.2	14.3	40
4. Communications, railways, banks, etc.	3.1	3.6	4.7	30
5. Wholesale & retail trade, other transport	13.4	15.1	18.8	25
6. Professions, services including Government administration and the rest	14.3	17.3	20.8	20
7. TOTAL	91.9	108.0	137.0	27
8. Population (millions)	359.3	383.7	409.7	7
9. Per capita income (Rs.)	256	282	334	19

Chapter Five

FINANCE AND FOREIGN EXCHANGE

Rate of Investment.—

1 The planned net investment covering both public and private sectors is Rs. 5,600 crores over the period of the Second Plan. The current rate of investment is about 7 per cent ; this will have to be raised to about 11 per cent of national income by 1960-61.

Resources for the Public Sector

2.1 The total expenditure of the Centre and State Governments combined is estimated at Rs. 8,800 crores for the Second Plan as a whole (Table 5). Expenditure outside the plan would increase from Rs. 825 crores in 1955-56 (estimated) to Rs. 900 crores on an average in the Second Plan. Expenditure on the Plan is expected to increase from Rs. 600 crores in 1955-56 (estimated) to an average of Rs. 860 crores in the Second Plan.

2.2 The total receipts from taxes and non-tax revenue, at the current rate of intake of 8.5 per cent of national income, would bring in about Rs. 5,200 crores. Borrowings (net) from the public should yield Rs. 1,000 crores (about Rs. 600 crores from loans and Rs. 400 crores from small savings). Allowing for Rs. 200 crores for receipts from railways and miscellaneous items on capital account, the total receipts from the domestic sources, at current rates, would be Rs. 6,400 crores.

2.3 This leaves a gap of Rs. 2,400 crores in the public sector. As against this, external assistance may provide Rs. 400 crores. The balance of Rs. 2,000 crores will have to be found at least in part by fresh taxation and profits of such commercial or industrial undertakings as can be started in the public sector. The aim should be to limit deficit financing to a total of Rs. 1,000 to 1,200 crores. A taxation target of 9 to 10 per cent of national income as against the present level of about 7 per cent must be attained.

3.1 The budgetary position on the above basis is shown below :—

TABLE 8—Government Budget : 1956-57 to 1960-61 (Rs. crores)

(1)	<i>expenditure</i>	(2)	<i>receipts</i>	(4)
1. On the plan		4,300	1. on the revenue account	5,200
2. Outside the plan		4,500	2. loans from the public	1,000
			3. railways and miscellaneous funds	200
			4. foreign assistance	400
			5. sub-total	6,800
			6. additional taxes and loans and profits from State enterprises	800—1,000
			7. deficit financing	1,000—1,200
TOTAL		<u>8,800</u>	TOTAL	<u>8,800</u>

3.2 A good part of the additional income in the Second Plan would be created at lower income levels. The heavy industries would take time to become profitable. Also, foreign assistance may not be realised to the fullest extent. It would be essential, therefore, to keep a stringent watch on expenditure outside the Plan ; to make necessary adjustments in the price and subsidy policy of Government ; to reach new strata for tapping savings ; and finally, to make changes in the tax structure to raise additional resources required to finance the Second Plan.

Finance of the Private Sector

4.1 Investment in the private sector is estimated at Rs. 2,200 crores out of which Rs. 1,100 crores or about a half is for housing and Rs. 400 crores for industries.

4.2 With deficit financing of Rs. 1,000 to Rs. 1,200 crores by Government, the banking system should be able to provide the credit required for working capital. In fact, conditions of easy credit are likely to emerge.

4.3 The newly set-up financial institutions (such as the Industrial Investment and Credit Corporation) will assist the private sector. The pattern of investment in the private sector will have to be watched continuously and influenced in the desired direction through tax incentives, selective credit controls, capital issue control and similar devices.

Foreign Trade and Payments

5.1 Much larger imports will have to be made of capital goods in the Second Plan. The total needs would come to about Rs. 1,200 crores ; adding Rs. 400 crores for imports of equipment for replacements, the total requirements would be about Rs. 1,600 crores for imports of capital goods.

5.2 This must be met partly by increased production of foodgrains, sugar, cotton, and petrol ; partly through foreign assistance and withdrawal from sterling balances ; and by curtailment of non-essential imports and promotion of exports in every possible way.

Chapter Six

PLANNING ORGANIZATION AND ADMINISTRATION

Planning Organization

1.1 Planning must be continuous and flexible. In addition to the Five Year Plan, detailed annual plans must be prepared every year. Targets, projects, and policies must be continually re-assessed and reformulated to suit changing needs and conditions.

1.2 At the same time it is imperative to keep in perspective the potential growth of the economy over a long period so that decisions can be made to secure a balance between short-term and long-term objectives.

1.3 For planning on lines explained above, it is necessary to build up an appropriate planning organization. A technical organisation (consisting of economists, statisticians, scientists engineers, technologists, and administrators) must be established within the Planning Commission for the preparation and continuing examination of the national plan and for working out the various balances relating to it. Technical units must also be established in the Central Ministries, State Governments, and other agencies to prepare detailed projects and estimates and to revise them as necessary.

1.4 There must be a continual two-way flow of information. Plan targets from the top must be continually checked against possibilities of realization at the level of projects. Possibilities of development envisaged at the bottom must continuously shape the targets formulated at the top.

1.5 Information of many kinds would be continually required for the formulation and revision of the plan and of detailed projects as well as for the assessment of the progress and implementation of the Plan.

1.6 The information service and planning and project activities must be closely related. The Central Statistical Organisation in association with the Indian Statistical Institute must function as an integral part of the planning machinery at the Centre. Following the same pattern, the State Statistical Bureaux must serve as focal points for statistical services in connection with planning activities at the State level.

Administrative Machinery

2.1 Planning on bold lines with a steady expansion of the public sector and advance to a socialistic pattern of economy would require the building up of appropriate administrative machinery of a new type at all levels.

2.2 There must be decentralization, on business like lines, of the day to day management of public enterprises with large delegation of financial, administrative, and executive control to develop initiative and responsibility at the periphery so necessary for efficient conduct of business enterprises.

2.3 Attention must be focussed on the implementation of the Plan—on getting things done at the right time—and rules of procedure must, if necessary, be revised to ensure effective action. Secretariat control of the present type must be replaced to a large extent by control by truly autonomous public corporations set up by Government or through the supply of credit by State Banks working under the general guidance of Government in matters of policy.

2.4 Administrative difficulties inherent in the existing Government machinery are likely to prove the greatest obstacle to efficient planning. To overcome such difficulties, large organizational and even constitutional changes may become necessary. The problem is urgent and requires immediate and serious attention.

2.5 Government must rally public support in favour of the Plan ; and encourage and help non-official organizations to promote its fulfilment.

THE SECOND FIVE YEAR PLAN

A Tentative Framework

A working paper prepared jointly by the Economic Division, Ministry of Finance and the Economic Division, Planning Commission, in consultation with the Central Statistical Organisation and the Indian Statistical Institute.

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March 21, 1955

INTRODUCTION

1. An attempt has been made in this paper to work out the targets to be achieved in the Second Plan period in the light of the main objectives in view. The purpose is to present a rough sketch of the overall picture or pattern which the Second Plan should aim at. The detailed targets to be achieved will, of course, have to be arrived at only after a detailed scrutiny of needs and of the means and measures required for their fulfilment. A broad framework is, however, necessary if individual schemes and targets are to be worked out by the authorities concerned with an eye to the overall developments envisaged. The framework presented in this paper may thus be regarded as a first approximation to what the final plan might look like. The intention, in the first instance, is to facilitate a discussion on overall objectives and the means of attaining them. The plan proper will only emerge after a series of discussions between planning and executive authorities on various levels. In this process, the initial assumptions made in this paper and the various suggestions put forward will necessarily come in for a review.

2. The Planning Commission is required under its terms of reference to "make an assessment of the material, capital and human resources of the country including technical personnel and investigate the possibilities of augmenting such of these resources as are found to be deficient in relation to the nation's requirements." Such an assessment is necessarily a continuous process. When the First Plan was formulated a quick estimate of the requirements and possibilities of the first five-year period was made and the plan represented what could be achieved as a first step towards more rapid and sustained progress in the future. The targets set in the First Plan were modest. At the time the plan was formulated the country had to reckon with the dislocation caused by war and partition, with the resurgence of inflationary pressures in the wake of hostilities in Korea and with shortages of food and essential raw materials. A cautious approach was inevitable in the circumstances.

3. The economy has gained considerable strength over the past three or four years. Inflation has been overcome. Shortages of foodstuffs and raw materials have disappeared. There has been considerable expansion in industrial production and in the provision of health and education facilities. These achievements of the First Five Year Plan give reason for the hope that a bolder step ahead in the Second Plan is feasible.

4. A bolder plan for the coming five-year period is, in fact, inescapable. Our experience in the past few years has focussed attention on certain disquieting features of the economy. Failure of employment opportunities to expand *pari passu* with needs and the fall in agricultural prices have made it evident that the rate of investment in the economy is inadequate. While agricultural production has increased, there has not been a corresponding increase in the demand from the other sectors. This, in part, at any rate, may be attributed to the rather

insufficient emphasis on industrial development in the First Plan period. In part, it is due to the rather unexpectedly good monsoons for the last two years. For raising the tempo of development in the next plan period there must be a greater stress on industrialization. The shift will, of course, be relative. Increase in agricultural production and productivity must remain for many years to come a matter of high priority.

5. The shortfalls in expenditure that occurred in the initial stages of the First Plan have emphasised the need for a detailed and timely formulation of schemes, for the setting up of adequate administrative machinery and for prior training of personnel at all levels. A bolder plan can be initiated only if more of the real resources which are unutilised in the system can be effectively mobilised. It is necessary, therefore, to assess the real resources available and to examine the uses to which they can be put with maximum advantage in view of the objectives in hand.

6. In short, experience with the First Plan suggests that a bolder approach in the Second Plan is *both feasible and desirable*. It also suggests at the same time that there is little ground for complacency about the financial resources available for securing a greater rate of development. The budgetary position of Government in the earlier years of the plan was helped by the extraordinary receipts following the war in Korea. The rate of spending in the first three years was also quite low. More lately while tax receipts have not increased, the response of the public to Government loans has been encouraging. For the five-year period as a whole, however, the surpluses from current revenues, the profits of railways and the accumulations in various deposit funds will turn out to be somewhat below the targets set in the plan. For stepping up the outlay in the plan in the fourth and fifth years, it has been found necessary to rely to a great extent on deficit financing. Deficit financing as a means of drawing unutilised resources into the system is justifiable. Continued reliance on it may, however, distort the price structure and create instability. In short, if the Second Plan has to be bolder, it has to be based on greater effort at mobilising the real and financial resources needed.

Chapter I

OBJECTIVES OF THE SECOND PLAN

The main objectives of the Second Plan may be set down in general terms as follows :—

- (a) A sizeable increase in national income so as to raise the level of living in the country ;
- (b) Rapid industrialization, with particular emphasis on the development of basic industries ;
- (c) Fuller employment ; and
- (d) Social justice.

2. These objectives are interrelated. The level of living in the country cannot be raised without a sustained increase in the production and investment. In order to facilitate greater capital formation in the country, it is necessary to develop the basic industries producing steel, coal, electricity, heavy chemicals and machinery. But in a poor country where consumption standards are already too low, higher investment and the development of basic industries cannot be made to depend on a curtailment of consumption even in the initial stages. An attempt must be made, therefore, to increase both consumption and investment simultaneously by harnessing such resources as are unemployed or unutilised at present.

3. The economic development of the country must conform to the broad social objectives in hand. The development of a socialistic pattern of society has already been enunciated as a basic objective before the country. In formulating the Second Plan emphasis must be placed on the extension of public ownership or control over the strategic means of production, on greater equality of opportunities, on bridging the gap between the haves and the have-nots and on the protection and enhancement of the well-being of the weak and unorganised sections of society. Men do not give of their best in the absence of a secure and fair share in the fruits of their labour; and achievement of social justice is a necessary condition for releasing the productive energies of the people.

4. The objectives outlined above cannot be achieved fully in a matter of five or ten years. In the short run, it may not be possible to reconcile fully the claims of greater production, fuller employment and a wider capital and industrial base for further progress. Such conflict as arises between different objectives in the short run must be resolved in keeping with the dictates of social justice and the need for raising standards of life at the lower levels. In planning for a given period ahead, the basic task is to define as precisely as possible the advance to be made in each desirable line and to ensure an optimum fulfilment of all the objectives.

NATIONAL INCOME AND STANDARD OF LIVING

5. The First Five Year Plan contained an illustrative model of development over a period of some 27 years. According to that model, India's national income could be doubled in some 22 years, per capita income could be doubled in about 27 years, and per capita consumption could be increased by roughly 70 per cent in a little more than five plan periods (i.e., between 1950-51 and 1977).

6. The increase in national income by the end of the First Plan is likely to be greater than was anticipated and may amount to some 15 per cent over the five years. The national income of India increased by some 15 per cent in real terms during the five years 1948-49 to 1953-54. During the first three years of the First Plan, the increase was of the order of 12.5 per cent. Even when allowance is made for the provisional character of the estimate for 1953-54 and for favourable monsoons, it is reasonable to expect a 15 per cent increase in national income over the First Plan period. For the Second Plan, therefore, we may well aspire to an increase in national income higher than 15 per cent, say, 25 to 27 per cent in five years, or 5 per cent per annum as a first approximation.

Net National Output of India at Current and Constant Prices.

	1953-54*	1952-53	1951-52	1950-51	1949-50	1948-49
Net output in Rs. abja**						
at current prices . . .	106.0	98.6	99.9	95.3	90.1	86.5
at 1948-49 prices . . .	99.5	95.2	91.6	88.5	88.2	86.5
Per capita net output in Rs.						
at current prices . . .	283.9	267.4	274.5	265.2	253.9	246.9
at 1948-49 prices . . .	266.5	258.1	251.7	246.3	248.6	246.9
Index number of net output with 1948-49 as base						
at current prices . . .	122.5	114.0	115.5	110.2	104.2	100.0
at 1948-49 prices . . .	115.0	110.1	105.9	102.3	102.0	100.0
Index number of per capita net output with 1948-49 as base						
at current prices . . .	115.0	108.3	112.2	107.4	102.8	100.0
at 1948-49 prices . . .	107.9	104.5	101.9	99.8	100.7	100.0

* preliminary.

**abja = 100 crores = 10⁹

7. An increase in national income of about 5 per cent every year in the Second Plan is by no means unrealistic or ambitious. A rate of increase in national income of 3 per cent per annum has been achieved over a period of years without any attempt at planning in countries already advanced industrially. In recent years, the socialist countries in Eastern Europe have achieved a rate of increase of some 12 to 16 per cent in national income every year. In the light of this experience, the target of a 5 per cent per annum increase in national income for the Second Five Year Plan must be regarded as a minimum to aim at. With effort and organisation, it could probably be improved upon. On this basis, it should be possible to advance the long-term targets outlined in the First Plan by some four to five years, or even more.

Growth in National Income in Selected Countries.

<i>Country</i>	<i>Period</i>	<i>Rate of growth (Annual Average in per cent)</i>
U. S. A.	1869-78-1904-13	4.5
	1869-79-1929	4.0
	1899-1908-1929	3.2
	1929-1950	3.0
Canada	1903-29	2.6
Switzerland	1890-1929	2.7
Germany	1876-1913	2.8
Japan	1887-1913	3.0
	1914-1930	6.7
	1914-1937	6.7
Australia	1901-03-1928-29	3.2
	1901-03-1947-48	2.5
Soviet Union	1928-37 (Official)	16
	1949-53	15
Poland	1947-53	14.5
Czechoslovakia	1948-53	12
Hungary	1952-53	12
Bulgaria	1952-53	16

8. An increase in national income of some five per cent per annum would permit both a sizeable improvement in the level of living in the country and an increase in the rate of investment. If investment is stepped up from roughly 7 per cent of national income at present to about 11 per cent of national income by the end of the Second Plan, total consumption should increase roughly by 20 per cent and per capita consumption by 12 to 13 per cent by the end of the Second Plan.

9. The First Five Year Plan aimed, as a first step, at restoring the pre-war levels of consumption of the basic necessities of life in the country. There has been a significant increase in the consumption of foodgrains, cloth and other items in recent years and the damage done by war and partition is all but repaired. However, the standards of nutrition, clothing, health, housing and education in the country are still inadequate.

10. The minimum requirements of cereals in a balanced diet were estimated by the Nutrition Advisory Committee as 14 oz. per adult per day. The average consumption of cereals in the country has increased from less than 13 oz. per adult per day in 1950-51 to nearly 15 oz. in 1953-54. The availability of pulses and grams still falls short of minimum nutritional requirements—2.5 against 3 oz. per adult per day. The consumption of a large number of people, however, is below the average level in the country ; and the demand for foodgrains is certain to increase if purchasing power is increased at the lower levels. Thus, quite apart from the requirements of a growing population, the production of foodgrains needs to be increased in the Second Plan.

11. In the case of other foods such as milk, ghee, meat, fish, eggs, fats, fruits, vegetables and sugar the present level of consumption falls far short of minimum requirements. In planning for a higher standard of living, special attention must be devoted in the Second Plan to animal husbandry, fisheries, poultry-farming, vegetable gardening and other branches of food production. How much advance in these directions can be secured within the next five years is a matter for detailed examination.

12. The average consumption of cotton cloth in India is now back to the pre-war standard of 15 yds. per person. The Textile Enquiry Committee has recommended an increase in consumption of cotton cloth to 18 yds. per person by 1960. This modest objective must be achieved in the Second Plan.

13. During the war, an acute housing shortage developed in the urban areas. Urban population increased by 42 per cent during 1941-1951, and the shortage of houses at the end of the decade was estimated at more than 18 lakhs in addition to some 10 lakh houses required for displaced persons from Pakistan. There has been a substantial increase in urban construction in recent years, and it is reasonable to expect that the supply of houses in the urban areas would increase from some 102 lakhs in 1950-51 to 115 to 120 lakhs by the end of the First Plan. Broadly, provision has to be made in the Second Plan for the construction of an additional 30 lakhs of houses in the urban areas. The housing problem in rural areas is not as acute as in urban areas. But an effort must be made through the National Extension Service and similar agencies to improve housing conditions in rural areas as well.

14. As regards education, of the total population of children between 6 and 14, only 23 per cent went to school in 1939-40 and some 32 per cent in 1950-51. It is expected that this proportion would increase to 40 per cent by the end of the First Plan. Under the directive principles of the Constitution, the State must endeavour to provide free and compulsory education to all children below the age of 14 within a period of ten years. A considerable

expansion to a proportion of, say 60 per cent, in primary education facilities must, therefore, be achieved in the Second Plan. Similarly, the provision of hospitals, doctors, nurses and sanitation facilities in the country is far from adequate and a substantial increase in health and medical facilities during the Second Plan must be assured.

15. An increase in national product by some 25 per cent would be required to ensure the increase in the level of living as envisaged above.

RAPID INDUSTRIALIZATION

16. Industrialization is a means, not an end. But considering the need for initiating the process of sustained and more rapid progress in subsequent plans, it becomes almost an objective in itself. From the long-term point of view, it is necessary to make a rapid advance in those sectors where the potentialities for further growth and the indirect benefits to other sectors are the greatest. It was with this end in view that the First Plan laid great emphasis on the development of irrigation and power in the country. In the Second Plan, a high priority must be accorded to the development of basic industries such as those producing iron and steel, machinery, electrical equipment and heavy chemicals. The development of these industries in the First Plan has not come up, by and large, to expectations; and this deficiency must be made good in the Second Plan. It is only by developing basic industries that a secure foundation for capital formation can be laid and the country made more and more independent of imports of vitally needed plant and equipment.

17. Historically, the development of heavy capital goods industries has followed in the wake of a rapid advance in consumer goods industries in most countries. But it is not an uneconomic proposition to give priority to the development of heavy industries and to try and reverse the historical process, within limits. A country which seeks rapid development cannot rely on the export of food and raw materials for satisfying the major part of its increasing requirements of capital goods. Nor can a comparative late comer in the field of industrialisation hope for a sizeable expansion in the exports of manufactured consumer goods. The hinterland of countries with an industrial vacuum is disappearing day by day, and countries placed in more or less the same position as we are are naturally anxious to develop industries themselves. Our natural resources put us at no serious disadvantage in the development of basic industries; and such deficiencies of capital or skill as we have can be removed by careful planning. In both these respects, assistance from more developed countries would be welcome. The emphasis on the development of basic industries, therefore, is not in disregard of the possibilities of international exchange.

18. The major effort in the development of basic capital goods industries must come from the public sector. This is necessary if the State is to have command over means of production in strategic sectors. Also private enterprise is not likely to be able to provide the large capital requirements of such industries. Schemes for setting up iron and steel plants and an electrical equipment plant in the public sector are already under way; and the possibility of taking up new schemes in this field must be further explored. Special attention needs to be given to the production of machinery to be employed in other producer goods

industries and to the production of synthetic petrol. Presumably, it would be necessary to expand steel capacity to 10 or 20 million tons in the next 10 or 15 years. It would be desirable, therefore, to try and fabricate as much of the steel-making machinery as possible at home. Similarly, the development of synthetic petrol in the country would reduce imports and serve as nucleus for the development of several other industries.

19. The private sector must also be encouraged to invest predominantly in the producer goods industries. A number of such industries, such as cement, chemicals and iron and steel are at present largely in private hands. However, a large part of the profits in organised industries is made in consumer goods industries. Steps must be taken, therefore, to direct a larger flow of private investment into basic industries by suitable tax and credit measures and by making a stricter use of the powers to control capital issues and imports and by licensing of new enterprises.

20. The development of heavy industries would require fuller exploitation of our mineral resources, extension of transport facilities and a rapid expansion in the number of trained personnel in the country. Concrete schemes for scientific training, mineral development and transport must, therefore, be worked out in advance of the projects for heavy industries.

21. In the ultimate analysis, all wealth is forged by human hands and brains with the help of such resources of minerals, land or water as are endowed by nature. The need for extensive surveys to discover additional mineral resources in the country can, therefore, be hardly exaggerated. At the same time, steps must be taken to conserve such scarce resources as high-grade coal and to develop domestic substitutes for minerals such as copper in which we are deficient. Where necessary, arrangements can be made with foreign countries to make up the gap in skilled personnel in the country by practical training abroad.

22. The development of capital goods industries requires heavy investment, both directly and indirectly. At the same time, it creates additional demand for consumer goods which it does not produce. The extent of such development is limited, therefore, by the feasibility of producing consumer goods on the scale required with the help of the residuary investment funds. The basic strategy in the Second Plan must, therefore, be to invest large sums in the development of basic industries, transport and mining at one end and to economise as much as possible in the capital requirements for other sectors without restricting the supply of consumer goods. This strategy requires all-out efforts for the maximum utilization of capacity in existing industries and for the development of additional production in the capital-light or small-scale sector of industries. Since a large part of the additional demand for consumer goods would be directed against food, attention must be paid to the adoption of schemes which would increase productivity in agriculture quickly and at less capital cost.

23. A great deal of unused capacity exists at present in organised industries. This should be drawn upon as fully as possible. It is also possible to expand production on the basis of existing equipment by working additional shifts. A detailed survey of unused capacity in different industries should, therefore, be undertaken as soon as possible and steps should be taken to ensure the fullest use of existing capacity before setting up new units.

24. The extensive development of small-scale industries in the Second Plan is essential for a number of reasons. Apart from releasing scarce capital resources for the basic industries, they would provide greater employment and incomes for a large number of persons organised in small enterprises. Measures to encourage and protect small-scale and village industries should, therefore, be an integral part of the Second Plan. But one must not lose sight of the fact that with increasing incomes, the pattern of consumption is liable to change fairly quickly, and the output of consumer goods must be adapted to this changing pattern. Cottage and small-scale industries must not be thought of in terms merely of traditional techniques and traditional types of products.

25. Needless to say, a great deal of effort and organisation will be required for resuscitating small-scale industries. Should these not be forthcoming, the emphasis on capital-saving methods may well land us between two stools—the large-scale capital-using methods may get discouraged without other methods filling in the gap. We may thus have the worst of both the worlds. The consequence of this would be inflation or nonfulfilment of the investment planned.

26. It should also be borne in mind that with production organised on the basis of numerous units, the problem of ensuring sufficient savings for further expansion becomes more difficult. It is comparatively easy to plough back incomes in organised industries for further progress. If this difficulty is not resolutely faced, the attempt to economise on scarce capital resources in the short run might make capital scarcer still in the future. To a considerable extent this difficulty can be got over by promoting cooperative organisation.

27. Once the economy gets going, employment opportunities become more plentiful, and investible surpluses increase, it would be possible, nay desirable, to introduce more efficient methods of production in the consumer goods industries as well. Indeed, the ultimate justification for developing producer goods industries lies in the need for modernising the production of consumer goods and making it more efficient. Although part of the output of capital goods may be exported or used for further expansion of producer goods industries a part must be absorbed in the modernisation of consumer goods industries. Thus the development of heavy capital goods industries is consistent with and requires modernisation of methods of production in other sectors over a period of time. The strategy of balancing the development of producer goods industries at one end with encouragement of capital-light methods of production at the other end is justified in the immediate future only because we hope that at a later date our savings would rise sufficiently to permit the adoption of capital-using methods over a large area without starving the rest of the economy for capital and without creating unemployment.

28. Even in the short run, the mechanised consumer goods industries must be encouraged to modernise and expand where small-scale industries do not provide an effective substitute and where it is possible to expand exports. A plan for the development of heavy industries would inevitably strain our balance of payments position; and any disregard of export possibilities would only defeat the basic purpose in hand.

FULLER EMPLOYMENT

29. A large increase in employment opportunities must be regarded as a principal objective—the kingpin—of the Second Plan. The nature and extent of the problem, however, needs to be carefully defined.

30. First, if there is to be no increase in unemployment, the entire increase in the labour force during the Plan period must be absorbed in gainful occupations. For a population increasing by some 125 per cent every year and with a labour force of some 40 per cent of the population, it would be necessary to create new *employment opportunities* for at least 9 to 10 million persons in the Second Plan.

31. Second, effort must be made to correct, if not to eradicate, such unemployment as already exists in the country. Some of this unemployment is *vert*; it is unemployment among those who are prepared to work for a wage or a salary. Here the problem can be stated specifically in terms of the number of jobs that must be created. Such unemployment exists in India, particularly in the urban areas and among the educated classes. There are at present some 6 lakh persons seeking jobs through Employment Exchanges in India. The creation of certain number of *jobs*—say 2 million—in the strict sense of the term must be a part of any programme for adequate employment opportunities.

32. For the large number of peasants, craftsmen and small traders, who are self-employed, unemployment arises in the form of lack of gainful work for a part of the year. In this area, the task of creating more employment is not easily distinguishable from that of providing higher incomes. In a sense, as long as incomes of peasants and craftsmen are raised by providing better techniques, more irrigation and greater demand for their products, it is immaterial whether they work all the year round or not. What is shocking is not that they do not have work for a part of the year but that their back-breaking labour for such time as they do work earns them only a miserable pittance. For those who have some gainful occupation of their own, the emphasis should lie on greater productivity and incomes rather than on employment over a greater part of the year. But, even so, supplementary occupations will have to be found for considerable numbers.

33. There is a special aspect of the unemployment problem particularly in agriculture which must be mentioned here. This is disguised unemployment. In an agricultural economy which has remained stagnant for years, a large number of persons remain attached to agriculture without really contributing any thing to production. Since gainful occupation outside agriculture is not available to a sufficient degree, the protective instincts of society give everyone some stake in economic activity even though their services are strictly redundant. If employment outside agriculture is available in the future, it should be possible to transfer a certain number of persons at present dependent on land to other jobs without affecting agricultural output. Although the existence of such disguised unemployment is often asserted no estimate of its amount is available, or is easy to make. If techniques of production in agriculture improve so as to reduce the demand for labour, especially at harvest time, it would

be possible and necessary to transfer a part of the population dependent on agriculture to other occupations. Such a transfer of population from land, however, is a long-term task; for the Second Plan it would be sufficient to aim at stabilising, more or less, the present level of employment on land.

34. On this basis, the employment target for the Second Plan should be of the order of 12 million. It may be noted that this target relates not only to jobs in the strict sense of the word but includes all gainful occupations. The aim should be to absorb these 12 million persons outside agriculture. *In addition*, it would be necessary to provide additional work or incomes to those already employed in agriculture and small enterprises.

35. It may well be that the total number of persons working in agriculture and allied pursuits increases by a million or two during the Second Plan in any case. Even if adequate employment opportunities outside agriculture are available, some additional persons may prefer to be absorbed in agriculture. After all, more than 6 out of the 9 million persons added to the labour force in this period would be attached to agriculture to begin with. If incomes in agriculture are rising, some of them may prefer not to take up an alternative occupation even at a somewhat higher remuneration. Again, in some parts of the country, additional employment on land would be economically desirable, for example, on newly reclaimed land.

36. In the context of an employment-orientated plan, there often arises a conflict between greater production and greater employment. If employment is to be maximised, labour-intensive methods of production have to be preferred. On the other hand capital-intensive methods are more productive. The relative roles to be assigned to these two methods of production deserves careful consideration. This conflict is particularly relevant to the manufacture of consumer goods. For a single industry, the superiority of a capital-intensive method is easy to demonstrate. But a poor economy *as a whole* cannot be run on the basis of up-to-date capital-intensive methods for the simple reason that there is not that much surplus for investment to go round. Obviously, therefore, the over-all availability of investible funds and the competing claims on them should determine the relative roles of small-scale and large-scale or mechanised methods of production in the manufacture of consumer goods. If our aim is to develop basic industries in the Second Plan, as has been argued earlier, the protection and encouragement of small-scale industries assumes importance as a means of preserving a balance between the supply and demand for consumer goods, quite apart from their employment potential.

37. For absorption of the unemployed, we should not think exclusively in terms of "industries" only. There are a number of activities such as construction of houses, roads, dams and laying of railway tracks where 'labour-using' methods may be just as economical as others. An increase in these activities can be a very useful source of additional employment.

38. The theoretical reasoning stated above notwithstanding, difficult cases of reconciliation between the two objectives of greater production and greater employment are bound to arise in practice. Granted the need for encouraging and protecting small-scale and village

industries, how far should this process be carried? The protection of small-scale industries also implies a redistribution of incomes within the community. The limit to such protection and encouragement—apart from considerations of export and the feasibility of the requisite organisational effort—must be prescribed, therefore, in the light of the broad social objective of protecting and promoting the level of living at lower levels in preference to raising of standards at a higher level.

39. Since some unemployment may be unavoidable for reasons of immobility of labour and the like, an employment-orientated plan must provide for unemployment insurance or relief, with facilities for training and placement, at least in the urban areas. For the rural areas also, it would be an advantage to hold in readiness a number of labour-intensive schemes of public works in case of threatened unemployment. Steps must also be taken to collect promptly data about the emerging pattern of employment and unemployment so as to facilitate the adoption of remedial measures in time.

SOCIAL JUSTICE

40. As in the case of all things that really matter in life, social justice is easy to recognise but not so easy to define. Since the goal of a socialist pattern has now been clearly accepted, concrete steps in this direction have to be taken during the next plan period.

41. An important element in this transformation must be land reform with a ceiling on holdings and an explicit transfer of property rights to the actual tillers of the soil. In order to be economically meaningful, land reform must be supplemented by consolidation of holdings and by provision of credit, marketing and warehousing facilities in the rural areas on the lines indicated in the Report of the Rural Credit Survey.

42. A socialistic pattern of society also implies State ownership or control of the strategic means of production. With the rapid development of basic industries, largely in the public sector, the Second Plan would ensure for the State a significant increase in its influence on this sector. Where necessary, the State must be prepared to enter into other spheres such as banking, insurance and trading.

43. Certain basic necessities of life must be provided to a greater proportion of the people irrespective of their ability to purchase the same in order to achieve a greater equality of opportunities in the country. Among these education and health come first. What is important is not merely an increase of schools and colleges but also an assurance of access to them for children of the poorest parents. The Second Plan must pay special attention to the provision of free boarding, lodging and tuition facilities to poor and deserving students from the primary right up to post-graduate levels. In other words the sphere of public or communal consumption must be increased as the share of the public sector in productive enterprise goes up.

44. Conspicuous consumption by the more well-to-do classes must be checked. In a poor country trying to lift itself by the bootstraps, the self-denial and labour of the poor must provide directly or indirectly the major part of the resources for development. But such self-denial and effort cannot be justified in the midst of glaring inequalities. Conspicuous consumption by a few persons also serves to dissipate the habit of thrift in others who follow suit in some measure for reasons of social prestige. Curbing of conspicuous consumption requires a fairly stiff system of taxes on luxuries. But, basically, the solution is reducing expendable incomes through direct taxation.

45. The Taxation Enquiry Commission has recommended that there should be a ceiling on net personal incomes after tax which, generally speaking, should not exceed approximately 30 times the prevailing average per family in the country. This recommendation is intended to be implemented by steps over a period of time ; but a few steps must be taken in this direction in the Second Plan.

46. The emphasis on employment opportunities in the Second Plan will raise incomes at lower levels. At the same time, an inflationary rise in prices which corrodes living standards of the workers and the middle class must be avoided as far as possible ; and in the event of inflationary measures gathering strength, steps must be taken to prevent the concentration of wealth and incomes in the hands of the trading and profit-making classes.

47. Industrial relations must be so arranged as to provide labour with both economic security and fair wages. The claims of capital accumulation must, of course, have precedence in the allocation of profits but a proportion should be devoted to increasing amenities like housing, providing training with a view to promotion, etc. In public undertakings, the State must set an example as a model employer.

48. Agricultural prices are not likely to remain depressed during a bold plan for rapid industrialisation. In the event of a sustained fall in agricultural prices, demand must be stimulated promptly by greater public expenditure and by open market operations by Government. Any sharp turn in the terms of trade against agriculture would depress the living standards of the large mass of people, jeopardise the increase in agricultural productivity and would curtail the demand in general.

Chapter 2

THE SECOND FIVE YEAR PLAN IN OUTLINE

We may now work out in more concrete terms the tasks to be taken in hand in the next plan period in view of the objectives stated above. We then go on to indicate the investment requirements of the targets outlined and their impact on employment opportunities and the structure of the economy.

2. The development of the economy envisaged for a given period ahead must satisfy three requirements. It must conform to the basic objectives of social policy. The growth of different sectors of the economy must be balanced in the sense that the requirements of each sector in terms of men, machines, and materials must be forthcoming in right quantities at the right time and the products and services of each sector must be promptly and fully utilized so as to promote the growth of other sectors of the economy. Third, the particular pattern of development envisaged must represent an optimum or an economically efficient choice from among the various alternatives available.

3. If the criteria just outlined are to be satisfied in formulating a plan, we have to take into account the socially desirable norms of consumption in certain specified fields such as health and education ; the pattern of consumer demand ; the scope for international exchange ; the interdependence of different industries ; alternative methods of production available in different sectors ; and the feasibility of mobilising certain intangible factors such as inventiveness and enterprise. In addition, we must proceed from a proper assessment of such resources of man-power, capacity or minerals and land as are unutilized or under-utilized to begin with. It is clear that the formulation of a plan in detail requires supplementing of existing statistical knowledge on a number of points, and such knowledge will grow if the preparation of the plan is taken in hand in terms of a frame tentatively thought out with the help of existing information and of broad judgments.

4. The tentative targets for the Second Plan as outlined in this paper are fixed, as far as possible, with reference to available data and in the light of our experience in recent years. In some cases, policy pronouncements already made have been accepted as a starting point. Complete consistency cannot be claimed for them at this stage. The purpose of the tentative framework given here is not to present a set of targets or a statement of the material or monetary requirements which must be treated as given, but to present the broad order of magnitudes involved in reaching defined objectives and thereby to initiate the process which would culminate in the formulation of the plan. Planning is a continuous process of reviewing and revising the tasks to be performed in the light of experience gained and after consultation at various levels. Initial assumptions can be modified in the light of further experience as the plan comes into operation. In the meanwhile, a tentative outline of the tasks to be performed in the next plan may throw some light on the decisions to be made by giving a rough measure of the effort involved in various directions for arriving at a desired set of results.

5. It is not possible at this stage to indicate the phasing of the plan annually over the five-year period. Targets are set for the final year of the plan (1960-61) and these are compared with our performance over the First Plan. It would be necessary in the next few months to work out the annual phasing of the plan. If the plan fails to gather momentum in the early stages or is thrown out of gear as a result of bottlenecks, the tempo of development in the later years is also likely to be retarded. Considering the falling price trends and the unemployment situation a fresh momentum must be given to the development effort at the very start.

6. The outline of the Second Plan given in this chapter is essentially in real terms inasmuch as targets are expressed in quantities, and magnitudes such as investment and national income are expressed at constant prices. In a money economy the financial aspect of the plan is inseparable from the physical aspect. Incomes are generated in the process of production and supplies are utilized through market operations. Balanced development requires that supply and demand are balanced in money and real terms. Thus aggregate incomes must equal aggregate expenditure, savings must match investment, and the supply and demand for individual goods and services must equal in terms of money so as to avoid any inflationary rise in prices or an undesirable shift in relative prices. The question of over-all balance in the economy is discussed in the next chapter, whereas in the present chapter we are concerned with the balance between individual sectors.

7. No attempt is made in this note to indicate the requirements of technical and managerial personnel for the fulfilment of the targets outlined. But it is clear that this gap must be filled early and the plan itself must provide for creating such resources of skilled personnel and administrative cadres as are needed for its fulfilment. Administrative and financial arrangements also must come for review in this connection.

I. TARGETS OF PRODUCTION

8. The provisional targets for production of important commodities and services are given in the table at the end of this section. A few comments are offered here on the assumptions underlying the targets in some important sectors.

Agriculture

9. Despite the general emphasis on industries in the Second Plan, we cannot afford to relax in our efforts to increase agricultural productivity in view of our increasing population, growing incomes, limited area, uncertain monsoons and low nutritional standards. It would also be necessary to provide for the raw materials needed in industries and for exports (or replacement of imports).

10. With a 20 per cent increase in total consumption over the Second Plan, the consumption of *foodgrains* may well increase by some 15 per cent. It would also be reasonable to expect a shift in favour of superior foodgrains such as pulses and wheat as against millets, and, to some extent from grains to other nutritional or protective foods. In terms of quantity, the consumption of foodgrains is likely to increase less rapidly than the consumption of other

commodities. On this basis, an increase in the production of foodgrains from 66 to 76 million tons or so should ensure the maintenance of self-sufficiency on an average at slightly higher standards of consumption. In the case of other foods such as milk, ghee, meat, fish, eggs and vegetables, demand is likely to be more income-elastic, and a provision of a 25 per cent increase in production is, therefore, made. However, in the case of milk, meat and eggs detailed schemes will have to be worked out if production is to increase on the scale indicated. If this is not feasible, a more liberal provision must be made for the supply of additional foodgrains.

11. The increase in the output of *cotton* from 4.2 million bales to 5.8 million bales is related to the production of cotton textiles, and it is assumed that the country would reduce its net imports of cotton substantially by 1960-61.

12. The total yield of *sugar-cane* would increase from some 5 million tons (raw gur) to 7.5 million tons. The demand for sugar is highly income-elastic ; and we are currently importing large amounts of sugar. We have been self-sufficient in the supply of sugar in the past, and it is not unreasonable to expect that we would revert to that position in the Second Plan.

13. The production of *oil-seeds* is expected to increase from 5.6 to 7 million tons largely in response to domestic demand.

14. In the case of important export items such as *tea* and *tobacco*, exports must be maintained and increased as far as possible in spite of greater consumption at home. The increase in the production of tobacco from 250 to 300 thousand tons and of tea from 675 to 750 million lbs. is postulated on this basis.

15. Apart from the important commercial crops like cotton and tobacco, attention must also be paid to others which have been hitherto of only marginal significance. Some of the marginal items like *wool* are bound to increase in demand at home and have good export prospects. Wool also has special significance from the point of view of providing employment in some of the poorer areas such as Rajasthan, Saurashtra and Jammu and Kashmir.

16. The lines on which efforts must be made to raise agricultural production are already clearly established. In order to achieve the targets outlined above, the total *irrigated area* in the country must be increased from 70 to 100 million acres. Special attention must be given to flood-control. The extension of *NES blocks and community projects* to cover the entire country by the end of the Second Plan is already contemplated ; and the Rural Credit Survey has indicated the role of credit, marketing and warehousing facilities as the spearhead of rural uplift. Apart, from this, the policy of ensuring an adequate return to agriculturists and the speedy implementation of a well-defined scheme of land reforms have already been emphasised.

Industrial and Mineral Development

17. The development of basic industries in the country has been emphasised as one of the major objectives of the Second Plan. The targets set in this field are somewhat generous in the sense that provision is made for a number of possibilities which remain to be explored fully. Since in this field our endeavour is to develop in new lines, it is necessary to indicate, however tentatively, some concrete possibilities which are desirable in themselves. Detailed projects must be worked out before any of these possibilities are taken up for implementation.

18. The production of *steel* in the country can be raised to five million tons and steel capacity to six million tons by the end of the plan by expanding the capacity of existing plants and by setting up three new steel plants in the public sector. It may be necessary, however, to prepare the market for this steel by developing other industries on the basis of imported steel in the early stages. If steel production is to expand further in subsequent plans, it would be desirable to set up a number of plants for producing the machine-tools required for fabricating the equipment in steel plants and in other producer goods industries.

19. Similarly, the production of *heavy electrical equipment* such as generators and turbines must be started in order to make the country self-sufficient in the growing requirements arising from rapid electrification of the country.

20. We have already made a beginning with the production of *railway rolling stock* in the country, and the railways have a big plan for expansion and re-equipment. The production of locomotives, wagons and coaches in the country can be increased by working existing equipment to full capacity on a multi-shift basis. In view of these considerations, it is not unreasonable to plan for a sizeable increase in the production of railway equipment in the country.

21. There is considerable unutilized capacity in the existing units producing agricultural implements, diesel engines, light engineering goods, and machinery for textile, sugar and other consumer goods. The scope for import substitution is also great in this field ; and doubling of output, therefore, may be appropriate.

22. The *fertilizer* target assumes "three more Sindris". On an average, a three-fold increase in the output of *heavy chemicals* is envisaged. Plans for the production of 300,000 tons of *synthetic petrol* have been on the anvil ; and this target is included in view of the need for economising on imports and for the development of associated chemical industries. The increase in the production of *aluminium* is envisaged in order to make up for the shortage of copper in the country and to meet the requirements of electrification. The output of 40,000 tons proposed represents a doubling of the target (capacity) proposed in the First Plan. Since production of aluminium has lagged far behind the plan so far, a considerable effort would be needed to realise the target set here.

23. The production of *coal* and *iron-ore* is related to the needs of other sectors. In the case of *mica* and *manganese* allowance is made for increased consumption at home and for somewhat higher exports.

24. The targets for manufactured consumer goods are fixed with reference to the increase in demand resulting from a 25 to 27 per cent increase in national income or a 20 per cent increase in total consumption. Some allowance is made for increased exports, and production by cottage and village industries is expected to increase substantially.

25. The production of mill-made *cotton cloth* is expected to increase from 5,000 million yards to 5,500 million yards, and that of handlooms and small power-looms from 1,600 million yards to 3,200 million yards. This would provide for a domestic consumption of 18 yards per person per year while allowing for additional exports of some 500 million yards by the end of the plan. In the case of *sugar* an increase in production from 1·4 to 2·1 million tons will make the country self-sufficient while allowing for a sizeable increase in total consumption. The targets for *vegetable oils* and *footwear* are based on similar considerations.

26. In the case of the newer industries producing *electrical goods, bicycles, sewing machines* and *glass-ware* where there is some excess capacity and where export prospects are good, increases in production ranging from 60 to 100 per cent and even more can be expected.

Transport and Power

27. Development of power and transport are essential preconditions for rapid industrial progress. The First Five Year Plan outlined a long-term programme for the development of power resources in the country over a period of fifteen to twenty years. It was expected that installed capacity for the generation of *electricity* would increase from 2·3 to 3·5 million kWh over the First Five Year Plan. In view of the programme for rapid industrialisation envisaged here, this capacity must be increased to 6 million kWh by the end of the Second Plan.

28. In the case of *railways*, there is a considerable lag in the development of both goods and passenger traffic. However, the Railways already have a tentative plan of expansion and re-equipment of some Rs. 800 crores. This plan, which calls for an addition of 3,000 miles of railway lines, among other things, may be accepted as the first approximation to the task in the Second Plan.

29. The long-term development of *roads* in the country has already been outlined in the Nagpur Plan. An expansion of road building in Second Plan is desirable from the point of view of providing both employment and the basic amenities of life in the rural areas. It is reasonable, therefore, to plan for an expansion of national highways from about 12·5 to 17·5 thousand miles and of State roads from about 20 to 35 thousand miles.

Social Services

30. The provision of basic services and amenities such as schools, hospitals, housing, water-works, drainage and parks must respond primarily to the expression of popular needs. It is in this sphere that "planning from below" has real significance. The district plans under preparation now should give a fair measure of popular aspirations in this field. The extent to which social services can be expanded in the Second Plan is primarily a function of such local initiative and popular participation as we are able to elicit by leadership and

organisation. The extension of social services must also keep step with the increase in the productive power of the community. Considering the prevailing low standards of health, education, housing, etc. to which attention has been drawn earlier, the targets set here appear to be a sort of minimum to be aimed at. It has also been emphasised that apart from increasing the basic amenities and services of life steps must be taken to make them available to a large proportion of the people irrespective of their means.

Production and Activity in Selected Sectors

	1950-51	1953-54	1955-56 (Estimates)	1960-61 (Estimates)
I. Agriculture				
Foodgrains (m. tons)	50.0	65.7	66.0	76.0
Other food items (index)	..	..	100	125
Cotton (m. bales)	2.9	3.9	4.2	5.8
Sugarcane (m. tons, raw gur)	5.6	4.6	5.0	7.5
Oil-seeds (m. tons)	5.1	5.6	5.6	7.0
Tobacco (th. tons)	258	256	250	300
Tea (m. lbs)	607	675	675	750
Irrigation (m. acres)	50	58	70	100
NES and Community projects (blocks)	..	479	1,200	5,600
II. Industries				
Pig Iron (for foundries, m. tons)	..	..	0.35	1.8
Finished steel (m. tons)	1.1	1.1	1.3	5.0
Cement (m. tons)	2.7	4.0	4.8	10.0
Aluminium (th. tons)	3.7	3.8	4.0	40.0
Fertilizers (index)	..	..	100	400
Heavy chemicals (index)	..	..	100	300
Synthetic petrol (m. tons)	nil	nil	nil	0.30
Cotton textiles (m. yds.) Mill	3,718	4,906	5,000	5,500
Handloom & powerloom.	742	1,200	1,60	3,200
Woollen manufactures (m. lbs.)	18	19.6	20	25
Sugar (m. tons)	1.1	1.1	1.4	2.1
Soap (th. tons)				
Large-scale	106	76	85	120
Small-scale			28	40
Footwear (m. pairs)				
Large-scale	5.2		5.7	7.0
Small-scale			80.0	100.0

	1950-51	1953-54	1955-56	1960-61 (Estimates)
Vegetable oil (m. tons)	1.2	1.4	1.5	2.0
Electrical good (index) . . . . .	..	290	100	166
Bicycles (thousands)	101	68	500	1,000
Sewing machanines (thousands)	33	..	90	150
Metalware (small-scale ; index) . . . . .	..	..	100	133
III. Minerals				
Coal (m. tons)	32	36	37	60
Iron-ore (m. tons)	3	4	4	13
Mica (cwts)	162	..	150	200
Manganese (m. tons)	1	2	2	3.5
IV. Transport and Power				
Shipping (tonnage th.)	391	525	610	..
Railway (mileage) . . . . .	..	..	34,500	37,500
Roads (th. miles) :				
National highways	11.9	12.2	12.5	17.5
State roads :	17.6	..	20.0	35.0
Electricity (m. kWh capacity)	2.3	2.8	3.5	6.0
V. Social Services				
Hospital beds (thousands)	107	112	125	250
Doctors (registered)—thousands . . . . .	..	65	70	90
Urban houses (lakhs)	101	..	120	150
Education (% of total children 6—14 going to school)	32	..	40	60

II. INVESTMENT AND PRIORITIES IN THE PLAN

31. The main targets to be achieved in the Second Plan have been indicated above, and these are summarised in the table just given. In this section, the investment requirements of the Plan are brought together so as to indicate the over-all size and priorities in the Plan. The concept of "investment", however, bristles with ambiguities ; and in view of the variety of concepts in the field, it is necessary to specify clearly what is included in investment here.

32. In the First Five Year Plan, two concepts were used to denote the size of the Plan, viz., net investment and developmental expenditure. Thus the net investment in the public

sector was expected to be of the order of Rs. 1,600 to Rs. 1,700 crores ; whereas the developmental expenditure which includes outlay of capital as well as current nature was initially estimated at Rs. 2,069 crores. Since outlay on the Plan included only a portion of the outlay on certain developmental heads such as health and education, an additional concept of total developmental outlay (as distinguished from that included in the Plan) has also been used at times to indicate the size of the Plan. In the case of 42 organised industries in private and public sector, the First Plan considered the requirements of gross rather than net investment inasmuch as allowance was made for part of depreciation, replacement and modernisation. Similarly, the requirements of working capital were taken account of in the case of industries, but not for other sectors.

33. For the purposes of this paper we speak of 'net investment' when referring to the economy as a whole. If our idea in assessing the 'investment cost' of a plan of certain size and character is to measure the effort of saving that is involved, it is more logical to consider gross income and gross investment. The entire gross product of the economy is, strictly speaking, available for consumption or investment. The allowance to be made for depreciation is in many cases notional in the sense that except in the case of repairs, maintenance or replacements no real resources are in fact required currently against the estimated amount of depreciation. Replacement itself is seldom a mere substitution of one machine or building by another of the same type. Nonetheless, since our national income statistics are expressed in net output terms, it may be convenient to relate them to net investment.

34. Non-monetised investment is not included in investment. In a predominantly rural community of self-supporting persons, a significant amount of investment must be done by the application of personal labour and by using locally available materials. With the efforts to mobilise voluntary labour for various nation-building activities such as flood-control, investment in non-money terms must play an important part. It is also illogical not to include such investment when the income generating from it is included in national output. However, in view of the highly conjectural nature of the imputed value of such investment, it is proposed to disregard it at this stage.

35. As regards investment in working capital, *i.e.*, in stocks of goods and services waiting to be consumed or to be utilised in production, it is clear that any additional requirements here are indistinguishable from the requirements of the fixed capital. Both require "savings" in real and financial terms ; and as the Rural Credit Survey amply points out, provision of short-term capital has as much relevance to production as that of long-term capital. Indeed, unless increments in stocks of *all* goods are included in investment, it would be difficult to justify the inclusion of residential houses in investment. Construction of a house is investment not because it resembles a producer good more than a consumer good but because it represents a net addition to the stock of houses. The requirements of additional working capital over a period are not easy to estimate ; but a rough allowance is made for them here.

36. Although it is more meaningful to speak of net investment when referring to the economy as a whole, it is useful to retain the concept of developmental expenditure in

speaking of the public sector. Whether this developmental expenditure under the Plan should include only a part or whole of the expenditure in certain specified heads is a question to which we return later. But at this stage, it may be emphasised that as long as we use more than one concept to indicate the size of the Plan in the public sector, it would be essential to recast Government budgets in a manner which would make explicit the magnitudes of all these concepts. Thus, net capital formation through the budget, total developmental outlay and the outlay on the Plan must be all readily ascertainable from the budget statements.

37. The total amount of net investments required for achieving the targets outlined above may be estimated at about Rs. 5,600 crores. This estimate is made up by aggregating wherever possible, the capital requirements of the individual targets. However, this procedure cannot be adopted uniformly for two reasons. The targets do not cover all the items of production. And in several important sectors, particularly in agriculture, investment is multi-purpose in the sense that only a complex of products can be related to a complex of investment.

38. Again, it is not as if all the investment in the community is strictly required for the achievement of the targets set. Residential construction, stock-piling and investment in gold and precious metals can take place irrespective of the requirements of the targets sought to be achieved. It is as well, therefore, to be clear in our minds as to how much allowance we make for such investment.

39. A tentative breakdown of the net investment of Rs. 5,600 crores may be given as follows :

Allocation of Net Investment in the Economy

	<i>Rupees crores</i>	<i>Percentage of total</i>
1. Agriculture and Community Development (including irrigation and flood control)	950	17.1
2. Power	500	8.9
3. Transport and Communications	900	16.1
4. Industries and Mining (incl. small-scale)	1400	25.0
5. Construction (houses, shops, schools, hospitals, etc.)	1350	24.0
6. Stocks and Miscellaneous	500	8.9
TOTAL	5600	100.0

40. Strictly comparable figures for the economy as a whole are not available for the First Five Year Plan. But total net investment in the First Plan was originally envisaged to be of the order of Rs. 3,500 to 3,600 crores. The provision made for aggregate investment in the Second Plan, therefore, is about 55 per cent higher than that in the First Plan. As regards the pattern of investment, the major emphasis is on industries and mining. A detailed

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breakdown of the investment of Rs. 1,400 crores in industries and mining (public and private) may be given as follows :

Investment in Industries and Mining

	<i>Rupees crores</i>	<i>Percentage</i>
1. Iron and Steel	425	30·4
2. Synthetic Petrol	80	5·7
3. Heavy Machinery to fabricate plants for steel and producer goods	150	10·7
4. Heavy Electrical Equipment	40	2·9
5. Machinery for Agriculture and Consumer Goods Industries	50	3·6
6. Existing State Enterprises (expansion)	50	3·6
7. Cement	50	3·6
8. Chemicals and Drugs	50	3·6
9. Fertilizers	100	7·1
10. Aluminium	30	2·1
11. Minerals and Prospecting	75	5·4
12. Factory Consumer Goods	100	7·1
13. Small-scale and Village Industries	200	14·3
TOTAL	1400	100·0

41. The provision made for industries and mining here corresponds to the targets outlined earlier. The major part of investment is devoted to basic industries and it is assumed that existing enterprises would work to full capacity on a multi-shift basis wherever possible. A generous provision of Rs. 200 crores is made for small-scale and village industries in view of the considerations outlined earlier.

42. It may be useful to relate these magnitudes to developmental outlay as conceived in the First Plan. For this purpose, we may assume that out of the total net investment of Rs. 5,600 crores, some Rs. 3,400 crores would be organised through Government's budgetary and other operations and the remaining Rs. 2,200 crores or so would represent private investment from private sources. Needless to say, this is only a tentative breakdown.

43. The developmental expenditure under the Plan in the public sector, corresponding to the net investment of Rs. 3,400 crores, might amount to roughly Rs. 4,300 crores. This figure is roughly comparable to the outlay of Rs. 2,069 crores initially proposed for the First Plan. In addition to capital formation proper, a part of the current expenditure on nation-building activities such as health, and education has also to be included in the Plan in the public sector.

44. A tentative break-down of the Plan outlay of Rs. 4,300 crores in the public sector might be as follows :

Outlay on the Plan in the Public Sector.

(Rs. crores)

	<i>Second Plan</i>			<i>First Plan</i>		
	<i>Investment outlay</i>	<i>Current outlay</i>	<i>Total outlay</i>	<i>Percentage</i>	<i>Percentage</i>	<i>Total outlay</i>
1. Agriculture, Irrigation and Community Development	750	200	950	22		
2. Power	450	..	450	10.5		
			1400	33	44	990
3. Transport and Communications	850	100	950	22	24	536
4. Industry and Minerals	1000	100	1100	26	8	178
5. Construction and Social Services	250	500	750	17	24	544
6. Stocks	100	..	100	2	..	..
TOTAL	3400	900	4300	100	100	2248

45. A considerable shift in favour of industries and mining is thus envisaged in the Plan for the public sector. Nonetheless, the actual expenditure on all other sectors such as social services, agriculture and transport in the Second Plan, as proposed here, is significantly greater than in the First Plan. The total Plan outlay in the public sector (Rs. 4,300 crores) is roughly double the outlay envisaged in the First Plan (Rs. 2,248 crores).

46. The total net investment of Rs. 2,200 crores in the private sector might be distributed roughly as follows :

	(Rs. crores)
Construction	1100
Industry, Mining, Power and Transport	500
Agriculture and allied pursuits	200
Working capital in trade and industry and miscellaneous	400
TOTAL	2200

47. It need hardly be emphasised that the pattern of investment outlined above is provisional and is intended to give only an approximate idea of the size and priorities in the Plan.

III. NATIONAL INCOME AND THE STRUCTURE OF THE ECONOMY

48. One way of describing the objectives of the next Plan would be to compare the structure of production as it is expected to emerge at the end of the Plan (1960-61) with that prevailing on the eve of the Plan (1955-56). This is done in the present section.

49. The latest available estimate of India's national income relates to the year 1953-54. At current prices, the national income of India in 1953-54 was approximately Rs. 10,600 crores. In order to present a picture of the change in the economy over the Second Five Year Plan, it is necessary to have an estimate of national income for the year 1955-56. Even if we make allowance for the fact that national income in 1953-54 was somewhat unusually high on account of favourable monsoons, it is not unreasonable to expect that national income over the last two years of the First Plan would increase by some 4 per cent. On this basis, national income in 1955-56 should exceed Rs. 11,000 crores at 1953-54 prices.

50. However, judged by recent trends, prices in 1953-54 were also high. In outlining the change in the economic structure over the Second Plan, we have necessarily to make all calculations at some constant prices. In one sense, it does not matter what particular prices we use. Nonetheless, since some estimates such as those of government receipts and expenditure are necessarily made at current prices, it is important that other calculations are also made at prices as near as possible to the prices current in the period under consideration. For Second Plan, we have worked out our calculations in terms of 1952-53 prices inasmuch as they are nearer to current prices than those in any other recent year for which national income data are available.

Index of Wholesale Prices in India

(1939 = 100)
Aug. 1939 = 100)

	Food Articles	Industrial Raw materials	Semi-manu- factures	Manufac- tures	General index
1948-49	383	445	327	346	376
1949-50	391	372	332	347	385
1950-51	416	523	349	354	410
1951-52	399	592	374	401	435
1952-53	358	437	344	371	381
1953-54	384	467	359	367	398
1955, Jan. 22	309	431	345	377	363

51. The national income of India in 1955-56 (at 1952-53 prices) may be estimated at Rs. 10,800 crores. With a 5 per cent increase per annum it should amount to Rs. 13,700 crores in 1960-61—*i.e.*, an increase of Rs. 2,900 crores. This increase is consistent with the targets set as supplemented by assumptions about minor sectors not included in the targets.

52. The increase in national income would obviously not be uniform for different sectors. The following table illustrates the change in the economic structure envisaged for the Second Plan in terms of the sectorwise breakdown employed in national income statistics.

Domestic Product of India

(at 1952-53 prices)

	Product (Rs. abja)			Per cent of total product		
	1950-51	55-56	60-61	50-51	55-56	60-61
I. Agriculture & allied pursuits	45.2	52.8	63.4	49.2	48.9	46.3
II. Mining	0.8	1.0	1.5	0.9	0.9	1.1
III. Factory Establishments	5.8	8.0	13.5	6.3	7.4	9.9
IV. Small Enterprises	9.3	10.2	14.3	10.1	9.4	10.4
V. Railway, Communications, Banks, etc.	3.1	3.6	4.7	3.4	3.3	3.4
VI. Other Commerce and Transport	13.4	15.1	18.8	14.6	14.0	13.7
VII. Professions, Government services, etc.	14.3	17.3	20.8	15.6	16.0	15.2
TOTAL PRODUCT :	91.9	108.0	137.0	100.0	100.0	100.0
Per Capita Product (Rs.)	256	282	334	..	..	..

53. It is clear from the table given above that of the total increase in national income (Rs. 2,900 crores) the largest part would still be in agriculture and allied pursuits (Rs. 1,060 crores). Factory establishments would show an increase in net output of some Rs. 550 crores, mines of Rs. 50 crores and small enterprises to Rs. 410 crores. The rest of the additional output of about Rs. 830 crores would be generated in the tertiary sector. However, in relative terms, the increase in income generated would be greater in factory establishments (65 per cent), mining (50 per cent), and small enterprises (40 per cent) than in agriculture (20 per cent) or in the tertiary sector (23 per cent). On balance, the relative share of mines, factories and small enterprises in the national income would increase from 17.7 per cent in 1955-56 to 21.4 per cent in 1960-61 and that of agriculture would decline correspondingly from 48.9 per cent to 46.3 per cent. Thus, despite the relatively high targets for industries, the structure of the economy would show only a small change over the Second Plan period.

54. The classification of domestic product by sectors given above does not reveal certain features of the development envisaged for the Second Plan. Thus, the development of heavy industries is obscured in the total of factory establishments. Similarly, the small enterprise sector is not indetical with the small industries sector. It includes in addition workers employed in construction industries. A further breakdown of these sectors can be attempted only on rough lines. Thus, although the net output of factory establishments increases by two-thirds, the output of consumer goods industries is expected to increase by some 20 per cent only whereas that of producer goods by 150 to 175 per cent. In the case of small enterprises, as against a total increase of 40 per cent in net output, that of consumer goods is envisaged to increase by one-third, of producer goods by 50 per cent and of construction enterprises by some 60 per cent.

55. Similarly, the increase in agricultural output of 20 per cent comprises a 15 per cent increase in foodgrains and 25 per cent in other foodstuffs and commercial crops.

56. In short, the structure of production envisaged here is in correspondence with the priorities dictated by the basic objectives outlined earlier. Heavy industries receive the greatest emphasis in the production of additional manufactured consumer goods, small enterprises get a roughly equal share with factory establishments ; and the output in agriculture shows a significant increase of 20 per cent.

57. The national income calculations just outlined are based on the physical targets described earlier. The physical targets themselves were based in most cases on the assumption of a 25 to 27 per cent increase in national income over five years or a 20 per cent increase in total consumption. (Allowance has to be made for greater investment). The structure of the economy in 1960-61 as envisaged here, therefore, takes into account the increased expenditure on different goods and services as national output increases—after making allowance for such exchange of domestic goods for foreign goods as was implied in the physical targets set.

IV. THE PATTERN OF EMPLOYMENT

58. The creation of adequate employment opportunities is one of the basic objectives of the Second Plan. Some of the implications of this policy have already been set forth earlier. In this section we may consider whether the target of 12 million additional persons to be pressed into gainful occupation outside agriculture can be realised in terms of the Plan envisaged here. Unfortunately, our knowledge of the occupational distribution of the population on the eve of the Second Plan can only be based on an extrapolation of the picture revealed by the 1951 census. This is not very satisfactory ; but a rough estimate has been attempted to see where the additional persons might be absorbed.

59. In 1950-51, out of the total working force of 143.2 million persons, some 103.6 million were employed in agriculture and allied occupations. It is to the remaining 40 million persons—or say 42 to 43 million by 1955-56—employed in mines, factories, small enterprises, trade, transport, communications, professions and other salaried employees that some 12 million additional persons have to be added in the Second Plan. The likely results of the Plan outlined above may be analysed sector by sector.

(1) *Mining*.—Some 8 lakh persons are employed in mines at present. With output from mines increasing by some 50 per cent in the Second Plan, additional employment in mines during the next plan period may be of the order of 3 to 4 lakhs.

(2) *Factory Establishments*.—Factory establishments employed some 30 lakh persons in 1950-51 of which roughly 24 lakhs were in consumer goods industries and the remaining in producer goods industries. (Total factory employment in 1955-56 may be a little higher than 30 lakhs.) In the Second Plan the net output of factory-produced consumer goods is expected to increase by some 20 per cent and of producer goods by 150 to 175 per cent. On this basis, additional employment in factories during the Second Plan may be of the order of 12 to 14 lakhs.

(3) *Small Enterprises*.—In 1950-51, small enterprises employed some 115 lakh persons. The term 'small enterprises' however, is misleading. In addition to small-scale industries proper it includes those engaged in construction of roads, buildings, irrigation works, carpenters, brick-layers, etc. This latter category accounted for as much as 44 lakh persons out of the total of 115 lakhs in small enterprises. Among the rest, textiles and tailoring accounted for 32 lakhs, metal working and mechanical enterprises 12 lakhs and food and tobacco industries another 15 lakhs.

The Second Plan envisages an increase of about 40 per cent in the net output of small enterprises, ranging from 20 per cent in food industries and 25 per cent in leather products to 33 per cent in the metal group, 50 per cent in the textile and tailoring group and 60 per cent in the construction group. It is clear that incomes of persons employed in small enterprises is low and several of them do not have sufficient work. In this sector, therefore, employment cannot increase as fast as production. Assuming that employment increases, say by one-fourth as against a two-fifth increase in output, this sector would absorb about 30 lakh additional persons during the Second Plan.

(4) *Railways, Communications, Organised Banks and Insurance*.—This sector provided employment to roughly 15 lakh persons in 1950-51. The Second Five Year Plan envisages considerable expansion in banking facilities, railways and communications. Additional employment of 3 to 4 lakhs persons here may, therefore, reasonably be expected.

(5) *Other Commerce and Transport*.—This sector is a great employment provider. Some 95 lakh persons were engaged in this sector in 1950-51. Nearly two-thirds of this group are employed in retail trade, some 6 lakhs in wholesale trade, 10 to 11 lakhs in hotels, and restaurants and about the same number in road transport.

If net output of this sector increases by 20 to 25 per cent, as is envisaged, additional gainful occupation for some 20 lakh additional persons should reasonably be available in this sector. It is arguable that we should not rely on trade for additional employment inasmuch as this sector is already rather large in relation to the total size of the economy. However, for the immediate future some expansion of employment in trade is to be expected.

(6) *Government Administration*.—In 1950-51, there were 39 lakh persons employed in Government administration, and additional employment in this sector during the Second Plan may be of the order of some 5 lakhs.

(7) *Professions and Liberal Arts*.—This is another important sector from the point view of employment. In 1950-51 some 64 lakh persons were employed in this sector including some 10 lakh teachers, 11 to 12 lakhs barbers, 12 to 13 lakh dhobies, 7 lakh scavengers and 8 lakh medical practitioners and health workers*.

60. In view of the substantial increase in the expenditure on health, sanitation and education envisaged in the Second Plan and the increased demand for the services of barbers, dhobies, etc. an increase in employment by 15 lakhs or more in this sector is not unlikely.

61. To sum up, the additional employment we may count on for the Second Plan is as follows :†

	Increase in employment 1955-56 to 1960-61 (in lakhs)
Mines	3 to 4
Factories	12 to 14
Small enterprises (including construction workers)	30
Railways, Communications, etc.	3 to 4
Other Commerce & Transport.	20
Government Administration	5
Professions and Liberal Arts	15 to 20
TOTAL	88 to 97

62. Thus, the foreseeable employment potential of the plan is of the order of 9 to 9.5 million persons absorbed outside agriculture. The Second Five Year Plan, therefore, has to be at least as bold as the one envisaged in this paper if it is to fulfil the promise of fuller employment. Perhaps some one to two million persons would be added to those engaged in agriculture in any case in view of the natural immobility of persons in the face of rising standard of living in their existing occupations. Again, not all the persons employed in agriculture and allied pursuits depend on land. Some additional employment among those engaged in fishing, forestry or sheep-raising may not be undesirable.

63. It should be emphasized, however, that the increase in employment envisaged here will demand a great deal of organisation, besides finance and suitable policies. It is clear that small enterprises, for example, which bear the brunt of the employment effort will not expand on the scale envisaged without sustained effort. Creation of employment opportunities is not

*The juxtaposition of barbers and dhobies with teachers and doctors is rather curious, but it is retained here inasmuch as it corresponds to national income classification in India.

† In view of the particularly urgent problem of urban unemployment among the educated middle classes, we must also indicate how much employment is likely to be created for this sector. But it has not been possible to attempt this considering the several arbitrary assumptions involved.

a matter of providing 'jobs' and the outcome will depend greatly on the response of the public. Provision of employment also carries with it the implication that training facilities for the type of personnel needed would be provided for on the scale required. Again, in several sectors we have assumed that additional output would mean a more or less proportionate increase in employment. This envisages some control over excessive rationalisation, on concentration of units, and on frittering away of higher demand in raising the remuneration of those already in employment to the detriment of the unemployed. The problem of unemployment, as has already been emphasized, can hardly be separated from that of distribution of income.

64. From this point of view, it may be of interest to note the following figures about the net output per person employed in different sectors. The figures must be interpreted with caution. Thus, figures in money terms do not take into account differences in cost of living or of the non-economic disabilities and advantages of certain occupations or places. Again, net output per employed person represents the earnings of labour as well as capital and does not take Government draft into consideration. The differences among sectors are partly the result of different capital requirements per unit of output. What is more, the number of persons gainfully occupied per household varies from sector to sector, and the disparities in income per occupied person do not correspond to disparities in incomes per household.* The occupational distribution envisaged for 1955-56 and 1960-61 is also largely conjectural. Nonetheless, the table illustrates an important aspect of the Second Plan. It may be noted that the distribution of additional output and employment in the Second Plan is so designed, by and large, as to raise levels of living at lower levels.

Occupational Pattern in India.

	Working force (in millions)			Net output per occupied person (Rs. per year at 1952-53 prices)		
	1950-51	55-56 Estimated	60-61	1950-51	55-56 Estimated	60-61
1. Agriculture and Allied pursuits	103.6	109.5	111.0	436	482	571
2. Mining and factory Establishments	3.8	4.0	5.7	1,737	225	2,632
3. Small Enterprises	11.5	12.0	15.0	809	850	953
4. Communications, Rlys., Banks & Insurance	1.5	1.6	2.0	2,067	2,250	2,350
5. Other Commerce and Transport	9.5	10.0	12.0	1,410	1,510	1,567
6. Govt. Administration, Professions, Liberal Arts and the rest	13.3	14.9	17.3	1,075	1,161	1,202
TOTAL	143.2	152.0	163.0	642	710	840

*Thus the ratio of earners to non-earners in a household in 1951 was 1 : 1.4 for agriculture; 1 : 1.3 for production in rural areas other than cultivation; 1 : 2.1 for commerce; 1 : 1.8 for transport; 1 : 1.7 for other services and 1 : 1.7 for production other than cultivation in urban areas.
29 P.C.

65. Net output per occupied person increases by only 4 or 5 per cent in the tertiary sector where it is already high compared to the national average. In the case of agriculture and small-scale industries, the increase is of the order of 20 and 12 per cent respectively. Mining and factory establishments also show an increase in net output per employed person of some one-sixth. This increase reflects, however, the shift in favour of heavy industries where large amounts of capital are associated with a comparatively small employments of labour. Thus, by and large, the employment pattern envisaged here is in keeping with the basic objectives of fuller employment and social justice.

Chapter 3

FINANCIAL RESOURCES FOR THE PLAN

The financial resources needed for the plan and the manner in which these might be mobilised are indicated in this chapter. A tentative indication of the foreign exchange requirements of the plan is also given. There are two distinct aspects to this question of raising the financial resources needed for the plan. First, the savings needed for the capital formation envisaged must be available in the aggregate. Second, the financial resources must be available and utilized by each sector and for each purpose in accordance with the priorities set in the plan. This second aspect requires a policy of directioning investment.

SAVINGS AND INVESTMENTS

2. If net investment of the order of Rs. 5,600 crores is to be realised over the next plan period, savings of the same order must be forthcoming. With increased incomes, the volume of savings is bound to increase. For initiating a process of higher investment and higher incomes by fuller utilization of unemployed and under-utilized resources, it is not necessary that savings come first and only these are invested later. Credit has to be taken in advance for the additional savings that are likely to arise as incomes and investment increase. Some initial credit creation, therefore, is an essential part of a development programme. Nonetheless, if planned investments are to be realised without generating serious inflationary pressures, the initial credit creation must be limited with reference to what savings are likely to be available or can be created by suitable policy measures.

3. An investment programme of Rs. 5,600 crores for the Second Plan cannot be carried through without a considerable increase in the rate of savings in the community. Assuming that sterling balances can be drawn down by some Rs. 100 to Rs. 150 crores and foreign assistance of the order of Rs. 500 crores is available during the Second Plan, domestic savings of the order of Rs. 5,000 crores must be available. The Taxation Enquiry Commission has estimated that total savings in India in 1953-54 and total net investment (at home and abroad) amounted to some seven per cent of national income. Their concept of net investment is not strictly comparable to the one used here in arriving at the net investment of Rs. 5,600 crores for the Second Plan. Thus, unlike the TEC, we have excluded non-monetised investment. At the same time, we have made some allowance for investment in stocks and in small enterprises which have been disregarded by the TEC. Again, a sizeable increase in public investment is expected for the last two years of the First Plan. On the other hand, the TEC's estimate of net investment abroad of Rs. 70 crores in 1953-54 must be regarded as rather exceptional. Normally, we should expect a deficit in our current balance of payments (not taking credit for donations) with the result that the total investment in the country must be higher than domestic savings. Taking these considerations into account, it is reasonable to expect

that comparable to the figure of Rs. 5,600 crores for the Second Plan, net investment in the country in 1955-56 would be of the order of 6.75 per cent of national income and corresponding domestic savings of some 6 per cent of national income. On this basis, the growth in investment and savings over the Second Plan would have to be somewhat as follows :

	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	(Rs. crores) 2nd Plan 1956-57 to 1960-61
a. National income	10,800	11,300	11,825	12,375	13,000	13,700	62,200
b. Net investment .	730	810	930	1,060	1,300	1,500	5,600
c. Domestic savings	650	680	800	930	1,170	1,370	4,950
d. Foreign resources	80	130	130	130	130	130	650

4. The phasing over the five years of savings and investments given above is intended to be illustrative. The essential point is that in order to achieve a total investment of Rs. 5,600 crores, the rate of investment must increase from 6.75 per cent of national income in 1955-56 to 11 per cent of national income in 1960-61, and domestic savings from 6 to 10 per cent over the same period. If foreign resources are not available on the scale envisaged, the savings effort at home would have to be correspondingly greater.

5. Whether an increase in the rate of domestic savings from 6 per cent in the beginning of the next Plan period to 10 per cent by 1960-61 is likely to take place in response to a voluntary increase in savings resulting from additional incomes cannot be judged in advance. The increase in savings envisaged here is not very large in relation to the rates achieved in other countries. But, considering the current low rate of saving and the large margin of unsatisfied needs, it may be assumed that savings of the order required would not be forthcoming without special and persistent effort at restricting consumption through fiscal and other devices.

6. In an under-developed economy, where there are idle resources, increased investment need not imply a reduction in current consumption. It would, however, imply austerity, that is, preparedness to hold down consumption, especially of luxuries, in the face of rising incomes. A check on the consumption of non-essential commodities, domestic as well as imported, is necessary in order to release additional resources for the production of essential goods. Shortages of essential goods are dealt with better in this way than by direct limitation of consumption. However, if resources released through restriction of luxury consumption are not of much use for increasing the supplies of essential goods, controls over consumption of essentials would become unavoidable. The question of controls must, in other words, be judged in terms of the particular real resources, which are in short supply. Foreign exchange resources have to be conserved with particular care, in that they can be converted into whatever commodities became scarce within the country. In the present

world situation, in regard to food and cotton, one can hope that a plan of the magnitude, contemplated can be seen through without having to impose controls on necessities like food and cloth.

7. Up to a point, the emergence of some inflationary pressures or a sellers' market is necessary, since our objective is to push ahead as far as possible in the direction of utilising our resources. Essentially inflationary pressures—or insufficiency of savings—arise as a result of inelastic supplies of goods against which people direct their demand. The elasticity of supply is not equally great in the case of all commodities. With effort and organisation, it can be altered favourably at least in selected sectors. If we are to stop at the first bottleneck in supplies for fear of a rise in prices in that sector, even though supplies in other sectors are elastic to some extent, we are likely to stop short of the full potential for expansion of the economy. We have to be prepared to 'tackle' short supplies in some commodities. Whether in doing so, we would be able to prevent a general and cumulative rise in prices depends, obviously, upon the measure of shortage and the organisational efficiency in dealing with it. In an expanding economy the sufficiency of savings cannot be predicted in advance, but since the overall effort suggested is not excessive and is required for making an impact on employment, the practical problem is one of watching overall economic trends and of correcting through fiscal and other measures any shortages in resources in particular sectors as they rise.

RESOURCES FOR THE PUBLIC SECTOR

8. From the stand-point of finding resources for the public sector, it is necessary to consider not only the outlay on the plan but total outlay. Expenditure outside the plan has an obvious significance to the realistic appraisal of the financing of the plan. The outlay on the plan in the public sector includes, first of all, all expenditure which results in the creation of new capital assets (directly in the public or indirectly in the private sector). In addition, it should include that part of the current expenditure on specific developmental heads which represents an increase over the level reached at the end of the first plan. This would give a clear idea of the 'lift' we are giving to the development effort during the next plan. This is the concept which has been kept in mind in this paper in arriving at the plan outlay of Rs. 4,300 crores.

9. An alternative would be to include all expenditure under specified developmental heads in the plan, leaving out only expenditure on non-developmental items like Defence and Civil Administration. Although this would inflate the plan figures, it would facilitate a more realistic appraisal of the plan and its financing by ruling out the possibility of shifting of expenditure as from one sub-category to the other within the broad category of developmental heads. It would also enable a quicker review of the progress under the plan from the budget itself. On the other hand, by confining the scope of the plan to the schemes deemed more essential to further effort, we are better able to scrutinise them. The best course under the circumstances would, therefore, be to highlight *both* the total expenditure under specified

developmental heads and the outlay on the plan. As a rough approximation, the budgetary position of the Centre and the States combined may be outlined as follows :—

Total Government Expenditure

		(Rupees Crores—estimates)		
			Over Second Plan	
		1955-56	1960-61	1956-57 to 1960-61
1. Outside the plan				
(a) Non-developmental	. . . . .	625	725	3400
(b) Developmental	. . . . .	200	225	1100
Sub-Total	. . . . .	825	950	4500
2. On the plan				
	. . . . .	600	1100	4300
TOTAL	. . . . .	1425	2050	8800

10. The estimated outlay of the Centre and the State Governments combined for 1955-56 is based on the budget proposals for the year, as far as possible, and on the revised budget figures for 1954-55. However, in view of the difficulties in combining the figures for the Centre and the States and in apportioning the development outlay, within the plan and outside the plan, the estimates must be taken only as roughly indicative of the magnitudes involved.

11. It is assumed that public outlay on the plan will increase from Rs. 600 crores or so in 1955-56 to Rs. 1,100 crores in 1960-61, *i.e.*, by about 80% in order to make up a total of Rs. 4,300 crores over the plan period. Expenditure outside the plan is assumed to increase by 15 % over the five years or by Rs. 25 crores every year. The total outlay on developmental heads is envisaged to be of the order of Rs. 5,400 crores—Rs. 4,300 crores in the plan, and Rs. 1,100 crores outside the plan.

12. The question is how a total government outlay of Rs. 8,800 crores (Rs. 4,500 crores outside the plan and Rs. 4,300 crores on the plan) is to be financed. Assuming that the Government takes some 8.5 per cent of national income in taxes and in non-tax revenue as has been the case on an average over the past four or five years (7 % in taxes and about 1.5 per cent in non-tax revenue) the total revenue receipts would amount to about Rs. 5,200 crores. Borrowing from the public may possibly yield (net) another Rs. 1,000 crores (about Rs. 600 crores from loans and Rs. 400 crores from small savings). Contribution from railways may

be put at Rs. 200 crores over five years. The budgetary position of the Government over the Second Plan might, therefore, look somewhat as follows :—

	Rs. crores
<i>Expenditure :</i>	
(a) On the plan	4,300
(b) Outside the plan	4,500
	<u>8,800</u>
<i>Receipts :</i>	
(a) On revenue account	5,200
(b) From railways	200
(c) Loan from the people	1,000
	<u>6,400</u>
<i>Deficit</i>	2,400

13. As against the gap or deficit of Rs. 2,400 crores, we may take credit for some Rs. 400 crores of foreign assistance*. Over the First Plan, foreign assistance utilised in the public sector is likely to be of the order of Rs. 250 crores. Thus we are assuming a 60 per cent increase in the amount of external assistance utilised by the public sector.

14. The remaining gap of Rs. 2,000 crores cannot be filled up by deficit financing or creation of money. As a first approximation, we may assume that such money creation can be resorted to to the extent of Rs. 1,000 to Rs. 1,200 crores by the Government. Allowance must also be made for credit creation by banks for the needs of the private sector, say Rs. 400 crores or so, bringing total credit creation to Rs. 1,400 to Rs. 1,600 crores. A part of this credit would be withdrawn from the system as we use up our accumulated sterling balances. We have made an allowance earlier for a decline in our foreign exchange reserves by some Rs. 150 crores. Even then, total money supply in the economy might increase by some Rs. 1,300 crores during the Second Plan. We have argued earlier that credit creation is essential to development and that some price rises may well occur in an economy trying to reach to the full limit of its resources. In India, a large money supply will be needed as the monetised sector expands relatively to the non-monetised sector. Even then, with a 25 to 27 per cent increase in national income, an increase in money supply by some Rs. 1,300 crores on a base of some Rs. 2,000 crores must be regarded as a sort of outside limit.

15. If, then, for reasons just stated deficit financing by the Government must be restricted to some Rs. 1,000 to Rs. 1,200 crores, it would be necessary to raise at least Rs. 800 crores by increased taxation, or by compulsory borrowings, or through increased profit of Government enterprises. In fact, a combination of all these will be called for. If additional Government profits are to be raised, it might be necessary for the State to enter into the field

* In addition, foreign assistance of Rs. 100 crores is envisaged for the private sector.

of trading or production of consumer goods. The scope for such expansion of State activity into profit making ventures will have to be carefully examined. Alternatively, taxation in the country will have to be raised from some 7 per cent of national income to 9 or 10 per cent of national income by 1960-61. An increase in taxation from 7 to 9 or even 10 per cent of national income cannot be regarded as excessive if our aim is to have a bolder plan which requires an increase in the savings of the community from 6 to 10 per cent of national income. But it should be borne in mind that some tax adjustments will be necessary even to maintain, the existing level of tax receipts at 7 per cent of national income.

16. The foregoing discussion of the resources for the public sector has been in terms of the receipts and expenditures of the Centre and the States combined. A survey of the financial position of individual States during the Second Plan will have to be prepared separately.

RESOURCES FOR THE PRIVATE SECTOR

17. Of the total investment of Rs. 2,200 crores in the private sector, Rs. 1,100 crores is envisaged in construction; Rs. 500 crores in industry, mining and transport; Rs. 200 crores in agriculture; and, Rs. 400 crores in working capital in trade and industry and in residual items.

18. The Taxation Enquiry Commission has estimated that net investment in organised enterprises (public limited and private limited companies) and in private transport amounted to Rs. 75 crores in 1953-54. Correspondingly, corporate savings and new subscription to capital of companies together have also been put at Rs. 5 crores for that year. This investment is roughly comparable to the provision made here for an investment of Rs. 500 crores in industries, mining and transport in the private sector for the next plan period. An increase in the rate of such investment from Rs. 75 crores in 1953-54 to an average of Rs. 100 crores over the next plan may be regarded as feasible, particularly in view of the larger profits that are likely to arise in organised industries if unutilised capacity is put to full use. The more important problem would be to ensure a proper allocation of the investment in the private organised sector of industries. Apart from capital issues control and export and import controls, a differential tax policy might be needed in this context. Where necessary, arrangements may be made for loans or planned increases in prices for realising important investments in this sector.

19. The requirements of working capital for industry and trade can be met without much difficulty through bank accommodation. We have made allowance for an increase of some Rs. 400 crores in bank credit earlier in arriving at total credit creation in the economy. Indeed, with deficit financing of Rs. 1,000 to Rs. 1,200 crores in the public sector, the problem may well be one of preventing excessive bank accommodation.

20. Of the net investment in the private sector of Rs. 2,200 crores, about one-half is envisaged to be in construction. This implies private construction activity of the order of Rs. 220 crores per year on an average in the next plan period. Private monetised

construction at present may be estimated at about Rs. 150 to Rs. 160 crores per year. The source of savings for construction activity cannot be indicated. Nor can it be asserted that the increase in construction activity envisaged would, in fact, be realised. If aggregate savings are inadequate, there is no knowing where this shortage would impinge. As long as investment in the high priority part of the private sector is assured, any shortfall in the availability of resources for other purposes would not seriously retard the tempo of development.

BALANCE OF PAYMENTS

21. A close analysis of the balance of payments position for the Second Plan period has yet to be made. Considering the type and structure of our exports, it is doubtful if a large increase in earnings can be secured, at least in the earlier years of the Plan. In the targets indicated earlier, provision has been made for larger exports of cotton textiles, tea, mica, manganese and some of the newer products like sewing machines, electrical goods, etc. However in view of the increasing competition in some export items, it might be safe not to assume any significant increase in export earnings. The balance would turn mainly on imports.

22. Of the total investment of Rs. 5,600 crores, about Rs. 2,500 crores will be of a kind that makes little demand on foreign exchange. For the rest, that is, about Rs. 3,000 crores of investment in irrigation and power, communications, industries, railways, etc., if we assume the imported component at 33 to 40 per cent (as a very rough average), the import requirements would work out at between Rs. 1,000 and Rs. 1,200 crores. To this, we may add Rs. 400 crores or so as imports needed for replacement.

23. Total imports of capital goods over the Second Plan period may thus amount to Rs. 1,400 to 1,600 crores. At present, these imports are of the order of Rs. 100 crores a year. Since the overall external account is more or less in balance, it may be assumed that we could finance Rs. 500 crores worth of machinery and equipment imports from current earnings. The problem, then, would be to find foreign exchange resources of the order of Rs. 1,000 crores. Allowing for a saving of foreign exchange of some Rs. 200 crores on petrol, raw cotton, sugar and similar items where domestic production is expected to increase, there would still be a problem of finding Rs. 800 crores of foreign exchange. The foreign exchange assets held by the Reserve Bank can perhaps be drawn down by Rs. 100 to 150 crores during the next Plan period (*i.e.*, from the present level of Rs. 730 crores to 550 or 600 crores, after making an allowance of a decline of Rs. 30 crores or so in the last year of the First Plan). This leaves a balance of Rs. 650—700 crores. If Rs. 500 crores of this could be met by way of external assistance, there will still be need for economising on imports and for promotion of exports. Since the reducible element in our imports is small, there is a correspondingly greater need for increasing exports.

LI. CAPITAL FORMATION AND INVESTMENT PATTERN

NOTE ON THE OBJECTIVES, ETC. OF THE SECOND FIVE YEAR PLAN

by

DR. A. K. DASS GUPTA

The present note is designed to form a basis of discussion in connection with the preparation of the Second Five Year Plan.

Objectives

First about objectives. A rational plan must have an objective or a set of objectives to which means are to be adjusted. The objective of the First Five Year Plan was basically conceived in terms of aggregate income. This was understandable in the given circumstances; for poverty of the country was just the consideration that inspired planning. However, as we proceed with our plans, certain other considerations crop up.

Broadly there are three possible objectives that we can fix our eyes on in the preparation of the Second and later plans.

- (1) Raising the *per capita* income, or in other words, speeding up the rate of economic growth along the line chalked out by the First Five Year Plan ;
- (2) Reducing unemployment and under-employment ;
- (3) Reducing inequality of incomes.

As regards (1) the major bottleneck, as realised in the First Five Year Plan is shortage of capital. Formation of capital is, therefore, a most important desideratum here. Now, given an investment pattern and given the technology, there is a rigid relation between capital and income. The First Five Year Plan proceeded with a certain assumption concerning capital-income ratio, and with a chosen income target, formed a plan of investment of a given magnitude. It is for the Planning Commission to judge, in the light of experience, how far the estimate was valid. We have the experience of other countries, too, to fall back upon, and the Statistical Institute has given us a certain as yet hypothetical estimate. The point that needs to be emphasised, however, is that the capital-income ratio is itself a function of the investment pattern and the technology chosen and that these in their turn are a function of the types of income goods that we want to have and the time lag that we propose to allow between investment and the realisation of income-goods*. These involve considerations concerning the other objectives, namely employment and the distribution of income.

*Incidentally the concept of "optimum" timing is somewhat misleading; there does not seem to be any objective criterion for its ascertainment.

How far are we to proceed with our objective of social justice ? Here arises the question of the type of economy that we propose to have, and how soon, if we aim at a socialist economy, complete socialisation of the means of production is to be achieved.

Let us assume the continuance of a mixed economy such as has been contemplated in the First Five Year Plan, the process of socialisation being gradual and marked by a gradual increase in the proportion of public investment to private investment. Controlling distribution with a view to social justice, then, becomes a question of (a) taxation of higher income groups, (b) grants (in the form of community benefit) to the common people, (c) employment at reasonable wage rate, (d) emphasis on production of goods, *e. g.*, food, housing, clothing, etc., essential for a decent living of the common people, etc.

Now the investment pattern is to be adjusted to the consumption pattern and the consumption pattern is a function of the distribution of income, which again is partly a function of employment and wage rate. There cannot, therefore, be a unique quantitative relation between capital and income.

Fixation of Targets

Broadly, then, the objectives of the Second Five Year Plan may be set forth thus :

Improvement in the standard of living (as in the First Five Year Plan) *and* an increase in the volume of employment within a framework of social justice in the form of a reduced inequality of income. The volume of investment and the pattern of investment, both in the public sector and in the private sector are to be adjusted accordingly.

Can we fix these objectives in the form of targets ? Quantitative formulation of targets does seem to be desirable for securing the maximum degree of concentration of effort, just as fixing a deadline is always a good way of getting a thing done quickly. The First Five Year Plan formulated an income target, and the quantitative assessment there involved is well known. We may now, in the light of experience of the working of the Plan, formulate a revised target, if necessary.

An employment target involves quantitative assessment of the following :

- (a) The present volume of unemployment, open and disguised ;
- (b) Possible increase in the number of working population in view of the annual growth of population ; and
- (c) Displacement of labour, if any, in the process of new investment, a part of which may turn out to be labour-saving.

Distribution target is definitely more difficult to fix. We have here to measure the present inequality of income and assess the degree of change that is possible within a given period. Taking, for example, the simplest and the most understandable measure of inequality of income, namely, the area covered by the Lorenz Curve and the line making 45° angle with the horizontal axis, we have to ascertain the present curvature of the Lorenz Curve and to what extent it is to be flattened.

Are the Objectives Consistent ?

Are these objectives consistent one with the other ? Qualitatively, and in a broad, general sense, yes. It is indeed possible to contemplate a pattern of economic development which makes for a simultaneous achievement of increased national income, increased employment and improved standard of living of the masses. For, starting with employment we find that, other things remaining the same, a net increase in the volume of employment necessarily leads to an increase in national income—whether output increases in the same proportion as employment, depends upon the condition of production. On the other hand, a transfer from the higher income group to the lower income group, although it may change the ingredients of national income, is not incompatible with an increase in aggregate income. The contrary view is often supported by the consideration that any such transfer would reduce the propensity to save and would be inimical to capital formation. However, where unemployment exists, a reduced propensity to save and increased propensity to consume provide a stimulus to consumption goods industries and hence to an inducement to capital formation. And, in the context of planned economy where investment is largely done in the public sector, capital formation is largely autonomous and should be independent of the propensity to save.

Yet, in a special quantitative sense, the objectives may turn out to be inconsistent. While *some* reduction of inequality may go with *some* increase in aggregate income, it is quite possible that the *most desirable* distribution of income turns out to be incompatible with the *maximum* increase of national income in relation to the given resources. Further, while increased employment certainly adds to national wealth, maximum employment within the available resources of other kinds may not always be compatible with the *maximum* degree of capital formation and maximum income potential. We may have to sacrifice 'economy' for the sake of other objectives. Where to strike the balance and what kind of compromise is to be made in the choice of various 'targets' are, however, matters on which no precise direction can be given by an economist. They are matters which the Planning Commission will decide, guided by instinct and social sense.

Relative Emphasis on Different Types of Industries

The above considerations have an important bearing on the relative emphasis to be given to different types of industries. If increase of income potential is our chief concern, emphasis on heavy industries is indicated. If, on the other hand, employment has a higher priority cottage industries demand special attention. The latter is also a way towards the mitigation of distributional disparity, provided a reasonable share of the proceeds of sales from cottage industry products can be made to reach the ultimate workers. For a balanced achievement of the various objectives it looks as if the proper procedure would be to push heavy industries on the one hand and cottage industries on the other. A suggestion to this effect has indeed come from the Statistical Institute, where it is held that expansion of large-scale consumption goods industries, such as cotton textile, may be held in abeyance for some time to come.

*The larger problem of Finance will be taken up in a separate note. It may only be marked here that there is implicit in this argument a recognition of the need for deficit financing.

It is also suggested, in conformity to the present policy of the Government, that large scale consumption goods industries may be taxed to provide revenue towards the granting of subsidies to cottage industries. However, in spite of its apparent simplicity and reasonableness, the procedure is not without drawbacks. It may lead to future complications against which we must be forewarned.

Heavy industries are supposed to yield 'producers' goods,— goods which are by and large used in the large scale consumption goods industries. If these latter are left high and dry, wherein will the machinery and tools produced during our period of planning be absorbed? New factories in the consumption goods sector cannot possibly be built overnight. It is not enough to say that products of heavy industries will only substitute imports. For the success of heavy industries will depend upon an *expanding* home market. Continuous expansion of light industries seems to be a necessary adjunct to a scheme of development of heavy industries. More important than this is the difficulty that is likely to arise in future in the cottage industries sector, if the current policy is to absorb the unemployed mainly in that sector. For what will happen to those cottage industries that are in competition with factories? How long will subsidies continue? These questions must be answered before we decide which industries should receive special emphasis in our next Plan, for current planning must be based on the pattern of economy that we envisage for the future.

Approach

A sharp contrast is often drawn between 'financial' approach and 'physical' approach to economic planning. The contrast would be meaningful if by 'financial' planning were meant merely a planned adjustment of aggregate money flows with a view to avoiding inflation and deflation, as distinct from a planned allocation of resources. In an economy which is already advanced and where the only purpose of planning is the maintenance of stability with 'full employment', financial planning in this narrow sense is all that is contemplated. Where, however, the object of planning is to accelerate the pace of economic development through an enlargement of the capital base, emphasis must necessarily be on allocation of resources. In this sense, therefore, planning for economic development will inevitably take the character of 'physical' planning. On the other hand, unless you have a totalitarian economy where the problem of production is reduced to mere technology, where considerations of cost-price relationship are completely ignored and where even the needs of the consumer are dictated by the planning authority, allocation of physical resources, even though planned from the Centre, will have a financial counterpart. Allocation of resources, if it is to be rational, must be based on a system of accounting in terms of prices and costs; in a completely socialised economy, the accounting is to be done by the planning authority proceeding by way of trial and error, while in a mixed economy it can be left, within a frame-work of controls, to the play of market forces. How far and at what speed socialisation will be carried in our economy is a matter of policy decision. The implication of the Avadi Congress resolution seems to be that the process of socialisation will be gradual. Which means that for sometime to come we shall continue to have a mixed economy with the proportion of public investment gradually increasing relatively to total investment in the economy.

Importance of Input-Output Analysis

The distinction, in the context of planning for economic development, then, is not between 'physical planning' and 'financial planning', for one involves the other. The question rather is, how comprehensive our planning will have to be. Should we have an over-all target in terms of income and employment, concentrate on multipurpose projects, as we did in the First Five Year Plan, and leave the private sector to react to changes in public investment in the way that it thinks appropriate, using only general controls to suit the fundamental objectives that we have in view? Or should we cover the entire economy, choose individual targets and add up the investments needed for the achievement of these targets? The difference here is one of degree not of kind, and it relates to coverage. Now, in an economy where the available resources fall substantially below the basic requirements of the people, where all that can be done at the initial stages of planning is to create minimum basic conditions for a healthy growth, all that is necessary is to concentrate on the glaring bottlenecks. Irrigation, power, transport, health, education are such bottlenecks, and the object of the First Five Year Plan was to correct these. Has the limit of such investments been reached? If it has not, the Second Five Year Plan may be just an extension of the First with added emphasis on specific lines of investment in view of the larger availability of resources which the achievements of the First Five Year Plan have made possible. Where the investments in the public sector are to provide only a general incentive to productive activity, precise quantitative knowledge of the reaction to stimuli of the individual sectors in the economy, though useful, may not be considered essential. But where the scope of public investment is extended to cover individual targets and where the consistency between the targets is the concern of the planning authority itself, quantitative assessment of the interaction of the various sectors of the economy is essential. It is here that the input-output analysis of the type proposed by the Indian Statistical Institute assumes real significance. And since, whatever the present position and the immediate policy of the planning authority may be, a gradual extension of public investment will inevitably change the character of the plan, bringing specific items within its compass, the need for a continuous study of inter-industry relationship can certainly not be exaggerated. It is to be seen, however, if an input-output table based on current transactions would tell us enough. A plan based on fixed input-output coefficients may indeed be misleading, particularly when the targets aimed at are long-term targets. Apart from the fact that, even as things are the assumption of fixed input-output coefficients is of doubtful validity, the achievement of the basic objectives of the plan is likely by itself to involve an alteration of these coefficients. An action taken towards a reduction the inequality of income would change the consumption pattern of the community and would inevitably affect the relative elasticities of demand for individual goods and services. On the other hand, a policy designed to raise the level of employment may involve an alteration in the structure of production such as would affect the relative elasticities of supply of individual factors of production. Policies such as these may indeed alter the entire configuration of the input-output table. These considerations are important, and yet, far from detracting from the importance of input-output analysis, they only point to the need for its elaboration and intensification,

THE SECOND FIVE YEAR PLAN INVESTMENT MAGNITUDES AND THEIR IMPLICATIONS

by

DR. K. N. RAJ

In framing the Second Five Year Plan one of the crucial steps is to agree broadly on the dimensions and the pattern of the investment programme to be undertaken. Any decisions taken on these matters at this stage will obviously be tentative and subject to revision; there can be no final commitment, either at the technical or at the political level, to magnitudes and proportions suggested as a basis for discussion and preliminary work. Nevertheless, the frame that is agreed upon now will be of vital importance in the preparation of the Plan, and the greater the organic unity and internal balance of the underlying conception, the more difficult will it be to recast it at a latter stage to any significant extent without seriously undermining the basis of the whole approach. It is therefore essential that, before any particular frame is adopted as a working basis, we examine the implications of the more important magnitudes involved, and satisfy ourselves that subsequent revisions will have to be only in the detail and not in the conception itself.

In this paper an attempt is made, in the first instance, to work out in outline an internally consistent model for the Second Plan; the two major considerations here are that it should relate the investment programme explicitly to the objectives sought to be attained, and that, secondly, the programme itself should be one which, from a technical point of view, is not only feasible but capable of being implemented with the resources (existing and potential) at the disposal of the country. The model presented below is only a first pencil sketch, giving the barest minimum of detail, necessary to indicate the approach and the underlying assumptions. *The object is to focus attention on certain orders of magnitude, and more particularly on certain relationships, which are likely to prove vital in the execution of any plan answering broadly to this description.* From these would therefore be deduced certain implications which, it seems imperative, should be faced from the beginning; these form the subject matter of the second part of the paper.

I

The objectives about which there appears to be general agreement are that, over the period of the Plan, a sufficiently strong industrial base must be created for more rapid economic development, a noticeable dent made into the problem of under-employed manpower, and clear advances registered in selected lines in the direction of a socialist pattern of society. But these objectives will have to be given precision before a concrete programme of action can be framed, and since a measure of arbitrariness is inescapable in the process, there will inevitably be left some scope for differences of opinion; the most that can be hoped for is that

the range of the differences will not be too large. The targets assumed in this paper will be clear as we proceed, and perhaps the only point, which needs to be stated at this stage, is that the political assumptions of the Plan, implicit in the conception of a socialist pattern of society, and even more so in the stress on self-reliance, are important enough to require an approach more rigorous and more internally consistent than might appear adequate if these were not binding considerations.

The Indian economy can be conceived of in two sectors, the rural and the urban. There is of course a great deal of inter-mingling between them, and there are also forces at work tending to bring about a closer integration, but the differences between them are significant enough to warrant their being treated separately in the first instance. The rural economy for instance is based primarily on agriculture; the small-scale industries in the rural areas are also significantly different in organisation and techniques from the small-scale industries in the towns; under-employment is more acute and massive in the countryside, and in so far as one can speak in terms of averages, the rural standard of living is markedly lower than the urban; there are also fewer transactions in money and their effects therefore more localised; and, not the least of all, the institutional basis of production and of distribution is altogether different, conditioned as it still is in the villages by the customs and practices of a feudal society. It is true that one of the main objectives of development must be to eliminate these differences, or at any rate their economic and social consequences, but the existence of these differences has itself a direct bearing on the form and process of development.

We shall therefore visualise the investment programme in two parts, one relating to the rural sector and the other to the urban, with certain differences in emphasis appropriate to the conditions of each sector. This treatment, it will be seen, is designed not only to link up the Plan with the resources available and with the objectives sought to be reached in the immediate future, but to direct attention to certain points in the system where strains are likely to develop as the tempo of development is stepped up.

The surplus of manpower in the country is largely in the rural sector. A programme of development, to make an impression, must mobilise this manpower for two reasons; (a) because it constitutes the most abundant unutilised resource in the economy immediately available for being tapped, and (b) because the existence and growth of this surplus manifest themselves in abnormally low wages, and are responsible not only for the economic distress and social unrest in the countryside, but for exercising a strong depressing effect on rural standards of living as a whole and on techniques of production. There are also other reasons, as for instance the favourable conditions which a skimming-off of the fully or partially dispossessed agricultural classes would create for a programme of land reform.

In framing an investment programme for the rural sector which leans heavily on the manpower surplus and has a strong employment-creating bias, there are however two pitfalls to be avoided. One is to get involved in conceptual and statistical difficulties about

definitions of unemployment and of manpower surpluses, and the other is to regard creation of employment as an objective in itself. As regards the first, the problem of definition is not important once we are clear what it is that we are after. The Report of the National Income Committee brings out that, of the increase of 20 million in the total working force of the country between 1941 and 1951, 14 million was among the agricultural classes, of which only 3 million became 'self-supporting', the remaining joining the ranks of 'earning dependants'. "All earning dependants are economically semi-active only. Though they contribute to the carrying on of economic activities, the magnitude of their individual contribution is deemed to be too small to justify their description as economically active". We have here a reasonably good indication of the effect of population growth on employment opportunities among the agricultural classes in the course of one decade. To prevent the position getting worse even within a five year planning period, say the period of the Second Five Year Plan, we may therefore assume that new employment opportunities must be found for roughly 6 million workers; if part of the backlog of disguised unemployment is to be also removed in the course of the Plan period, say the numbers added between 1947 and 1956, we may fix a target of 15 million additional jobs. This is the target assumed as necessary for the Second Five Year Plan in this paper. We shall see that the approach can be made still more concrete if we proceed in terms of the distribution of landless labour in the country and their income levels.

To avoid the second pitfall mentioned above, it is important to make a distinction between the 'revolving' and 'sedimented' employment created by investments. The employment yielded by a project in the actual investment process is 'revolving', because once the construction stage of the project is completed, those employed on it can continue to be given employment only if a new project is undertaken, unless the project itself creates the productive base for employment of a more permanent nature; the latter, namely the permanent employment created on the *completion* of an investment, by virtue of the addition to the productive capital stock of the community, is 'sedimented' employment, in an under-developed economy, initially the scope is greatest for creating revolving employment, *i.e.*, through labour-intensive schemes of investment, but unless this in turn leads to creation of sedimented employment within a reasonable period of time, the employment created will be discontinuous, and if the discontinuities are large, the result will be inevitably a breakdown of the whole employment policy underlying the investment programme. It is true that in a developing economy, the investment process is itself a continuous one and the volume of investment will also be expanding, but the scope for productive investments of a labour-intensive character is certain to diminish as we go on, and hence the need to concentrate from the beginning on projects which will not only employ large numbers in the investment process, but will, directly or indirectly, create employment of a more permanent nature. Broadly speaking, the conception underlying the model presented in this paper is that the spearhead of a more adequate employment policy must be, to begin with, in the rural sector through the creation of revolving employment on a large scale; the effect of a good part of the investments undertaken in the process will be to increase the productivity and working hours of labour already employed (as, for instance, by the provision of

irrigation) rather than to create employment opportunities on any large scale for fresh hands; as production and incomes increase, however, small supplementary investments will help to create a layer of sedimented employment, and there will also be some employment of a similar nature created by schemes of land reclamation, afforestation, soil conservation, etc.; the more permanent employment resulting in these ways is not likely, however, to be adequate to absorb fresh additions to the working force, or even those gradually displaced from revolving employments; in the ultimate analysis, therefore, it is only to the extent that the rural investment programme is designed to support a more comprehensive and not so labour-intensive investment programme, for creating an industrial base for the economy as a whole (which base we assume will be, conceptually, in the urban sector), that it cannot be considered as something more than a temporary programme of relief or at best a partial and limited answer to the problem of development.

The investment programme for the rural sector, outlined below for the Second Five Year Plan, is based on the following assumptions: (a) the labour component of the programme, which in framing the schemes should be made to account for about two-thirds of the total cost, will be drawn from the ranks of agricultural labour, and among them from the lowest income groups; (b) the additions to the expenditure on labour employed by government on its schemes will lead to increased money incomes and further private expenditures which, in all, may expand the wage bill by about $2\frac{1}{2}$ times and the employment afforded per annum by about twice the initial amounts; (c) the recipients of the new incomes will belong to an income-group in which about one-third of the increases in income is likely to be spent on foodgrains; (d) the investment programme in the sector has to be such as to meet not only the bulk of the increases in demand for consumer goods from the classes in the rural sector receiving larger money incomes as a result of the programme, but the increased demand for foodgrains from the urban sector as a result of the programme in that sector; and (e) the urban sector will be able to pay for its increased imports of foodgrains (and raw materials) with exports of consumer goods for which there is increased demand in the rural sector but which cannot be produced locally.

In the concrete, this means that, if, of the 15 million additional jobs which need to be found by 1961, new employment for 12 million workers is to be created in the rural sector, the additional labour employed by government in its investment projects in this sector should be around 6 million. These have to be recruited largely from the 20 million agricultural labour families in the country, which probably account in all for 25-30 million of the total working force of 100 million in agriculture.* Agricultural labour families are distributed very unevenly over the country accounting for less than 10 per cent of the total rural families in the Punjab, Rajasthan and Assam; only 10-15 per cent in Uttar Pradesh; 15-20 per cent in Bombay and Saurashtra; 20-25 per cent in Madhya Pradesh and West Bengal; but 40 per cent (and in places over 60 per cent) in Bihar, Orissa, Hyderabad, Andhra and Madras. Their income

*The data given below are based on an analysis of available material by Shri V. M. Dandekar. The debt is gratefully acknowledged, though he is free from all responsibility for the way in which the data have been used in this paper.

and consumption levels also differ widely, the proportion of agricultural labour families living on less than Rs. 100 per consumption unit per annum (the consumption unit being calculated by taking adult male members as full units and converting other members on the basis of their relative calorific requirements) being as low as 5-10 per cent in certain parts and as high as 20-30 per cent in Hyderabad, Mysore and Travancore-Cochin, 30-40 per cent in Madras, and 60 per cent in parts of Bombay, Deccan and Andhra. If we assume that a wage rate of about Rs. 1½ per day will be required on an average to attract labour from the lowest-income groups, that there are likely to be in all about 300 working days in a year, and that the present income of this labour (perhaps now largely 'earning dependants') does not exceed Rs. 150 per annum on an average, the increase in the wage bill on account of employing 6 million additional workers will be around Rs. 180 crores per annum*. Since the labour cost of the projects is taken to be two-thirds of the total cost, the total increase in the investment of government on labour-intensive projects in the rural areas will have to be about Rs. 270 crores per annum by 1961. The investment on such projects (irrigation, roads, and other constructions) by the end of the First Five Year Plan may be around Rs. 150 crores per annum. If we phase the investment programme on labour-intensive projects in the Second Plan in such a way that it is stepped up steadily from Rs. 150 crores per annum in 1955-56 to Rs. 420 crores per annum by 1960-61, the total outlay on these projects in the period will have to be about Rs. 1560 crores. This indicates broadly the dimension of the investment programme required for the rural sector.

We must pursue next the implications of this in terms of demand for foodgrains and other consumer goods. The increase in the aggregate wage bill is assumed to be 2½ times the addition to the wage bill of government on the labour-intensive projects, so that the increase would in all amount to Rs. 450 crores by 1961. If one-third of this represents the increase in demand for foodgrains, the additional supply of foodgrains required to meet this demand will have to be of the order of 6 million tons. But this will not be the only account on which there will be increased demand for foodgrains, since the producers of foodgrains and commercial crops, who have to meet also the demand from the urban areas, will be receiving larger money incomes and consuming more of foodgrains. A further provision of 3-4 million tons on this account may therefore be necessary, taking the total for the rural sector to about 10 million tons. The non-food demand, insofar as it is not directed into producer goods, will have to be fully met by additional consumer goods and services of the kind normally demanded in the rural areas, unless some kind of compulsory saving scheme is built into the investment programme itself. Assuming that about Rs. 50 crores per annum of the Rs. 450 crores increase in the wage bill, can be diverted away by the end of the period into producer goods and compulsory savings, and the equivalent of Rs. 150 crores met by increased food production, the supply of other consumer goods and services will have to be increased by about Rs. 250 crores on this account and perhaps by another Rs. 150-200 crores to meet the demands of the producers

*It is assumed, for simplification that the income now accruing to these workers (taken at Rs. 150 per annum on an average for each worker) will continue to accrue to them, and that, therefore, it is only the additional income required to ensure average earning of Rs. 450 per annum per worker that has to be provided by the direct employment created by the Government; this could approximate to reality, if the employment afforded by Government is only for 7 or 8 months of the year covering the slack seasons.

of foodgrains and commercial crops. About one-third of these may have to be met by imports from the urban sector, the equivalent of roughly Rs. 125-150 crores, but the rest can be supplied from within the rural sector itself with an investment of about Rs. 100 crores spread over five years in small-scale village industries.

By the assumptions of this model, therefore, a development programme for the rural sector, which is consistent with the objectives of creating employment opportunities for an additional 12 million from among the agricultural classes, and of ensuring in effect a minimum wage of about Rs. 450 per annum per worker, can be implemented on the following conditions : (i) the government undertakes investment of the value of about Rs. 1600 crores over the five-year period in schemes with a high labour content; (ii) a good part of this investment is designed to increase production of foodgrains by about 15 million tons—10 million for consumption within the rural sector itself and 5 million provisionally assumed as necessary for export to the urban sector—and also of agricultural raw materials; (iii) about Rs. 100 crores of the investment programme is set apart for village industries; and (iv) the urban sector is able to provide consumer goods and services of the order of Rs. 125-150 crores per annum by the end of the Plan period for meeting the demands of the rural sector. Tentatively, the investment programme of Rs. 1600 crores can be broken down as follows: Rs. 700 crores for irrigation, reclamation and soil conservation, Rs. 250 crores for roads, Rs. 200 crores for warehouses and godowns, Rs. 250 crores for buildings for schools, hospitals, welfare centres, etc., and Rs. 200 crores for other miscellaneous schemes. It now remains to tie up this programme with the investment programme for the urban sector.

In the urban sector, by our conception, the main task is to create an industrial base for more rapid economic development, which will in turn provide in due course sedimented employment on a large scale in non-agricultural occupations; this means concentrating on the creation and expansion of certain key producer goods industries, in which process the revolving employment created may not be very large, but the gestation period may be considerable. Instead of starting from employment targets as in framing the rural investment programme, we may, therefore, proceed directly in terms of certain initial production targets in respect of key producer goods like steel and electricity and work out its implications in terms of the investment directly required for them and the supplementary investment required in associated producer goods industries. Here, the main considerations must be, on the one hand, the need for developing as strong and wide an industrial base as possible in the shortest period, and on the other, the compulsions in the other direction exerted by the magnitude of the investments likely to be required and the length of the gestation periods. Once certain targets are fixed, as for instance in steel, there will be a minimum volume of investment, determined largely by technical factors, that will be required in other industries to utilise these products to maximum advantage; an assessment of such minimum investment requirements, in relation to alternative sets of production targets, can be made only on the basis of intimate technical knowledge, but for the purposes of this paper a rough estimate is made of the investment that may be required consistently with a target increase of 5 million tons in the production of

steel. Logically, there is no reason why we should start with this target, and not with a target of 4 million tons or 6 million tons; the only justification in favour of the target adopted is that it has been widely mentioned as desirable and capable of being achieved, and also that it seems probable that an increase of this order may be necessary to sustain a growing volume of investment in the country and to create in due course a framework which will provide non-agricultural employment on the scale required. The estimates of the investment likely to be required in associated producer goods industries, it must be emphasised, are largely shots in the dark and can, at best indicate only the broad orders of magnitude.

Industry	Production by 1955-56	Target for 1960-61	Estimate of Investment required (Rs. crores)
Steel	1.4 m. tons	6.4 m. tons	600
Electrical energy	3.5 m. kws.	7.0 m. kws.	350
Engineering (machine tools, electrical equipment, locomotives, diesel engines, etc).	Net value added : Rs. 60 crores	Net value added : Rs. 200 crores	400
Cement	5 m. tons	12 m. tons	50
Other producer goods . . . . .	..	..	150
			165

To this we may add also the investment likely to be required in transport and communications ; again, broad orders of magnitude are indicated below :

(Rs. Crores).

	Provision in the First Plan	Allocation suggested for Second Plan
Railways	250	600
Shipping, harbours and ports	50	125
Posts and Telegraphs	50	100
Aviation	25	40
Others (including road transport, broadcasting, etc)*	15	45
	390	910

*(Roads are excluded here because they come in the programme for the rural sector).

We have yet to deal with investment in housing, certain special export industries like jute, and consumer goods industries in general. Before we deal with this, it may be well to pursue the implications of the investment programme in producer goods industries, transport and communications, because it is the effect of this programme on money incomes and expenditures in the urban sector and on the foreign exchange position of the country as a whole that must determine the nature and magnitude of the investments required to meet consumer demand and to save foreign exchange.

The total investment in producer goods industries, transport and communications is likely to be of the order of Rs. 160—175 crores by the last year of the First Five Year Plan ; to complete an investment programme costing Rs. 2560 crores over five years in the Second Plan, the expenditure will have to be phased roughly as follows :

	(Rs. crores)
1955-56	160—175
1956-57	275
1957-58	400
1958-59	525
1959-60	650
1960-61	810
	2560

The foreign exchange element in these investments is likely to be large, initially accounting perhaps, for as much as 60-70 per cent of the total cost and later, with the establishment of producer goods industries in the country, falling to 40 per cent or less. An estimate of the year-wise requirements of foreign exchange, on these broad assumptions, is attempted below :

	Total Investment (Rs. crores)	Proportion assumed to need for exchange	Foreign Exchange required (Rs. crores)
1955-56	160—175	60	96—105
1956-57	275	60	165
1957-58	400	55	220
1958-59	525	50	263
1959-60	650	45	392
1960-61	810	40	324
			1264

If we assume that the entire foreign exchange cost of the programme will be covered by foreign aid of some kind (withdrawal from sterling balances*, inter-governmental grants, or

*Sterling balances are treated here as 'foreign aid' because the releases from these balances would be in effect *current* saving abroad supplementing *current* domestic saving, just as in the case of loans and grants.

loans), we need then consider the income-expenditure effects of only that part of the cost which is incurred inside the country. This is a very large assumption to make, and so we shall assume that only half of the foreign exchange cost will be covered by foreign aid, and that the rest will have to be met by appropriating foreign exchange from domestic exporters (which will have the same income-expenditure effects inside the country as when the initial government expenditure is internal). If then we make the further assumption that, as in the rural sector, the total increase in money income per annum as a result of the increase in domestic investment expenditure will be about $2\frac{1}{2}$ times as high as the latter, the increase in money incomes in the urban sector by 1960-61, as compared to the position in 1955-56, may be estimated at about Rs. 1970 crores (for, to the internally-covered expenditure of Rs. 648 crores on account of the investment programme in the urban sector must be added the non-labour cost of the programme in the rural sector, which is assumed to be incurred in the urban sector and will amount to about Rs. 140 crores by 1960-61). This has to be either prevented from expressing itself as increased demand for consumer goods or met by corresponding increase in the supply of consumer goods; if both are only partially effective, there will follow a rise in the prices of consumer goods; and a rise in the prices of consumer goods if allowed to continue, can lead to distortions and ultimately to the collapse of the whole Plan. Even assuming that consumer demand of this magnitude can be met by increased supply from light industries and services of various kinds, and that the capital-output ratio in these lines can be made to be about 1 : 2, investment in consumer goods industries in the urban sector will have to be of the order of Rs. 985 crores.* (We shall assume that the investment in consumer goods industries is quickly maturing and we shall also ignore the multiplier effects of this investment on money incomes.) To prevent the money incomes in the urban sector rising faster and exerting additional pressure on consumer goods, we must make the further assumption that a ceiling will be placed on investment in housing and that the investment on constructions in the urban sector will not therefore exceed Rs. 800 crores over the five-year period (the investment on urban constructions is likely to reach Rs. 160 crores by 1955-56, and so there will be no increase over this in the annual rate during the period of the Second Plan).

Apart from the direct foreign exchange cost of the investment programme in producer goods industries, transport and communications, the increased investment and production in other industries is also likely to make demands on foreign exchange, both for purchase of equipment abroad as well as for importing essential raw materials; if strong controls are not imposed on imports of consumer goods, there will be further demands on this account. When domestic incomes increase, commodities that have a foreign market will also tend to be

*Since we have no idea of the value of the money income multiplier or of capital-output ratios based on Indian data, there can be no objection to juggling with various alternative values. The point of the illustrative estimates above, however, is to indicate that (i) the increase in effective demand on account of the money income multiplies has to be met by increased supply, whatever the precise value of the multiplier, and (ii) if this increased supply is to become available without having to provide for substantial investment in consumer goods industries emphasis will necessarily have to be placed on small scale enterprises which in turn implies the ability to face the organisational problems involved.

consumed internally. The precise extent of these demands on foreign exchange is difficult to estimate because it will depend on a variety of factors, but if we assume that investments in lines likely to save or earn foreign exchange will be generally given priority, that about Rs. 50 crores will be specially earmarked for investment in key export industries like jute, that strict controls will be imposed on imports of consumer goods, and that measures to direct production to foreign markets will be taken if necessary, we may, for the present, take it that the foreign exchange position can be held. This is, however, a matter which would need to be much more closely examined in the light of the actual investment programme; all that can be said at this stage is that the foreign exchange position will reflect all the pressures and bottlenecks in the economy, and that no plan which slurs over the implications of these in terms of foreign exchange, or fails to provide adequate safeguards, can claim to be based on a physical approach to the problem of development.

We are now in a position to pull all the threads together and present the main features of the model for the Second Five Year Plan, taken as a whole.

- (i) The total investment outlay in the Second Five Year Plan (excluding only investment in rural housing which currently runs at the rate of about Rs. 150 crores per annum) will be of the order of Rs. 5995 crores distributed, as follows :

‘Rural’ Investment		(Rs. Crores)		‘Urban’ Investment	
Irrigation, land reclamation, soil conservation, etc.	700	<i>Producer goods industries</i>		Steel . . .	600
Roads	250	Power . . .	350	Cement . . .	50
Warehouses and godowns . . .	200	Fertilisers . . .	100	Engineering . . .	400
Buildings for hospitals, schools, welfare centres, etc.	250	Others . . .	150		1650
Other miscellaneous schemes . . .	200	<i>Transport and communications</i>		Railways . . .	500
	<hr/>	Shipping, etc.. . .	125	Posts & Telegraphs . . .	100
	1600	Aviation . . .	30	Others	45
					<hr/>
					910
		Housing and other constructions	800	Key export industries . . .	50
		Consumer goods industries . . .	985		<hr/>
					4395
					<hr/>

- (ii) In consequence of the programme, net national output should increase by about Rs. 3700 crores by 1960-61 *i.e.*, by 33½ per cent over the level in 1955-56. Of this, about Rs. 900 crores will go into investment and Rs. 2800 crores should become available in the form of increased output of consumer goods*; of the increased output of consumer goods, about Rs. 500 crores in value will be accounted for by larger production of foodgrains.
- (iii) The investment programme in the rural sector will directly create additional employment for 6 million workers at an average annual wage of Rs. 450 per worker, and indirectly additional employment for another 9 million at about the same wage rate. It is difficult to estimate the employment effect of the programme in the urban sector, which will be highly capital-intensive as far as producer goods industries are concerned, but in view of the proposed investment in light-consumer goods industries and the investment in transport, it is reasonable to expect that employment may be found for an additional 3 million. In all, therefore, the Plan will not only have found non-agricultural employment for the increase in the working force during the period of the Plan (say, 10 million) but also absorbed about 5 million of those in disguised or open unemployment at the beginning of the Plan.
- (iv) For the Plan to be implemented as visualised above, a little over Rs. 600 crores will be required by way of foreign aid over the five-year period; if there are not adequate safeguards to take care of the pressures created by the investment programme the amount may well have to be larger.

II

So far what we have done is merely to construct a model on the basis of certain assumptions. These assumptions can be changed, if found necessary on statistical testing or for political and other reasons, and the result will be another model, or set of models, with somewhat different magnitudes. Models of infinite variety can be constructed if one has adequate statistical knowledge, and the only basis on which one model can be chosen in favour of another is by assessing all the implications of the respective investment programmes. The implications in terms of results can be read off directly from the models; but once we are satisfied about these, it is more important to examine and grasp the implications in the *implementation* of the investment programme. It is to the latter aspect of our model that we shall now turn.

In the first place, the implementation of an investment programme of the order of Rs. 6000 crores over the period of the Second Five Year Plan, with foreign aid of only about Rs. 600 crores, will involve raising investment supported by domestic resources from about 6 per cent of the national output in 1955-56 to about 10 per cent of a higher national output

*This, it must be emphasised, rests in particular on the assumption that additional consumer demand of the order of Rs. 1970 crores in the urban sector will be met by corresponding increase in output; if the increase in output that can be expected is lower, the overall increase in national income will also be lower. The estimate of the increase in output of consumption goods represents what is required and not necessarily what is practicable or what is likely to materialise.

by 1960-61*. The proportion of national output absorbed by investment will be reduced to a little less than 9½ per cent if the foreign aid that becomes available is twice as high. If the estimated increase in the output of foodgrains and other consumer goods is not realised to the full extent, say by only Rs. 1500 crores instead of by Rs. 2800 crores, investment supported by domestic resources will have to go up to 11 per cent of the national output even with foreign aid of Rs. 600 crores. If the targeted increase in the output of foodgrains and other consumer goods is realised, but foreign aid is negligible, the proportion of national output which will have to be set apart for investment may have to be as high as 12 per cent. The relative burden of the same investment programme will therefore vary widely depending on two factors, the realisation of the targets in respect of foodgrains and other consumer goods, and the extent of foreign aid.

The analysis, so far, has been entirely in terms of real quantities, and largely also in terms of aggregates for the whole economy ; we must now turn to consider the mechanism of finance, and how this would fit in. For this, an estimate must be made, to begin with, of the likely division of responsibility for the investment programme as between the government and private entrepreneurs. Very broadly we may assume that the entire investment scheduled for the rural sector, the bulk of the proposed investment in producer goods industries, transport, and communications, and a small amount of the investment considered necessary in export and consumer goods industries will have to be the responsibility of the government ; the share of the government in the total programme cannot therefore be less than Rs. 4000 crores and may, in fact, have to be a little higher. But this, it might seem, is not all ; we have not up to now taken account of the demands that will arise on account of the need to expand social services.

The recurring expenditure of the government on social services, which is currently of the order of Rs. 150 crores per annum, may however be considered not as investment expenditure in the economic sense of the term, but as expenditure which, through the provision of collective services, alters the pattern of consumption of the public. In providing for enlarged social services, we must therefore make two adjustments ; (i) deduct increases in the recurring expenditure on social services from the increases in the income of government expected as a result of increased tax revenue, so that only the balance is available for non-recurring expenditure, and (ii) make specific provision in the investment programme for the non-recurring expenditure on social services. The latter has already been made in the programme for the rural sector, and we may for the present assume, to avoid introducing more complications, that the requirements in the urban sector can be squeezed into the provision for urban housing, say by diverting resources now going into luxury building. The only allowance we need therefore make is in respect of recurring expenditure, which we shall do immediately when we turn to the estimation of the resources likely to be available to the government from out of its current income for meeting the demands of its investment programme.

In recent years, the current income of government from taxes, fees, and profits of State enterprises has averaged about 8½ per cent of the national income. If all the recommendations

*The estimate of 6 per cent for 1955-56 excludes investment in rural housing, which may amount to another 1¼—1½ per cent of the national income, though how far this is likely to be *net* investment is open to question ; the targets in our model for the Second Plan also excludes investment in rural housing.

of the Taxation Enquiry Commission are implemented, the proportion will rise, at the present level and distribution of national income, to about 9½ per cent. Unless there is a marked change in the distribution of income in favour of profits (which, if it comes through inflation, cannot help), or a relative increase in the supply of heavily-taxed commodities, or an increase in the profits of state enterprises, there is no logical reason for expecting that the share of the government will automatically increase in the period of the Second Plan ; this is so particularly because taxes on capital gains do not figure prominently either in the present tax structure or in the structure recommended by the Taxation Enquiry Commission. We may therefore assume that, unless special steps are taken, the income of government will not exceed 10 per cent of the national income by 1960-61 and may well be only around 9½ per cent. However, on the more optimistic assumptions, we may proceed to estimate the resources likely to be available to the government for its investment programme from out of its current income.

	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1956-61
National Income .	11,000	11,740	12,480	13,220	13,960	14,700	66,100
Total Net Investment	660	840	1,020	1,200	1,380	1,560	6,000
Of which, Government Investment.	380	560	680	800	920	1,040	4,000
Current income of Government (proportion of national income in brackets.)	990 (9%)	1,086 (9¼%)	1,186 (9½%)	1,256 (9½%)	1,361 (9¾%)	1,470 (10%)	6,359
Recurring expenditure of Government on							
(a) Social Services	175	200	225	250	275	300	1,250
(b) Others (including developmental services.)	740	760	780	800	820	840	4,000
Balance available for meeting govt. investment.	75	126	181	206	266	330	1,109

Even making allowance for all possible economies in ordinary administrative expenditure, and increased profits that could accrue to State enterprises by raising the price of the products, it is clear that the current income of government will not cover much more than say, Rs. 1,100 crores of the proposed investment expenditure of Rs.4000 crores, and may well cover less.

The precise methods adopted for financing the remaining Rs. 2,900 crores will determine whether the potential inflationary forces released by the rapidly expanding investment programme (particularly by the investment programme in producer goods industries) will come into the open or are transformed into latent inflation which can be tackled at a later stage. By our initial assumption, we have counted upon foreign aid of about Rs. 600 crores over the period of the Plan ; when this is allowed for, we are left with the problem of covering expenditure of about Rs. 2300 crores over the period of the Plan. If this entire amount can be covered by borrowing from the public, and the securities issued by government are not used by the public in settlement of current transactions, the inflationary forces can be successfully mopped up ; if, on the other hand, the gap is covered largely by creation of money, and only a small part of the consequent increased liquidity of the public is converted into holdings of the less liquid government securities or national savings certificates, the pressure of excessive liquid stocks in the hands of the public will undoubtedly strengthen tendencies to open and serious inflation.

The net borrowing of the government, through loans as well as small savings, is now of the order of Rs. 100 crores per annum. If this is steadily stepped up so as to reach a level of about Rs. 300 crores per annum by 1960-61, the total amount borrowed in the course of the five-year period may come up to Rs. 1100 crores, though it is clear that this will require a great effort and more effective methods of borrowing. If the rest of the investment programme, involving an expenditure of Rs. 1200 crores, is met by creation of money, the consequent increase in money supply during the period will not necessarily be limited to this figure of Rs. 1200 crores. Rs. 1200 crores will represent only the increase in primary money supply, *i. e.*, in the liabilities of the Reserve Bank ; on the basis of this increase, commercial banks can further multiply credit, the magnitude of this depending on how much of the increased liabilities of the Reserve Bank find their way into the reserves of commercial banks. Approximately 10 per cent of these liabilities are in the normal course likely to find their way into the reserves of commercial banks, and assuming that the banks will be content with maintaining a cash ratio of $12\frac{1}{2}$ per cent, the potential increase in the supply of money, as a result of the government meeting Rs. 1200 crores of its investment expenditure by borrowing from the Reserve Bank, may be estimated at Rs. 2040 crores (*i. e.* Rs. 1080 crores in the form of Reserve Bank liabilities plus Rs. 960 crores in the form of the demand liabilities of commercial banks held by the public). Some of the secondary expansion of credit by commercial banks can be prevented either by issue of Treasury Deposit Receipts (as in the United Kingdom during the last War), or by increasing by legislation the cash ratios of commercial banks (as has often been done in the United States) nevertheless, taking all these possibilities into account, it seems probable that there will be an increase in money supply to the extent of anywhere between Rs. 1500 crores and Rs. 1750 crores over the period. With the increase in national income expected by 1960-61, and the possibility of monetary transactions growing somewhat in importance relatively to barter transactions, an increase of about Rs. 800-1000 crores in money supply is likely to be required for sustaining the expanded economic activity in the system, but this would still leave an excess

of money holdings ranging anywhere between Rs. 500 and Rs. 950 crores in the hands of the public, and this is the fuel on which an open inflation can develop.

But the method of finance decides only the nature and volume of the fuel ; even straightforward borrowing from the public does increase the amount of fuel, with only the difference that there is less chance of government securities and national savings certificates being used in settlement of current transactions (particularly when these transactions are of a 'black market' nature and illegal) than actual cash and bank deposits. Basically, it must be emphasized, the problem is one of restraining consumption and ensuring that the demand for consumption and investment goods, at each stage in the implementation of the Plan, does not exceed the available supply of these goods at a more or less constant price level. If an investment programme of the magnitude visualised is implemented, there is no serious possibility that the demand for investment goods will be in excess of their supply (though undoubtedly some direction of this demand, away from certain lines and into certain others, will be necessary) ; the problem arises mainly in regard to consumer goods, and so we come back to the problem with which we started this section.

The entire internal consistency of our model, the impressive increase in the national income by 1960-61, the favourable capital-output ratio, and the relatively small dependence on foreign aid, all these turn on the assumptions we have made regarding the possibilities of increasing the output of consumer goods. We have assumed that the output of foodgrains can be increased in the period by about 15 million tons, and that the output of other consumer goods can be increased to the extent of Rs. 2400 crores by an investment of approximately Rs. 1100 crores in village industries and in urban light and small-scale enterprises for simplifying the presentation, we have also taken no note of the income-expenditure effects of the investment in urban consumer goods industries. All these estimates about the likely increase in the output of consumer goods if investments of a certain kind and magnitude are taken, can perhaps be broadly justified on *technical* grounds; but the organisational problems involved are obviously immense, and greater the reliance placed on small producers and traders the greater naturally would be the difficulties of ensuring that the estimates are realised and the output made available to the market to the required extent and in the right proportions. There must, therefore, be adequate safeguards within the frame visualised for the Plan to prevent shortfalls or unexpected fluctuations causing major dislocations and distortions ; the adequacy of these safeguards must be regarded as very much a part of the whole question of the internal consistency of the Plan.

The problem, it will be noticed, arises not so much from the employment-creating bias of the rural investment programme—this programme is on the whole easily dove-tailed into the production targets in respect of foodgrains and other consumer goods—but from the heavy investments in the urban sector, which have a relatively long gestation period and will not lead to substantial increases in the output of consumer goods in the period of the Plan.

To go into all the problems connected with institutional and organisational changes in relation to the Second Plan is outside the scope of this paper. The main changes, which seem essential in the light of the magnitudes and relationships indicated, are however briefly outlined below :

- (i) Since foodgrains occupy a central position in the consumption pattern of the people, and particularly of the lower-income groups, and since also their production is liable to violent fluctuations due to climatic factors, the means to prevent price rises in foodgrains must be strengthened. A programme of constructing warehouses on a country-wide scale, supported by the stocks accumulated in these warehouses, will undoubtedly help to maintain prices stable through open-market operations in foodgrains. Since, however, this assumes that there will be a steady flow of foodgrains into these warehouses at all times, and since by our assumptions regarding foreign aid we have ruled out imports of food, it is necessary to ensure that the stocks are not exhausted at any time by withdrawals in anticipation of rise in the prices of foodgrains. It is difficult to prevent hoarding by producer but it will go a long way if hoarding by traders can be prevented by the government assuming monopoly in the wholesale trade in foodgrains.
- (ii) If the demand for consumer goods is at any stage seriously in excess of the supply, the commodities whose prices are likely to be affected most are (apart from foodgrains) cloth, sugar, vegetable oils, kerosene, and perhaps one or two more of this kind; it is essential that monopoly of wholesale trade in these commodities is also assumed by the government.
- (iii) The scope of State enterprises must be expanded with a view to earning profits; this is desirable not only because it will enable a larger part of the investment programme of government to be supported by its own income but also because it is better to prevent profits being made at points where they are likely to be used for the wrong purpose than to allow them to be made and then to try and catch them. This means that the government should be prepared to go outside the field of basic industries and services, where, precisely because they are basic, it is difficult to use them for the purpose of making profits, State trading in the commodities indicated above will not be adequate for this, since these are, by and large, essentials; greater scope for making profits can be found only if the government enters the sphere of luxuries and semi-luxuries. One possibility to be explored in particular is the nationalisation of plantations, covering tea, coffee, and rubber*; with the large foreign demand for these commodities, and the inevitable growth in internal demand, not only is the scope for making profits large, but the

*The possibility of developing new cashewnut and pepper plantations owned by the State needs also to be considered.

sooner these enterprises are nationalised the better, because of the large capital gains that are otherwise certain to accrue to their present owners (the fact that a good deal of the capital in the plantations is foreign makes these considerations even more urgent). Another possibility closely bordering on this is the nationalisation of sugar factories.

- (iv) In the borrowing programme of the government, greater accent must be placed on compulsory loans and non-transferability (except under special conditions) of the securities offered ; for, the merit of expenditure financed by borrowing from the public over expenditure financed by creation of money is only in so far as it exercises a restraint on private expenditure. Compulsory saving has the same effect as taxation in imposing cuts in consumption, and if the counterparts are not easily negotiable it would also prevent their being used for transactions at a later date without the fact coming to the notice of the government.
- (v) The pressure on foreign exchange will be acute, and there are also likely to be strong tendencies towards smuggling of gold and other forms of export of capital ; this might require strict control over foreign trade, and perhaps State monopoly in certain lines of export and import. As the development programme gets into swing, the profits on foreign capital will increase substantially in certain lines, and to that extent the value of the property they hold will also increase ; if the foreign exchange implications of the remittance of profits are likely to be serious (as is likely in the case of tea), or if at a later stage it might prove necessary to acquire some of these investments, it will be better to do so now than later. This requires, however, a close study of foreign investments in this country, particularly since the purpose is not to attack foreign capital as such, but to look at the problems associated with it from the larger point of view of the economic development of the country.
- (vi) In view of the social objectives underlying the Plan, and the large employment opportunities proposed to be created in the investment projects, it will be desirable to give up the present system of recruiting labour at random and discontinuing their services on the completion of particular projects, and instead organise labour armies on a more permanent footing. In view of the uneven disposal of agricultural labour in the country referred to earlier the recruitment will be confined in the main to a few States where distress is greatest. The potentialities, implicit in the organisation of such labour armies, are immense from many points of view.
- (vii) Lastly, the capacity of the government to organise rapidly expanding investment outlay has itself to be strengthened if an investment programme of the size indicated in this paper is to be undertaken and implemented with even moderate success. The experience in this regard with the First Five Year Plan has not been very encouraging, and certainly not as encouraging as the 'budget' and even 'revised' estimates of government suggest. For instance, the budget provisions

in 1952-53 for expenditure on schemes in the Plan was Rs. 345 crores, the revised estimate Rs. 223 crores, and the final estimate Rs. 266 crores ; in 1953-54 the budget provision was Rs. 413 crores, the revised estimate Rs. 356 crores, and the final estimate, it seems likely, will show a figure around Rs. 310 crores ; even larger shortfalls are likely in the estimates for 1954-55 and 1955-56. As the budget provision increases, the difference between the amount provided for and the amount actually spent has been widening, and it is therefore not unsafe to forecast that, of the planned outlay of Rs. 2069 crores in the First Plan, not more than Rs. 1750-1800 crores are likely to be actually spent. The implications of this, from the point of view of the Second Plan, will be evident if we compare the likely level of development expenditure in the last year of the First Plan with the rate at which it would have to go up in the period of the Second Plan.

	<i>Second Plan Period</i>					
	1955-56	56-57	57-58	58-59	59-60	60-61
Investment expenditure of Government.	380	560	680	800	920	1040
Total recurring expenditure of Government on Social Services	175	200	225	250	275	300

No mention has been made in this paper of the need for more basic land reforms. Perhaps as much as Rs. 600—800 crores of the income created in agriculture is appropriated now by intermediaries in the form of rent and interest ; if even a part of this could be diverted away into the hands of the State, and a part allowed to be retained by the actual producers, there is no doubt that the resources of the government will be considerably expanded and a better atmosphere also created for all development activities in the rural sector. But this is a large subject in itself, and must therefore be left for separate examination.

No mention has also been made in this paper of the case for nationalisation of banking and insurance. These services are already subject to close control and direction, especially in regard to the use of their resources, and if there is really a case for their nationalisation, it is that they are controlled by interests closely connected with trade and industry, who are therefore likely to use, in not-so-obvious ways, the financial resources at their command in support of activities detrimental to or not necessary for the implementation of the Plan. But if the banks and insurance companies are nationalised, but left in charge of the same boards of directors, (as has so often happened in the case of other nationalised enterprises) not much purpose will have been served. Unless, therefore, suitable personnel can be found from elsewhere to take charge of these institutions after nationalisation, it seems wiser to depend on more effective use of the existing regulations for supervision and control over them. This does not of course mean that the government should not enter banking and insurance on its own through one or two institutions; it has already done so, and the need and the scope for expansion will undoubtedly increase.

A NOTE ON ALTERNATIVE BASES OF INVESTMENT FOR THE SECOND FIVE YEAR PLAN

by

DR. S. K. MURANJAN

It is relatively less useful to initiate the question how much in the aggregate we should invest during a ten-year period. If the proposed aggregate investment is 20,000 crores or 2000 crores a year, we shall all agree that it is too high a target to aim at. If the proposed investment is placed at 10,000 crores, we shall probably agree that the investment is not too far above or too far below our capacity and that the effort is worth making. An estimate of the aggregate volume of savings is not likely to yield any more definite guidance than this.

The more fundamental problem of planning is in what proportions the available resources from year to year should be allocated to different lines of output corresponding to different levels of economic welfare. The total of all these lines of investment could then be adjusted according to limits indicated in the preceding paragraph.

(i) The actual physical consumption of different goods and services at different income-levels could give the total necessary outputs of these goods and services at those different levels. Outputs could be calculated at increased levels of income like 50 p.c., 100 p.c., etc. The total investment necessary for these outputs could then be estimated on the basis of ascertained investment-output ratios. The consumption patterns used should be actual as well as desired or ideal.

Even when both public and private consumptions are included, a pattern of investment based on consumption-pattern will leave out some lines of investments like Social Over-heads, etc. The investments under these heads must be added separately. Besides, each head of investment will itself involve priorities along different lines according to technical and other possibilities.

Consumption-patterns emerging from averaging of hundreds of cases under different income-groups give only a very rough indication of probable change. The averaging conceals quite a substantial dispersion under the same income-group.

(ii) The volume of investment arrived at by the procedure indicated under (i) could be checked by volume of investment based on some actual employment patterns. (a) One employment pattern—somewhat dogmatic one—would be like this. It might be agreed that we should keep more or less stable our present labour-force in the sectors of agriculture and domestic or craft industry. All the additional labour force which will accrue during the next

ten years should be absorbed in modern mechanised industry. On the basis of ascertained capital-employment ratios, we could then arrive at the total investment under this employment pattern to be achieved during the next ten or twenty years. (b) Another approach would be to discard the countries at the top and bottom of the national income scale and to adopt as our working-basis the employment pattern of some country which is similar to our own. France, Italy, Argentina, Japan, Australia or New Zealand might be compared from this stand-point and employment-pattern selected. This empirical approach has its difficulties, but may not prove devoid of some general guidance.

Under either approach, the question of allocation of investments to different lines of output still remains unsolved. For this purpose, the guidance derived under method (i) is still needed.

(iii) As we are not writing on a clean slate, account must be taken of investment trends already in existence under the First Five Year Plan or otherwise. If priorities were agreed to among existing investment trends, estimates could be made of the investments required to carry these trends forward to their logical completion. The priorities might be roughly indicated as follows:

- (a) Investments relating to Social Overheads to be preferred to other lines of investment.
- (b) investments requiring less use of foreign capital goods to be preferred to those requiring more of foreign capital goods.
- (c) investments creating more employment per unit to be preferred to those creating less employment, and so on.

(iv) A further check at least in certain sectors will be supplied by the extent to which over-all planning conforming to over-all targets is supplemented by decentralised planning based on the expressed needs of villages, towns and districts. These expressed needs will very probably relate to common needs like roads, water-supply, schools, etc. The advantage of such planning in the creation of popular enthusiasm and interests will be counterbalanced by the disadvantage that the aggregates will conform to no scheme of over-all priorities; and immediate local benefits might over-ride long-term, general benefits.

If decentralised plans are drawn up at the district level rather than the village or town level, the clash of local and general priorities will be very much lessened.

For 1 to 3 months before villages, towns and districts start actual formulation of their needs or plans, it would be well that the scheme of decentralised planning from the bottom were advertised on a large scale and people made familiar with the main heads on which the investments of the Plan are to be concentrated. Such large-scale propaganda will give direction to people's wishes and narrow the area of their aspirations. Transport, Housing, Health, Education, Cattle improvement, etc., are some obvious heads.

This basic planning could be functional as well as territorial. In case of functional planning industrial labour, school teachers, handloom and other craftsmen, etc., could be invited to frame their progress and rationalisation plans.

Taking the First Five Year Plan statistics, the consumer expenditure in 1961 is estimated on the basis of an annual investment of 1300 crores. The allocation of this investment to different items would be worked out on the basis of investment output ratios as indicated in the breakdown of consumer expenditure. This is only one illustrative model.

(1) The objective is to illustrate the method for working out crude models. These models can be used in studying the basic relations that are involved.

(2) The results reached by these methods would not differ very much from the results based on econometric models.

(3) The model worked out here is based on the assumptions regarding rise in income made in Five Year Plan. Similar models can be worked out for alternative proportions such as doubling per capita income within ten years and so on.

Investment Income and Consumption

(Figures in crores)

<i>Year</i>	<i>Income</i>	<i>Investment</i>	<i>Consumption</i>
1955-56	10,000	700	9,300
1957	10,200	800	9,400
1958	10,400	900	9,500
1959	10,600	1,000	9,600
1960	11,000	1,200	9,800
1961	11,200	1,300	9,900

Assumptions : (1) Population in crores at

(2) Investment at the end of the F. Y. Plan is 6½ per cent of National income.

(3) Half of Additional income is invested.

(4) Once the targets are fixed, the calculation of amount of investment necessary to produce these targets is simple matter.

In fixing the targets we shall have to disaggregate the blanket groups like food and clothing into pulses, vegetables, fruits, sugar, eggs, cotton, wool, silk, and so on. For each of these targets we can calculate the amount of investment by using the census of manufactures data. We can compare the ratios arrived at with ratios obtained in other countries where the technique of production followed is similar.

The consistency of the targets as well as investments can be tested by the condition that total of these investments should not exceed the total investment consumption table.

(5) From the investment in each industry we can calculate the additional employment that can be given by that industry. We can make use of the data given by Tariff Commission reports and census of manufactures.

Variation in Consumer's Expenditure 1931-32 to 1940-41 in 1938-39 Prices

(Figures in crores)

Year	Food	Clothing	Fuel, light power	Housing	Household goods	Personal effects
1931-32 . . .	1538	210	51	147	57	16
1932-33 . . .	1518	227	49	145	57	17
1933-34 . . .	1527	216	49	150	62	19
1934-35 . . .	1553	216	52	153	63	18
1935-36 . . .	1536	223	51	151	69	20
1936-37 . . .	1605	235	52	151	67	21
1937-38 . . .	1594	229	56	153	68	23
1938-39 . . .	1561	247	54	156	67	24
1939-40 . . .	1525	241	55	160	68	24
1940-41 . . .	1560	261	55	163	72	21

Source : Desai

- Conclusion.*
1. Roughly speaking there is a stable relationship between different items of consumption.
 2. The items that show largest instability are household goods and personal effects. The population of expenditure on these commodities to total consumers expenditure is very small.

Consumers' Expenditure as Percentage of Total Expenditure

	Food	Fuel and light	Clothing	Toilet, petty articles, services	Education, Medical and amusement
National Sample Survey No. 2 (Rural Area).	65.96	6.11	5.92	7.82	2.65
National Samples Survey No. 3 (All India).	63.18	6.50	6.63	7.72 (11.91 Urban) (5.45 Rural)	3.08 (5.82 Urban) (2.35 Rural)
Desai's Consumers' expenditure (India & Pakistan)	60.5	2.1 (Only fuel)	9.8	11.2	N.A.

- (1) There is a significant variation regarding some items between Rural and Urban areas.
- (2) The pattern of consumption as revealed by N. S. S. does differ very much from Desai's pattern.

Consumer's Expenditure

Assumption :—(i) Consumption pattern will roughly be the same as revealed in the N. S. S. report and R. C. Desai's Consumers' Expenditure.

(Figures in crores)

Year	Cons. Exp. in excess of exp. in 1955-56	Commodities			
		Food	Fuel & Light	Cotton Clo- thing & Silk & Wool	Toilet, petty arti- cles, Services Edu., Med., Furniture, Amusement
1957	100	63 (2.82 sugar)	6.50	6.63 (Desai 10)	7.82 (4.24 conveyance) (1.43 services)
1958	200				
1959	300				
1960	500				
1961	600	378 (16.92 sugar)	39.00	39.78	46.92 (25.44 conveyance) (8.58 services)

- (1) The additional amount of expenditure in each year can be easily estimated by using N. S. S. data.
- (2) If we want to deliver goods to consumers at the same prices (prices that exist to-day) the production goals indicated above are the minimum that must be produced. If we find that as we go ahead, prices have tendency to rise we will have to revise our production target for the five-year period. If we aim at a different price structure, we can follow a slightly different method. We shall have to reduce the monetary demand to physical demand. In reducing the monetary demand to physical demand we can make use of the average price. We can then make a rough guess as to physical demand to a lower average that has to be satisfied is that the total demand so calculated should not exceed consumer's expenditure.

INVESTMENT PATTERN IN THE SECOND FIVE YEAR PLAN

by

PROF. C. N. VAKIL

and

SHRI P. R. BRAHMANANDA

The problem to be discussed is the relative role that is to be assigned to industry as against agriculture, and within industry to heavy industry as against light industry and within light industry between labour-intensive fields of activity and capital-intensive fields of activity. In other words, what should be the pattern of investment in the Second Five Year Plan?

2. The main criticism that was levelled against the First Five Year Plan was that a relatively low priority was accorded to the development of capital goods industries.* The Plan could be defended on grounds of the emergency conditions that prevailed at the time. A major effort had to be devoted towards filling up of the structural gaps created on account of the Partition, and the undertaking of measures to provide a more or less long-term solution of the food problem. Moreover, the Commission had to consider a number of schemes which were already under way. Our point was not that so much importance was given to agriculture, but that provision should have been made towards the establishment of those industries which would enable the economy continuously to step up its output of food through an increase in the ability to plough resources towards irrigation, multipurpose projects, etc. The neglect of heavy industries ancillary to agriculture was considered a defect not because of the lack of emphasis on industrialisation, but because it was only through such industries that a continuously increasing marketable surplus of food could be built up to meet the requirements of a growing population, thus enabling a larger extent of industrial potential to be built up. The Planning Commission, however, seems to have missed the theoretical perspective governing the above criticism. It may be pointed out that the central problem of the Indian economy, namely, the slow rate of growth of industrial employment is due to the slow rate of increase in the supplies of marketable surplus of food. The problem is not merely one of lack of appropriate organisational facilities in the industry; nor is it one of lack of innovational abilities; and not even one of lack of credit. No doubt, these and other factors may tend to explain why the performance of the economy does not reach, at different periods, the capacity limits. The process of a continuous

*The idea that heavy industries should get predominance in the Second Five Year Plan is being heavily canvassed in certain quarters. We may be permitted to point out that this was among other things the central point of criticism regarding the First Five Year Plan in "Planning For A Shortage Economy" by Vakil and Brahmananda (vide Chapter X, pp. 130-139). It may also be pointed out that the above work emphasised the development of capital goods industries ancillary to agriculture as against the current plea made in certain quarters for an indiscriminate expansion of heavy goods industries.

building up of complementary facilities in the industrial sector becomes dependent upon the rate of growth of expansion of the marketable surplus of food. This, in its turn, depends upon the rate of growth of production and the rate of growth of internal requirements, the former depending upon the pace of expansion in the construction of capital assets and utilisational measures which increase productivity, and the latter depending upon primarily the growth of population, particularly, the rate of increase in the pressure on land. From this point of view, a long-term solution of poverty and unemployment in India is to be sought through two types of efforts. (On the one hand we should continuously build up our agricultural basis, on the other, we should build up the necessary organisational machinery in industry which automatically utilises effectively the conditions of increasing the marketable surplus that are created as a result of the first set of measures.) Mere efforts to develop a number of industries of diverse types with no corresponding improvement in the conditions governing the availability of marketable surplus will lead to the emergence of excess capacity in the industrial sector.) The problem takes a peculiar shape in which while we know fully well that the rate of industrialisation has been slow, we are not able at the same time to keep the industrial units at a level where their capacity is fully utilised. The problem here, of course, is one arising out of a lack of markets as well as capital. It is in such a quandary that India finds herself to-day. It is from this point of view that we had emphasised in 1951 the need to develop certain heavy industries ancillary to agricultural production. (Manufacture of equipment necessary for irrigation and power plants, earth-moving equipment, equipment for fertiliser plants, intermediate goods like steel, cement, etc.). This would enable the economy to have a rate of development of irrigation and multi-purpose projects, which in turn would solve the problem of provision of wage-goods capital, a deficiency of which is the central bottle-neck preventing a higher rate of industrial expansion and at the same time provide a growing market for various types of consumer goods, whose growth in turn would provide the market for the development of heavy industries, manufacturing equipment of consumer goods. It may be pointed out that this approach outlined by us in 1951, is different from the approach which puts a blind emphasis on the development of heavy industries of all sorts.* Reference may be made to similar lack of coordination in electricity planning with industrial planning leading to waste of natural resources. The very ideal of planning presupposes such coordination and one is surprised at the desire of some people to advocate the growth of heavy industries without regard to the demand for their products.

3. It is obvious therefore that we must concentrate on the development of heavy industries which are ancillary to agriculture, particularly those which will help increase the rate of construction of irrigation, multi-purpose projects, etc. A continuous state of excess capacity in these industries would enable us to have a continuously increasing supply of marketable surplus of food. The question that arises here is whether during the period of the Second Five Year Plan the emphasis on agriculture, directly or indirectly, should be lessened. Those who argue from this point of view have the recent food situation in their mind. Food produc-

*Vide "Economics of Electricity Planning" by Vakil and Brahmananda.

tion has gone up by about 11 per cent as compared to last year, and by 20 per cent as compared to the targets laid down in the First Five Year Plan. The burden of food imports too has eased considerably. The problem appears to be one of how to dispose of the quantities of food that have accumulated with the farmers and the middlemen. The optimistic approach that has been poised for the Second Plan derives its strength mainly from the above situation. It may be pointed out that we are not at all certain whether the improvement in the food output is of a permanent character. The Third Progress Report of the Five Year Plan is not clear on the point whether the improvement is of a transitory character. No doubt, a number of short-term measures like provision of fertilizers, introduction of new methods of cultivation, better supplies of seeds and manures, the innovation of new organisational leadership in the villages and a number of other reasons have helped to increase food production, but these different measures are complementary to the windfall in the form of good rainfall which has blessed the economy during the last two years. It has been found that the aggregate food production may vary as much as 20 per cent, depending upon variations in the monsoon. The other measures raise the level of peak output during periods of good rainfall. They do not, however, help raise the level of food production when rainfall is not favourable. From these points of view, unless we are definitely clear that the ghost of the food problem has been once and for all exorcised, it will be hazardous to ignore the need to step up continuously agricultural production. We would, therefore, suggest that unless we are definitely certain about the permanent character of the improvement in the food situation, it would not be proper to embark on a type of industrialisation which neglects cultivation over a fairly long period of time.

4. In this connection, it may be pointed out that the system for an expansion of heavy industries is based on the experience of the Soviet Union which concentrated in the first few years on the development of heavy industries and later, on the development of consumer goods industries including that of agricultural production. It would be dangerous to argue on the basis of the experience of a country which had had a different economic background to face in planning. May we point out that the problem in the case of the Soviet Union in regard to agricultural production was more one of deficiency of marketable surplus rather than one of overall production, whereas in the case of India, we have both the problem of a relatively lower production as well as a lower proportion of marketable surplus. The Soviet measures towards collectivisation of agriculture and co-operative farming were designed on the one hand to divert surplus labour from the rural areas and on the other to increase the extent of the flow of marketable surplus. Nor did the Soviet Union face during its earlier planning period the problem of expanding agricultural production on the basis of long-range capital intensive schemes in the form of irrigation and multi-purpose projects. Further, the technical problem confronting the Soviet Union during the period of the plan was more that of lack of complementary capital assets like livestock and tractors, rather than that of lack of assured supplies of water. Moreover, the absolute growth of population in the Soviet Union in any given year is one-third of that in India. We should not assume that all is well with the Soviet economic situation now. The Soviet Government appears to have recognised the importance of agricultural production and measures are being undertaken to bring about increases in agri-

cultural productivity. After all, the time has not yet arrived to give any final ex-post verdict on the issue whether the investment pattern chosen in the Soviet Union for their plan was of the optimum type. No doubt, every economy has to take certain risks, but then would it not be appropriate to point out frankly the nature of the risk that an economy has to undertake, and put it directly before the public, so that those who have to bear the burden may well know what they have bargained for. In this connection, it may also be pointed out that the international climate under which the Soviet industrialisation process was carried out was not favourable for the imports of capital equipment into that country. Fortunately, the conditions in the case of India are somewhat better. The above reasons are sufficient to prove the doubtful validity of the Soviet experience under conditions facing India today.

5. Another point worthy of consideration in this context is that the growth of heavy industries should be keyed to the rate of growth of consumer goods industries. In the ensuing discussion, we shall proceed on the assumption that heavy industries ancillary to agricultural production will find an important place in the Second Plan. The question to be considered is whether other types of heavy industries which provide capital equipment for consumer goods industries, besides food and other wage goods industries, should be given any importance at the present juncture. Here, the question is what has been the rate of growth of demand for consumer goods (besides food and other wage goods) in India in the past? The demand for equipment arises on account of : (a) replacement and (b) expansion. The replacement demand depends upon the rate at which equipment is wearing out and the life composition of the equipment in the industrial units. Very often, unless the absolute extent of development of consumer goods industries is significant, mere replacement demand cannot serve as a basis for the development of heavy industry in the particular fields. In so far as the expansion demand is concerned, the problem is one of how the general level of income is rising in the economy. The final demand for various types of consumer goods must ultimately depend upon the quantity of marketable surplus of food and the conditions governing its supply. Neither small-scale industries nor the large-scale consumer goods industries can develop at a rapid rate, unless the surplus over and above the consumption needs in regard to food and other wage goods is large and is growing at a high rate. The demand for products of heavy industries is ultimately derived from the demand for consumer goods, the demand for which is ultimately derived from the marketable surplus of food and other wage goods. Thus, it is ultimately the growing agricultural base which enables indirectly the development of heavy industries. If the problem of providing marketable surplus does not exist, however, and we are fairly certain that for a relatively long period of time we are not going to be in difficulties in regard to the available food supplies, we can think of accelerating the rate of growth of heavy industries, which in its turn would provide the basis for the expansion of consumer goods industries. Moreover, the problem is one of having conditions under which a continuously increasing excess supply of food can be created. Only if we had very large capital resources at our disposal, or if we are assured that continuously increasing quantities of food would be

available to us through external loans or that the foreign exchange position is continuously improving so that we can bank upon large imports of food, we would be justified in expanding heavy industries other than those which are ancillary to agriculture.

6. In this context, it is suggested that a detailed study be carried out to ascertain the extent by which the demand for consumer goods has increased. It is not correct to assume that there are no capital goods industries, of any sort in India to-day. In some fields there are. In some fields the problem is not one of commitments on imports of capital equipment for consumer goods industries, but one of utilisation of the capacity that is already available within the country for the manufacture of equipment. Further, we must find out the experience of the capital goods producers in economy and ascertain whether their expectations are realised or not. The trouble that we are facing in regard to the Ship-building Industry is sufficient to dispel blind faith in all types of heavy industries by themselves. The excess capacity that prevails in a number of engineering industries is again a pointer in this direction. Moreover, a number of consumer goods industries are also facing problems of under-utilisation. There is clamour for sharing of markets and reservation of spheres. Under these conditions, if a super-structure of heavy industries is to be built, should it not have some relation to the economic background in the country? We have already shown that mere development of heavy industries by itself is not going to solve the problem of demand for products of these industries.

7. The case for an indiscriminate expansion of heavy industry is further weakened if we take into account the present international situation. In so far as it is possible for us to import capital equipment of various types for different consumer goods industries and a sellers' market for these goods obtains abroad, we should not be unduly worried as was the case with the Soviet Union. It may be possible for us to enter into agreements with international public bodies and private organisations abroad for assuring ourselves of effective supplies of these equipments. Moreover the embarkation on a plan for heavy industry and the diversion of substantial resources in this field would involve as a corollary a long waiting period. It is justified provided the results are promising or in keeping with the requirements. Capital resources available to the economy are meagre enough; their utilisation in one field implies their non-availability to others.

8. The problem is not one of having substantial surplus resources which we have to utilise now. It follows that the greater the importance given to indiscriminate expansion of heavy industry, the less the importance that can be given to consumer goods industries, capital-intensive or labour-intensive. In this connection, it has been suggested that expansion of consumer goods industries which involve capital-intensive methods of production, should be kept under check. Under this suggestion, the pressure of demand during the period of the Plan arising for various types of consumer goods should be met by the development of small-scale and cottage industries. This argument has an appeal however superficial, to the producers of small-scale and cottage industries. Let us examine whether the argument is consistent and the supposed benefit in the cottage and small-scale units would at all arise. The problem is not posed as one of choice between heavy industries and consumer goods industries as such. The problem is one of whether substantial portions of resources should be diverted to large-scale expansion of heavy industries

in the Second Plan. We have seen earlier that the demand for consumer goods, whether produced by large-scale or small-scale units, in farms or in towns, depends upon the rate of expansion of marketable surplus of food. If we neglect continuously the need to step up agricultural productivity, the problem would be one of sharing out stagnant or a slightly increasing market between large-scale consumer goods units and small-scale consumer goods units. If the large-scale consumer goods units already derive their supplies of capital goods from within the economy, then a policy in favour of small-scale and cottage units would involve under-utilisation of capacity in these industries. Well, what is the purpose of the development of capital goods industries? Are the new capital goods that are to be manufactured to meet the requirements of small-scale and cottage units? Unless we are clear on this point, we may be proceeding on a wrong track on the basis of incorrect appreciation of facts and logic of the situation. What happens if the small-scale and cottage units find that they are unable to compete on a level of efficiency with the large-scale units already in the economy? What happens if the latter derive their supplies of equipment and technical skill from within the economy? What happens if the organised consumer goods industries are in a position to develop markets at a fast rate in other countries? Should the products of small-scale and cottage units be equal in efficiency in this respect? What about the need to maintain continuously increasing supply of foreign exchange? Are we aware as to how much of our foreign exchange is earned by the consumer goods industries? How are we to obtain the foreign exchange for the development of heavy industries? Are we agreed that we do not require imports of various types of consumer goods during the period? Can the small-scale and cottage units provide the entire requirements assuming that such imports are banned? To what extent is it true to say that it will pay in the long run to bring about a rapid increase in the consumer goods industries? Is not our position similar to that of Britain in the 19th century? Should the levels of efficiency built up cumulatively over a long period of time in a number of our organised consumer goods industries be set at nought? If we halt the process of expansion of consumer goods industries now, what will happen when our heavy industries are built up? Is not the purpose of the latter to provide equipment for the consumer goods industries? Should heavy industry be desired for itself or as a means to a higher standard of consumer welfare? These and other questions crop up when once we probe into greater detail about the currently fashionable arguments for an indiscriminate expansion of heavy industries. It may be emphasised that the need for the development of heavy industries ancillary to agricultural production was emphasised by us long ago, but what we are contending against at present is not the development of such industry, but development of heavy industries, which emphasises vaguely an indiscriminate expansion of heavy industries on the basis of arguments which have no support either from facts or from logic valid under conditions facing us here and now, and which derives its justification only from a hasty imitation of the experience of some other country with obviously different economic conditions.

9. Let us remember that we have no strong economic basis for an all out expansion of heavy industry and a blind following of other countries' experience in this context should, if it is at all agreed upon, be based on the political implications, from a long-term point of view

of the above approach. Otherwise, we would be taking a veritable leap in the dark. We would be putting the economy under certain constraints, which may envisage more and more of such constraints until we are prepared to accept the institutional corollaries that will become inevitable at a later stage. / It is obvious therefore that in the investment pattern under the Second Five Year Plan more emphasis should be given to heavy industries ancillary to agriculture while the development of heavy industries to provide the requirements of other consumer goods industries should depend upon detailed studies of the rate of growth of demand for various types of consumer goods. / The possibilities of obtaining cheap equipment during the period of the Plan and the alternative cost of utilising the capital resources in other fields should be explored. / Secondly, a substantial stepping up of the expansion of consumer goods industries built up for export markets is an urgent need of the hour. Nothing should be done in the Plan period which negatives the cumulative progress in these industries over a period of four or five decades. / In the third place, small-scale and cottage units should be developed by encouraging those industries which provide cheap equipment to the latter. / The Japanese experience which concentrated on manufacture of low cost capital equipment of various types is preferable to that of the Soviet Union. What is required here is the minimisation of the impact of indivisibilities. / Technological progress should be concentrated on this and more can be gained through a close study of the Japanese experience. The small-scale and cottage units should no doubt be helped; such help, however, should not be a permanent character, but should enable these units to stand on their own legs at least at a later stage. / A high rate of technical progress is a vital pre-condition to the success of economic development programmes. / In the case of India, the need to retain and develop export markets is also a vital consideration. / It is not a question of the enumeration of those industries which have already developed; it is also a question of ascertaining which industries have potentialities in this field. / Unless we know the latter, we may be denying ourselves the advantages of industrialisation. / Finally, a programme of economic development in the country has to be correlated to the requirements of providing a growing volume of employment. / By definition, heavy industries do not provide large employment. If, however, we can get cheap imports of equipment, and consumer goods industries within the country can be developed at a faster rate, the volume of employment can be continuously stepped up. There will be great scope for both large-scale and small-scale units. / The growth of demand for consumer goods is determined by the growth of marketable surplus. / Continued use of substantial resources on improvements in agriculture would automatically create conditions for expansion of consumer goods industries. / Under the international situation facing us today, we have less difficulties in regard to imports of equipment. It is quite possible that a sellers' market may emerge here. The strategy of economic development should be utilised at each step to gain the advantages that accrue at a given conjuncture, internal and external. It is on these grounds that it is suggested that the Second Five Year Plan should continue to lay predominant emphasis on the stepping up of agricultural production, and programmes to step up agricultural productivity. / It should also utilise substantial portions of resources for development of heavy industries ancillary to agriculture and create conditions under which more and more of consumer goods industries of all types including

small-scale as well as cottage units can be established. It should utilise a considerable portion of resources for the manufacture of cheap and low-cost equipment and for the provision of power for small-scale and cottage units*. It should concentrate on expanding industries which have built up export markets and at the same time explore the potentialities of those industries which can build up export markets anew. This, in essence, appears to be the ideal investment pattern under conditions facing India today.

*Vide Appendix on "A. Positive Policy for the Development of Small-scale Industries".

APPENDIX ON
A POSITIVE POLICY FOR THE DEVELOPMENT OF SMALL-SCALE INDUSTRIES

1. From the conceptual point of view, we have to distinguish between large-scale units and small-scale units in any given industry. The terms 'large-scale industries' and 'small-scale industries' give the impression that there are some industries in which the industrial units operate on a small-scale. The real problem is one of competition in each of the industries between large-scale units and small-scale units.

2. It is difficult to divide the different industries according to those which are predominantly suited for large-scale production and those which are predominantly suited for small-scale production. This is because we cannot be definite about the changes in technology and what form they are going to take.

3. In a growing economy in which new techniques are being invented or industrial units come to know of the potentialities of the superior techniques, there is bound to be a transition from inferior methods to superior methods. Generally, it happens that the superior methods require a considerable amount of initial expenses in the form of outlay on capital equipment, technical skill, organisational expenses, etc. Large-scale economies arise because of indivisibilities. Small-scale units are not so efficient because they operate with methods which are uneconomic compared to the methods that large-scale units can employ.

4. It is possible, however, to split up some of the economies which large-sized units are able to reap. Some of the indivisibilities are conventional or institutional. Changes in the legal framework as well as in technology go to some extent to reduce the impact of indivisibilities. The following examples can be given :—

- (i) It should be possible for small-scale units to get access to easy and cheap sources of credit.
- (ii) Small-scale units should be enabled to consult technical experts and engineers at a low fee. Large-scale units can employ their own experts, whereas small-scale units cannot afford the expenditure.
- (iii) The legal and other organisational overheads that are associated with the inception or operation of any enterprise can be reduced if advice and service on these matters are made available to small-scale units at a relatively low fee.
- (iv) The small-scale units should be in a position to get access to power, coal, oil and other resources as well as transport facilities at a relatively low rate. Several of the large-scale units can have their own subsidiary plants for these purposes.
- (v) Small-scale units should be enabled to get a clear knowledge about the advantages of different productive processes and of changes in techniques of production. Large-scale units can have their own laboratories or research units. They can also afford the cost of outlay on adoption or invention of new methods.
- (vi) Capital equipment, land and other facilities should be available at low cost

5. The above are some of the ways by which it is possible to reduce the impact of indivisibilities. To a considerable extent, the initiative in the supply of facilities and services must come from the State or some body which is initiated by the State. The difficulty is that for some time to come the outlay on the starting of such organisation will not be self-financing. From the social point of view, considerable gains can be reaped by the above process.

6. The above represents a constructive approach towards the problem of increasing the competitive efficiency of the small-scale units on a long-term basis. The current approach accepted by the Government is however in the opposite direction. It seeks to perpetuate the difficulties of small-scale units by giving them subsidies and other advantages which, however, do not solve the problem but only postpone it. The point is that the community as a whole is bound to benefit if the cost of production of different commodities are lower than what they are. This requires that production must be carried out on the basis of the best available techniques as well as organisation. This does not, however, pre-suppose that there should always be large-sized units in every industry. Several of the difficulties which small-scale units are facing arise on account of the impact of avoidable indivisibilities. That is why the approach of the Government should be to encourage the invention of methods of production which involve lesser initial outlay in the form of capital equipment, organisational expenses, etc. This requires a new approach in regard to the problem of the appropriate technology suited to the under-developed countries like India.* Any other method can only be a palliative. It must be remembered that India has to compete with products of other countries if she has to maintain or expand her export market. This by itself necessitates a careful approach towards the problem of efficiency. Secondly, from the point of view of the consumers, it is iniquitous that the gains of superior methods of production should be denied to them. Technical progress which connotes a continuous improvement in the method of production has been an important factor in the raising of the real incomes of the individuals in advanced countries. Whatever little progress India itself has achieved has also been to a great extent due to the gains arising out of technical progress. Any policy which comes in the way of adoption of the best available methods of production places a serious obstacle to the progress of technique. What is suggested in this note is that the Government should see to it that improvements are brought about in technique and organisation in order to better the competitive efficiency of small-scale units. This requires that the Government should conduct detailed inquiries on the factors responsible for low level of efficiency in all the small-scale units in different industries. At present, the policy has been based upon emotional and unscientific approach towards the subject. What is needed now is more of facts and research into the reasons responsible for disparities in the levels of efficiency of large-scale and small-scale units. It is not proper to delude the small-scale units that they can continue to exist on whatever the level of efficiency of their operation. At one stage or another, they will again be put into difficulties. This problem has to be faced now and then and it is no good postponing it expecting a fortuitous solution at a later date.

Vide "Technical Knowledge and Managerial Capacity as limiting factors in industrial expansion in under-developed countries"—*International Social Science Bulletin*, 1954 and "The Structure of Capital in Indian Economy"—*Indian Economic Journal*, October 1954.

INVESTMENT IN THE PUBLIC SECTOR

by

DR. R. BALAKRISHNA

Under the broad subject of "Problems Relating to the Investment Pattern for the Second Five Year Plan", I have limited my study to the Investment Pattern in the Public Sector for the next planning period. Such limitation has been necessitated by the fact that so far as the private sector is concerned, it would be difficult to have any definiteness with regard to the targets that can be suggested. Further, the factual evidence about the increased investment that has taken place in the private sector during the First Five Year Plan is also meagre. Besides, in a mixed economy, investment in the private sector can only be induced, and the best means of doing it is through a declared readiness on the part of the State to fill the lacuna wherever it threatens to arise. Thus to think of a definite pattern of investment in the public sector would perhaps serve a better purpose than to hazard the design of an overall pattern which would involve innumerable imponderables.

Nature of Investment

The nature of investment in the public sector would be governed primarily by the broad objectives which the State would set to itself in the implementation of a plan and it would also depend upon the type of overall economic pattern which is desired to be reached in the interest of not only economic but other sociological considerations. Among such objectives, the most important could be maximum production, full employment, economic equality and social justice. These objectives represent the main conclusions that were reached at the first meeting of the Panel of Economists.

So far as the overall economic pattern is concerned, it is now the declared objective of the State to have a socialistic pattern of the society. Defined broadly, it would be one where the private sector would be allowed to function with reasonable freedom but at the same time would be expected to conform to certain principles which are likely to be conducive to public interest. The implications, however, would be a progressive widening of the public sector and a reorientation of the private sector to suit the needs of a planned economy. Obviously, there would be an increase in the quantum of public investment and also in the area of such investment. Among the ancillary consideration, the promotion of the interests of small-scale industries and individual craftsmen-entrepreneurs would rank high. In fine, the existing unbalanced occupational pattern would be rectified as far as possible through State intervention and encouragement. The advancement of social welfare would be the touchstone of the success of this pattern.

The investment pattern in the public sector would also depend upon the type of social overheads to be developed. They would loom large where a plan is designed to approximate

towards a welfare state, though an outlay on social overheads may not be immediately productive. They are necessary not only to create the pre-condition for future development, but also to enthuse the people to co-operate in a common endeavour for attaining the promised goal. Consequently, investments on health, education, housing and general welfare of the backward classes have to be maintained at a high level. But investment would also be necessary to take in the slack in the tempo of investment in the private sector. Even among those categories of investment which ought to legitimately fall within the purview of private enterprise, there may be some which may not sufficiently evoke its enthusiasm. In such cases, the State has to step in and do the investment as a corrective of the attitude of the investing public in the country. Thus the scope of public investment ought to be not only wide but also flexible according to the reaction of the private sector with the unfolding of the plan.

Investment under the First Plan

Before outlining the pattern of investment for the next plan, it would be helpful to assess not only the manner in which investment was conceived for the First Plan but also the achievement thereof till now. The main features of public investment under the First Plan have been a high priority to agriculture, including irrigation and power, a relatively low percentage of investment on industry and a sober consideration of other items such as transport and communication and social services. This is as it ought to be, because an increase in food and raw materials would be the foundation for the superstructure that will have to come later. Further, it fitted in with the objective of completing the projects which were already making progress and the very legitimate reliance that was placed on the private sector for progress in the industrial sphere. The following table shows the overall investment pattern in the public sector designed for the First Five Year Plan.

*Overall Investment Pattern in the Public Sector
First Five Year Plan (Revised)*

(In crores of Rs.)

<i>Item</i>	<i>Centre</i>	<i>States</i>	<i>Total</i>	<i>Percentage of total expenditure.</i>
I. Agriculture & Community Development	203·9	169·8	373·7	16·6
II. Irrigation & Power	255·9	360·9	616·8	27·5
III. Transport & Communications	434·0	101·9	535·9	23·7
IV. Industry	149·0	29·1	178·1	7·9
V. Social Services (including Rehabilitation)	245·1	244·3	489·4	21·8
VI. Others	42·9	12·1	55·0	2·5
TOTAL	1330·8	918·1	2,248·9	100

Nearly 60 per cent of the planned outlay by the State was expected to result directly in the creation of productive capital under the ownership of Central and State Governments.

The balance of 40 per cent was expected to add to the productive equipment of the private sector by providing assistance in the form of working capital or of advisory and administrative services and to help maintain and expand social services. The major share of the overall investment was to be borne by the Centre, leaving the balance to the States.

In terms of output targets, the return on these investments has been satisfactory. It is not however possible to make a comparison of the results yielded in different directions, because the investments made were aimed not only at increase in physical units but also at improvement in general standards, which cannot be reduced to physical units; and even confining oneself to physical units, a comparison will not be scientific as the units are different. Further, factors like weather and price changes have largely influenced production in agriculture. In the three years ending March 1954, the Central and State Governments have together spent Rs. 885 crores, which amounts to nearly 40 per cent of the total Plan; and in view of factors like the late finalization of plan and late commencement of some of the schemes, this may be considered satisfactory progress in expenditure.

Present Economic Context

Since the launching of the First Plan, certain changes have taken place in the economic conditions of the country, which have to be taken into account in designing the future pattern of investment. In the first place, the food situation has eased, enabling the planners to divert the resources towards the achievement of other objectives. It does not warrant the same degree of preoccupation that it did at the initial stages of the First Plan. Secondly, the emergence of unemployment is a serious development in the economic situation during recent years. Thirdly there is reason to believe that there is an increase in inequality of wealth among different classes in the community. Finally, inflation appears to have been very largely brought under control.

These changes seem to warrant a modification of the pattern of investment for the Second Plan. Since the irrigation projects would, on completion, stabilize the achievements in the agricultural segment, there is no need of a further augmentation in the quantum of investment on the agricultural sector. The solution of unemployment would also justify a diversion of investment to the industrial sphere, particularly in the labour-intensive types of occupations. A reduction of inequalities would warrant a larger outlay on social services and other auxiliary measures like land reform. If taxation cannot be made to subserve egalitarian ends any longer owing to its adverse effects on incentive to produce, an expansion of public investment may have to be thought of for bringing about a better distribution of wealth and opportunity. Finally, the control of inflation would encourage a larger outlay on the basis of deficit financing.

Future Pattern of Investment

The form and magnitude of investment in the public sector for the next Plan have not yet been finalised. However, proceeding on the basis of the estimate given by the Taxation Enquiry Commission, namely Rs. 3,500 crores, we may attempt a breakdown in terms of specific projects which need continuance and which have to be newly launched. The amount of Rs. 3,500 crores shows an excess of Rs. 1,250 crores over the First Plan investment of

Rs. 2,250 crores. It may be suggested that in the Second Plan the sum of Rs. 2,250 crores may be distributed among the various heads in the same proportion as in the First Plan. The excess of Rs. 1,250 crores may be distributed by way of additions to those spheres which need added emphasis. The table below gives a form of distribution which may be designed for the next Plan.

Item	First Plan		Second Plan		
	Amount*	Percent- age.	Additions to be made to Ist plan Invest- ment.	Total	Percent- age.
	(Rs. crores.)		(Rs. crores)	(Rs. crores)	
I. Agriculture & Community Development	375	17	..	375	11
II. Irrigation & Power	620	27	..	620	18
III. Transport & Communication	530	24	250	780	22
IV. Industry	175	8	700	875	25
V. Social Services (including Rehabilitation)	500	22	300	800	23
VI. Others	50	2	..	50	1
TOTAL	2,250	100	1,250	3,500	100

*Amounts are rounded off for convenience.

The justification for this distribution of the excess investment consists in the absence of any further need for augmentation of capital investment in the agricultural sphere and the pressing need for an enhanced investment in the industrial sphere on account of the inadequate provision made for it in the First Plan. Further, the necessity to increase employment opportunities would also entail a relatively larger investment in the industrial sphere. Finally, it could be stated that the Second Five Year Plan is an appropriate opportunity to rectify, as far as possible, the under-developed nature of the Indian economy through development of as many industries as the State could sponsor. Emphasis has to be laid on the building up of capital goods industries in the public sector, as any reliance in this respect on the private sector may not meet with success.

Corresponding increases in the percentage of investment on transport and social services are warranted by the scheme of industrial development envisaged for the next Five Year Plan. Investment on Social overheads such as education, health and housing, has got to be necessarily accelerated to maintain the tempo of the efficiency among the personnel who have to sustain the new economy which has to be gradually built up.

One more point, which might appear rather odd and out of the way, would also require some emphasis. Some capital investment has to be made by the State for the creation of

appropriate institutional machinery for undertaking the task of co-ordinating the different segments of the Plan. This is a task which is now obviously left to take care of itself to a large extent. Perpetual vigilance and a continuous study of the maturity of plans and the manner in which they mesh with each other is a task of considerable importance not only for the success of the Second Five Year Plan but as a lesson for all future plans.

The resuscitation of small-and medium-scale establishments, though falling within the sphere of the private sector is a responsibility of the State, as they lack capital both individually and collectively. The employment potential in them is enormous. Further, the output emanating from them would absorb to a considerable extent the excess purchasing power which is likely to be generated by the higher degree of deficit financing which would necessarily take place. No further justification is necessary to foster them; but the manner of capital investment for them by the State is difficult to define. However, it would not suffice if the entire reliance of the State for this purpose is placed on the co-operative machinery. Special financing and developmental agencies have to be started by the State with a very liberal provision of finance under the Second Five Year Plan.

Conclusion

Investment in the public sector cannot be strictly confined to the delimitation of spheres between public and private enterprise as laid down in the Industrial Policy Statement of the Government. Very often certain significant gaps in the private sector may be noticed by the Government and it ought to be the responsibility of the State to cover them by risking investment even though they may fall outside the sphere of public enterprise. This is in the interest of achieving the overall pattern envisaged by the Plan. The true spirit of mixed economy is not merely to assign areas between the two parties responsible for the purpose and consider them as watertight compartments. Of the two parties, the State takes a view longer in range than that of the private entrepreneur and as such its interest in the achievement of the final pattern ought to be greater.

However, the State should also adopt certain indirect measures for enthusing private enterprise to come up to expectations. This task would be even more difficult now with the announcement of the socialistic pattern as the final shape of things to come. But the task is not impossible if the State explains the purpose of its activities and the manner in which the results are likely to benefit not only the consumer at large but also the architects of the private sector. Better health, education, higher living standards, more equitable distribution and greater premium on leisure which are, by and large, the expectations of the socialistic pattern are bound to manifest themselves in higher effective demand for consumer goods and services to be produced by the private sector.

CAPITAL FORMATION IN THE INDIAN UNION

(Central Statistical Organisation and Economic Division of the Ministry of Finance)

INTRODUCTION

- o.1 This is a working paper which is being circulated for the information of the Planning Commission and the Panel of Economists.
- o.2 The estimates given in this paper are provisional and subject to revision.

I. The Method of Estimation

1.1 An attempt has been made in this paper to prepare the estimates of capital formation in the Indian Union for the years 1948-49 to 1953-54. To the extent possible, the commodity flow approach has been used to derive the estimates. The method of estimation has been described briefly in the following paragraphs.

1.2 Apart from the public authorities sector, direct estimates of investment are not possible with any degree of certainty. The capital formation in the public authorities sector (comprising of Central and State Governments, Port Trusts, Municipalities, District and Local Boards, Improvement Trusts and Village Panchayats) has been estimated from the budget documents and other connected publications giving details of expenditures incurred by them. The gross fixed capital formation has been classified into:

1. buildings,
2. roads and bridges,
3. other construction and works,
4. transport equipment and
5. machinery and other equipments.

All expenditure included in the account head 'Defence Capital Outlay' has been treated as consumption expenditure of the Government. Structures such as dams, canals, wells are included in capital formation whereas expenditures for forest fire protection, eradication of pests and on research etc. have been regarded as consumption expenditure. The expenditures on maintenance and repairs of irrigation works, electricity schemes, etc., when included in the working expenses of Government commercial enterprises are treated as consumption expenditure. All expenditure on new outlay even if included in the working expenses is taken as capital formation. The expenditure on replacements and renewals are separately available only in respect of Railways and Posts and Telegraphs. All purchases of financial assets (such as shares of private industrial concerns, etc.) have been excluded. The investment by Government by way of purchase of machinery and equipments (from imports and internal production has been omitted in the private sector to avoid double counting).

1.3 The estimation of private fixed capital formation as undertaken here can be broadly grouped under three heads, viz., the evaluation of construction, evaluation of indigenous

production of machinery and equipment and analysis of import of machinery and equipment. Among these, the data available are fairly comprehensive in respect of imports, but extremely unsatisfactory in respect of domestic output and construction. The Census of Manufactures does not cover a number of important capital goods industries and the Sample Survey of Manufacturing Industries for 1949 and 1950 does not give the necessary details. The position is much more unsatisfactory in respect of small enterprises where, apart from some preliminary studies made by the National Sample Survey (N.S.S.), the only available data relate to the census occupational statistics and some estimates of value of output per person. Some material on rural investment by way of improvement of land and construction or improvement of houses, wells, tanks, etc., is available from the National Sample Survey. In respect of urban construction the available information is not sufficient to enable direct estimates to be prepared.

1.4 The estimational procedure in respect of private capital formation may now be briefly outlined. The estimate of net rural investment in improvement of land and in construction or improvement of houses, wells, tanks, etc., per household as available from the second and third round reports of the National Sample Survey has been inflated for the entire rural India. The estimate of depreciation or maintenance (excluding current repairs or maintenance) of rural houses has been prepared from NSS material and the estimate of gross investment fixed on this basis. The investment in construction or improvement of wells, tanks, etc., has been separated and shown along with that of improvement of land. These two items of rural investment largely belong to the non-monetised sector of the economy. They may in many cases be the result of the farmers' own labour requiring either little or no counterpart in monetary savings.

1.5 In respect of urban private construction of buildings, indirect methods of estimation have to be used. Data on utilization of building materials such as iron and steel, cement, bricks, etc. for construction purposes have been used in conjunction with the technological ratios connecting cost on individual items to the total cost to obtain the level of investment in urban construction. The technological ratios have been worked out on the basis of data on residential and non-residential construction undertaken by Public Works Departments over different parts of the country and also from some other sources. Such analysis need not necessarily hold good for private construction. However, they have to be utilised in view of the dearth of material relating to private construction. The types of construction undertaken and the materials used over different parts of the country vary very widely and the present estimate can only be considered as a first approximation. The estimate, however, is dimensionally of the same order as the estimate prepared by making use of census occupational statistics and estimated values of output per person engaged in building activities. The depreciation of urban residential buildings is placed at two per cent of its estimated value and the depreciation on non-residential buildings has been estimated on a *pro rata* basis to residential construction.

1.6 The gross value of domestic output of capital goods by factory establishments has been taken from the Sample Survey of manufacturing industries for 1949-50 and adjusted on

the basis of material received from the Ministry of Works, Housing and Supply. The estimates have been suitably adjusted for other years both in respect of changes in production and prices. As construction has been estimated independently, production of all building materials has to be left out of consideration here. With regard to certain items such as sewing machines, automobiles, etc., which are used as consumer goods also the share sold to households or to public authorities has rather arbitrarily, been fixed at certain percentages of the total production of such goods. An overall allowance of 20 per cent for distribution charges and erection charges has been made.

1.7 The depreciation provision allowed by the income-tax authorities in respect of 332 public limited companies during 1948 to 1951 as given in the Report of the Taxation Enquiry Commission has been utilised here to obtain the estimates of depreciation provision of plant and machinery for all public limited manufacturing companies. This estimate has been adjusted for private limited companies and also for the rise in replacement cost on the basis of material available in the Report of the Taxation Enquiry Commission. The depreciation in respect of automobiles (lorries, buses and taxicabs only) has been fixed in relation to their number, average price and expected years of life. This estimate has then been marked up to cover other transport vehicles such as aeroplanes, motor boats, etc.

1.8 In respect of small enterprises, the gross value of output of capital goods has been estimated with the help of working force engaged in those industries and value of output per person prepared in connection with the estimation of contribution to national income from small enterprises. The capital goods produced by the small enterprises are agricultural implements, carts and other transport vehicles, hand-loom and other equipments, etc. A good part of the expenditure on these may be non-monetised. The depreciation of all agricultural and other implements and also of carts and other such transport vehicles is estimated mainly on the basis of material available from the National Sample Survey.

1.9 The figures of imports of capital goods have been taken not of exports and are adjusted for import duties. As in the case of factory output, the imports of items like automobiles, sewing machines, etc., have been adjusted for purchase by households and public authorities. The make-up effected for distributive and erection charges is the same as in the case of factory output which is 20 per cent.

1.10 No attempt has been made to estimate the investment in stocks because of dearth of statistical material, and to this extent the estimates presented in this paper are incomplete.

2. The Estimates

2.1 The estimates of domestic capital formation are presented in Table 1 below,

TABLE I—Estimates of Domestic Fixed Capital Formation

(Rs. crores)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Private</i>						
1. Construction						
Urban—gross	108	128	169	176	186	198
depreciation	69	71	72	72	75	75
net	39	57	97	103	111	123
Rural—gross	100	108	116	120	117	134
depreciation	48	50	52	52	53	53
net	52	56	64	68	64	81
2. Improvement of lands and construction of irrigation works						
gross	67	72	79	81	79	91
depreciation	6	6	7	7	7	8
net	61	66	72	74	72	83
3. Agricultural and other implements and small enterprises						
gross	108	113	116	134	136	134
depreciation	63	65	65	67	69	69
net	45	48	51	67	67	65
4. Mining and manufacturing enterprise						
gross	113	140	120	150	135	136
depreciation	53	60	63	68	72	75
net	60	80	57	82	63	61
5. Transport						
gross	87	79	103	126	123	93
depreciation	52	54	54	59	59	64
net	35	25	49	67	64	29
6. Total private						
gross	583	638	703	787	776	786
depreciation	291	306	313	326	335	344
net	292	332	390	461	441	443
7. Government						
gross	200	572	262	285	303	349
depreciation	46	65	63	75	85	72
net	154	192	199	211	218	277
8. Total investment						
gross	783	895	965	1073	1079	1135
depreciation	337	371	376	401	420	416
net	446	524	589	672	659	719

2.2 The net domestic capital formation is thus estimated at Rs. 719 crores in 1953-54 which forms about 6.8 per cent of the estimated national income of the year. The following Table 2 gives the trend of net domestic capital formation expressed as a percentage of national income.

TABLE 2—*Capital Formation as Percentage of National Income*

Year	Net domestic capital formation as percentage of national income
(1)	(2)
1948-49	5.2
1949-50	5.8
1950-51	6.2
1951-52	6.7
1952-53	6.7
1953-54	6.8

2.3 The investment in India may be compared with the level of investment in certain other countries. The gross domestic fixed capital formation expressed as a percentage of the gross domestic product at market prices for a few countries for the years 1948 to 1952 are given in Table 3 below.

TABLE 3—*Comparison with Some Foreign Countries*

	1948	1949	1950	1951	1952
1	2	3	4	5	6
Australia	20.7	24.3	24.8	30.6	25.9
Burma	15.1	8.7	10.3	12.0	15.1
Ceylon	6.0	8.8	10.5	11.6	13.3
Ireland	12.8	12.6	14.1	15.2	13.4
U. K.	12.1	12.6	13.1	13.1	13.4
Indian Union	8.3	9.1	9.3	9.8	10.0

2.4 The estimate of domestic capital formation may be adjusted for lending to the rest of the world. The results are given in Table 4 below.

TABLE 4—Domestic investment and foreign lending
(Rupees Crores)

Year	Net domestic capital formation	Net lending to the rest of the world	Net domestic capital formation plus net lending abroad-saving
1	2	3	4
1948-49	446	-239	207
1949-50	524	-50	474
1950-51	589	56	645
1951-52	672	-174	498
1952-53	659	74	733
1953-54	719	66	785

2.5 The estimates of investment presented in this paper are fairly close to those furnished by the Taxation Enquiry Commission for the years 1950-51 and 1953-54. They are reproduced in Table 5 below. The estimates relating to 1950-51 presented in the First Five Year Plan are also given side by side for facilitating comparison.

TABLE 5—Comparison with alternative estimates
(Rs. Crores)

I	First Five Year Plan	Taxation Enquiry Commission	Presented in this paper		
	1950-51	1950-51	1950-51	1953-54	
1	2	3	4	5	6
<i>Private investment</i>					
Organised enterprises	80 ¹	55	55	57	61
Urban construction of buildings	100	90 ²	120	97	123
Rural investment	120	140	160	187	229
Transport other than Railways	25	25	20	49 ³	29 ³
<i>Public investment</i>	185	185	305	199	277
TOTAL DOMESTIC FIXED INVESTMENT	410	495	660	589	719

¹ Large and small scale industries.

² Urban housing.

³ Includes investment in rural transport.

2.6 The net domestic fixed capital formation in respect of the year 1949-50 furnished by Mukherjee and Ghosh in their paper "The Pattern of Income and Expenditure—A Tentative Study" is Rs. 536 crores against the estimate of Rs. 524 crores presented in this paper.

CAPITAL OUTPUT RATIO IN ECONOMIC PLANNING*

by

SHRI P. R. BRAHMANANDA
(Through Prof. C. N. Vakil)

I

1. The concept of capital-output ratio or output-capital ratio has figured very prominently in recent discussions on economic growth and plans for economic development. The capital output ratio is a modified version of the concept of the acceleration coefficient. The latter tells us by how much investment will increase, given a particular rate of change in consumption or in national income. In the case of the capital-output ratio or the capital coefficient, we make certain assumptions about the levels of utilisation of capacity and the forms of organisation of resources. In an article "An Essay in Dynamic Economics" (E.J., 1939), (later amplified in his book "Towards a Dynamic Economics"), Prof. Harrod introduced a formula to explain the forces which determine the rate at which an economy is growing. His formula is summarised in the following equation :—

$$g=s/c$$

where g indicates the rate of growth of national income, c , the inverse of the capital co-efficient (c is the output-capital ratio), and s , the proportion of income that is saved. Professor Domar also arrived at a similar formula.

$$d=s\delta$$

where d is the rate of developments, s is the proportion of savings, δ is the average productivity of capital. Both the equations are similar. From the above, we can read off the following :—

(1) The lower the capital-output ratio, the higher the average productivity of capital. The rate of growth of national income will also be faster.

(2) Given the value of the capital-output ratio or the average productivity of capital, the larger the proportion of income that is saved, the higher the rate of growth of national income. If g or the rate of development is slow, then it must be due either to one or both of the following factors :—

(i) The proportion of income that is saved is low.

(ii) The capital-output ratio is high.

*This paper is the first of a series of studies in certain techniques of planning which are being conducted at the School of Economics and Sociology, University of Bombay. *Vide* also "Towards an Optimal Tax Policy in a Retrogressive Economy"—Journal of the University of Bombay, July, 1954; 'A Note on Capital Structure in the Economy'—IEJ October, 1954. The latter gives preliminary results of an enquiry into the capital-output and capital-net output ratios in a number of industries in India. Appropriate adjustments for changes in the price level have been made therein.

2. The central equation of Harrod and Domar can become a powerful tool for purposes of economic planning. Given different values of s and c , it is possible to obtain different rates of growth of national income. If any economy desires a higher rate of growth of national income, then all that it has to do is to manipulate economic forces in such a way that both s and δ are raised. Obviously, the Harrod-Domar version of growth lays the cardinal emphasis on the rate of growth to capital stock and its productivity.

3. There have been efforts to ascertain the secular trends in the capital-output ratio in a number of economies. Not merely has the ratio varied in any given country at different periods, but it has also been different in different countries. We shall not be concerned in this part of the paper with this aspect of the problem. We shall, however, deal systematically with the theoretical implications of the concept of the capital-output ratio and ascertain the limits within which it can vary.

II

4. In discussions of the concept of capital-output ratio generally, no allowances is made for time lags. It is therefore necessary to evolve a more complicated version of the concept. Let e represent the average units of capital outlay on labour, equipment and construction materials per year and g represent the period of gestation. This includes the period taken for planning the outlay and the actual period of construction. Let i represent the sum of interest charges per unit of time. Total capital outlay is hence equal to :—

$$c = (e \times g) + (i \times g)$$

Obviously, the longer the g the larger the c , given the interest rate and average expenditure per year. If the interest rate is higher, then given e and g , c would be larger. c can have a lower value if there are reductions in g and in i . Thus, delays—deliberate or unplanned—in the gestation period lead to a larger value of c . One obvious way of reducing c is, therefore, to reduce the period of gestation.

e is of course dependent on the cost of labour, of equipment and of construction materials. If wages are lower, then e would be less ; so also if the prices of equipment and materials are lower.

5. Another technical factor to be noted is that the capital-output ratio is not always a correct measure of capital productivity. The latter depends upon the length of the equipments, the probable prices in the factors of production, probable changes in technique, etc. Two methods of output expansion may have different capital coefficients. In one, the capital-output ratio may be low, in another, it may be high. But, the former may have a short period of existence whereas the latter may be much durable. A choice between the two methods has to be based on a comparison between the increased costs for capital in the case of the long-lived equipment which, however, yields output for a longer period, and of the lower costs of capital in the case of the less durable process which, however, has to be replaced soon. Just merely because one particular investment has a low capital-output ratio, it does not follow that it is the most productive from the economy's point of view.

Further, in matters of choice pertaining to investments, the capital-output ratio is a poor guide. What matters here is the capital efficiency of different programmes. We have to calculate the net profit rates on different capital investments. There is no reason to believe that investments with low capital-output ratios have the highest net rates of return. The expected rate of return depends upon the proportion between overhead costs and prime costs and the trend of prime costs. If labour costs of operation as well as prices of raw materials are going up, then unless demand conditions are very favourable, the rates of return would be falling. *Expose*, it would appear as if a more capital-intensive method would have been appropriate.

6. These considerations point out to the need for caution in utilising the capital coefficient in economic planning. In fact, the study of trends in capital coefficients is more appropriate for historical enquiries than for forward planning. The choice of a low capital-output ratio may mean a direct preference to labour intensive methods. From the overall point of view, the marginal efficiency of some other methods may have been higher. Low capital coefficients may imply high operating costs and under conditions of increased labour bargaining and rising wage costs would lead to very low rate of 'plough-backs'. That is why the more appropriate criterion is to ascertain the capital-net revenue ratios in different types of investments. This would imply a lesser degree of emphasis on year by year measurement of growth of national income and a greater degree of accent on growth of capital. Capital-intensive schemes may, therefore, be better from a long period point of view and the choice among different methods will have to be based on how much can be effectively ploughed back at each stage. Over-attention on capital coefficients do not therefore provide the best possible way of augmenting national wealth.

In the rest of the discussion we shall ignore the implications of our above criticisms though we shall make a brief mention to their implications at the concluding portion of the Section.

III

7. At the outset, it must be noted that if we have to utilise the capital coefficient for project estimates of possible growth, we have to make the following assumptions :—

(1) In the first place, any particular coefficient which we derive for the economy must be related to the background of economic conditions in the particular period. It is not valid to assume that there is one particular value of capital coefficient which has a unique sanctity for all the countries. The particular capital coefficient for any economy is dependent upon the type of economic organisation that is prevalent as well as upon the types of output that are produced. In this, we assume that the pattern of economic organisation in all countries are same or have been similar in relevant respects or the establishment of a particular pattern in any given country is a relatively easy matter and can be done within a short period of time. We are not warranted in attributing sanctity to values of coefficient derived from the experience of any given countries or set of countries and to assume that these values hold or can be made to hold true in any other country.

(2) From the theoretical point of view, in matters pertaining to long-term planning, it would be incorrect to postulate a given value of the capital coefficient. Such a procedure in its turn has to assume the following :—

- (i) There would be no changes, for better or for worse, in the levels of utilisation of capacity. In other words, the realised levels of utilisation correspond to the expected levels throughout the period of planning.
- (ii) There should be no variations in the rate of interest or in the conditions governing decisions influencing employment of different factors in productive processes. If the rate of interest changes, then given the state of technique and other conditions, it becomes profitable either to increase the capital intensity in the system or to reduce it. In either case, employment of this sort would falsify the assumption regarding the behaviour of the capital coefficient throughout the period. Secondly, if it is expected that the wages of labour or of particular categories of labour would tend to go up, then there would be a tendency towards an increase in capital intensity. The reverse would be the case if it is expected that the wages of labour or of particular categories of labour would come down. Thirdly, if it is found that a preference, given to capital or to labour in the choice of the combination of factors is subject to certain special handicaps, then too there would be a change in the capital intensity. For example, it may be expected or it might have been found that a preference towards labour-intensive methods leads to overheads in the form of outlay on housing and social welfare ; or it might create difficulties in the way of maintenance of work discipline etc. Such experience or expectations, would lead to a rise in capital intensity. If the expectations are of the reverse sort, a decrease in capital intensity would be the result.
- (iii) We have noted above that changes in the prices of different factors, of production would bring about changes in the combination of factors. The same result would be obtained if technical changes are taking place and new inventions are being introduced ; unless we can assume that the inventions on the net are neutral from the point of view of the economy as a whole, there is no reason to assume that the capital coefficient would be invariant during the process. In the alternative, it must be assumed that the invention and introduction of technique would be so regulated that they tend to have no effect on the degree of capital intensity. This introduces an assumption about the willingness and capacity to control the movement of technology.
- (iv) It is obvious that any capital coefficient utilised for purposes of forward planning must have been derived from the study of experience over a long period and must embody within itself the result of certain equilibrium tendencies in the economy. If, for example, the given capital coefficient is derived from an observation of the behaviour which itself was seeking to adjust to certain trends, then the coefficient may not remain the same in future. In other words, the coefficient chosen for forward planning must be optimal, given other conditions in the economy. This is not an absolute optimum but a feasible optimum.

8. It is obvious that the utilisation of the capital coefficient in the drawing up of planning programmes requires a considerable amount of caution and should be based on a clear understanding of the working of the economic processes. *Even a small change in the value of the capital coefficient chosen for the purpose of planning might lead to a significant variation in the patterns of policy that are adopted.* The higher the value of the capital coefficient, the greater has to be the emphasis on saving. The lower is the value of capital coefficient, the lesser the emphasis on saving for attaining a given increase in national income. Obviously, if the capital coefficient chosen for forward planning has a low value, compared to what it has been in the past or what will turn out to be in future, then the economy would place less emphasis on saving. This would lead to the development of heavy inflationary pressures which might be difficult to control later on. A low value of the capital coefficient would also indicate the possibility of a higher rate of growth of national income. Unless the choice of such a low value is correlated to past trends and to the set of conditions as would obtain in future, the preference for a low value in the capital coefficient would be purely statistical. This would have no sanction either from past experience or from the logic of economics. If, for example, the capital-output ratio is chosen to be equal to 1.4 : 1 or the output-capital ratio is made equal to 0.7, then if the capital coefficient is equal to 2.8 : 1, or the output-capital ratio is .36, it can easily be shown that the economy can attain an extent of growth double what can be achieved if we had adopted a higher value of the capital coefficient or a lower value of the output-capital ratio.

9. It may also be pointed out that if we can assume that conditions regarding prices of products as such would remain the same, whereas the costs of capital investment would be reduced, say because of reductions in labour costs, costs of equipments, costs of employing technical personnel, etc., it would be possible to arrive at a lower value of the capital-output ratio. If it is found that the price level of output is rising in general and that money wages are lagging behind, the capital-output ratio would have a lower value than if these conditions had not occurred. A lagged adjustment on the part of wages in the face of a rising price-level would, therefore, indicate a low capital coefficient. Similarly, for example, if wages of workers employed in investment activities are halved (this may be due to a general reduction in wages, or to the discriminatory practices followed in investment goods activities) and if the prices of the output produced with the aid of investment are maintained constant, the value of the capital coefficient would also be approximately halved. Thus, one way of reducing the capital coefficient is to reduce the wages paid to the workers employed in the investment goods activities. For example, if new workers are employed who have to be paid let us say, nothing at all for

* The First Five Year Plan of India, for example, calculated on the assumption of a capital-output ratio being 3 : 1; that it would be possible to double the national income within a period of about 25 years. If we assume that the capital coefficient is equal to, say, 1.4 : 1, it can easily be shown that given the same extent of saving as anticipated by the Planning Commission, it would be possible approximately to double the national income within, say, the same time assumed to be necessary to do so by the Planning Commission. It is clear that the target of doubling the national income in a shorter period is a result of the assumption of a low capital-output ratio. Unless it is possible to provide statistical justification based on an examination of current trends as well as past experience that the ratio is as low as it is, the choice of a low ratio would have been a choice based on assumptions, non-relevant to the economic conditions prevailing in the country.

purposes of getting themselves engaged in investment activities, and if the proportion of such workers in total employment is large, then the general capital coefficient for the economy would tend to be low.

10. If the level of utilisation of equipment is also increased then the capital coefficient would tend to be lowered. Upto a state of full utilisation of given equipment, additions to output would tend to reduce the value of capital coefficient. To assume that the value of the capital coefficient would be lower than what it is because there is a state of under-utilisation of equipment is justifiable if the economy is actually having a low degree of utilisation of equipment. This gain is a matter of actual fact.

11. Thus, we can make the following general statements about the capital coefficient:—

- (i) Under conditions of boom, there would be a tendency for the capital coefficient to be low. The reverse would be the case under conditions of depression. The relevant value of capital coefficient would, therefore, depend upon whether the economy, prior to embarkation of planned programme, is having a full or near-full utilisation capacity or a low level of utilisation.
- (ii) Under conditions of inflation, wherein money wages would lag behind the price level of output, the capital coefficient would tend to be low ; the reverse would be the case under conditions of deflation.
- (iii) If employment in new investment activities requires payment of wages lower than what the workers in other activities are getting and if such employment bears a large proportion to total employment, the capital coefficient would have a lower value.
- (iv) If technical changes taking place and the combinations of factors that are chosen for productive processes require relatively less of capital, then too the capital coefficient would be reduced.
- (v) If improvements in methods of organisation are taking place and the average productivity of capital as such has a tendency to increase, then too the capital coefficient would tend to be lowered.

IV

12. Thus, a number of stringent conditions are necessary before we can assume particular values for capital coefficient which are different from the values that actually ruled in the past or are currently ruling. Perhaps, the most important way in which an authoritarian State can reduce the value of capital coefficient is to reduce the wage-costs of investment programmes, at the same time keeping the price level constant or permitting them even to increase. It is feared that some such procedure must have been adopted in the Soviet planning programme during the period of the Russian Five Year Plans. This also explains why the capital coefficient revealed under Soviet experience tended to be astonishingly lower than that which had been ruling in other countries. The difference was not so much due to new techniques of planning as such ; nor to the planning programme as such ; but mostly due to the conditions of employment of workers. Thus, unless we, in India, can also assume that either

the general conditions of workers as such would be permitted to be deteriorated or that new workers in the capital construction programmes would be paid nominal or very low wages, it would be unscientific and unreasonable for us to assume that the value of the capital coefficient would tend to be similar to that which ruled in the Soviet Union. It must be emphasised that low values of capital coefficient are not the result of any new techniques of planning or new methods of planning as such. They are essentially due to the particular policies adopted in regard to conditions of labourers. To assume that actual conditions in India warrant the assumption of a capital coefficient similar to that which ruled in the Soviet Union is tantamount to an assumption that we are willing to bring about a general deterioration in the standards of living of the working classes as a whole and that the new workers in new employment would tend to get wages substantially lower than what the workers who are at present employed are getting. Stated thus, it becomes clear that either or the sum of the following conditions have to be obtained if a capital coefficient similar to that which ruled in the Soviet Union can be obtained in India during the period of the Second Five Year Plan :—

(1) The planning programme would imply substantial inflationary pressures. These pressures would actually tend to reduce the standard of living of the workers as a whole or of the new workers who are employed.

(2) The prices of output as such will not be brought down at the same time that the wage costs in real terms are being lowered.

(3) We would be prepared to adopt the appropriate concomitant of economic policy in the form of discriminatory wage fixation, expansive monetary policy, maintenance of high prices of consumer goods.

V

13. There are also certain other implications behind our adoption of any particular capital coefficient. In the first place, there is no sanctity behind any given value of the aggregate capital coefficient. Obviously, the capital coefficient relevant for the economy is derived from the capital coefficients for the different outputs manufactured in the economy. If out of the total output, a larger proportion of the output happens to be that which requires a low capital coefficient, then the value of the capital coefficient for the economy too would tend to be low. It is the proportion of different outputs to the total output and the capital coefficients for each of the different outputs that determine the value of the aggregate capital coefficient. If a significant portion of development outlay happens to produce no output at all, or if the output that is produced will accrue only after a very long period of gestation and depends upon the presence of a number of conjunctural conditions, the aggregate capital coefficient would tend to be high. To give a concrete case, if out of the total development outlay, one-third for example is devoted to social welfare services, medical services, education etc., unless the capital coefficient is substantially lower in the case of the rest of the investment outlay, the aggregate coefficient would tend to have a higher value ; even among other

outputs if a large proportion happens to require large outlay then too the aggregate capital coefficient would be high (multi-purpose projects, irrigation schemes, electricity schemes, transport, communications schemes, capital goods industries etc.). *Thus, the relative capital coefficient valid for any economy would be conditioned in the overall terms by the proportion of different outputs in the total output.* Unless we can bring about changes in consumer wants and in the scale of preferences so that a larger proportion of their outlay is devoted towards outputs which require low capital, we cannot assume a low capital coefficient in the aggregate. Thus, the relevant capital coefficient for India would ultimately depend upon the types of output that are to be manufactured and the manipulation of capital coefficients would depend upon the extent of control we can exercise on consumer preferences.

14. So far we have not discussed the theoretical utility of the capital coefficient itself. Obviously, in calculating the capital coefficient for forward planning, we take into account the reproducible capital. We must be clear as to what we refer to by the term capital output ratio. Considerable fluctuation in the output is possible on account of seasonal conditions like variations in rainfall etc. If rainfall is good, then fertilisers and manures will add to output. If rainfall is not good, fertilisers and manures would be of little help. Thus, it is not correct to argue that because rainfall has been favourable during the last two years and output which is based on the utilisation of non-reproducible factors like land has gone up, the overall capital-output ratio too has substantially gone down. It would be extremely unscientific to proceed further on the basis of the above example and to assume that the value of the capital coefficient for the future would also be low. This requires a particular assumption regarding the behaviour of rainfall. In matters of prospective planning, what we have to keep in mind is the ratio between reproducible capital and the outputs produced thereby. Just because the rainfall has been good and output on given land has gone up, it does not imply that the capital coefficient in the irrigation projects has a low value. Most of these projects have yet to be completed. They have no reason to enter into the calculations pertaining to the ratio of reproducible capital to output.

VI

15. Granted that we have to utilise a particular capital coefficient, it may be remembered that growth models which utilise this particular method of approach emphasise fixed capital. It is necessary at the same time to draw attention to the phenomenal importance of liquid capital. In other words, if liquid capital during the period of planning does not undergo significant variations, the targets of fixed capital would not be fulfilled. In other words, what determines the total level of employment and output during the years to come under conditions that are obtaining in India today is the availability of wage-goods and the terms at which they are offered. This is exactly the matter which is not taken into account in the Harrod-Domar model. The central hall-mark of the Soviet experience is the difficulties which that country faced during the period of economic planning in the form of shortages in the marketable surplus of food and other wage goods. Further, the current formulation of the capital coefficient does not include the essential aspect of deepening. To take over the

Harrod-Domar model without making appropriate provision for deepening of capital would be to miss the significance of these theories. Moreover, the experience of other countries cannot be transposed on other countries, which are different from the primary country, both in the structure of values as well as in the forms of economic and social organisations. Any approach towards economic planning has to be adjusted to the particular economic problems of the country as are revealed by a systematic and serious study of the economic past of the country. In the case of India, an approach which gives importance to the wage-goods capital and its supply would have greater relevance and greater chance of success. What is inhibiting progress in the economy is not so much a deficiency of fixed capital as such ; nor is it a deficiency of technical personnel. What is inhibiting long-term progress is shortages from the overall point of view in the supplies of wage-goods. The total limit to economic progress is set by factors governing the supply of these and the terms at which these are offered as also by the rate of growth of the capacity in the rest of the economy to absorb these goods.

INDIAN INDUSTRY'S INSTALLED CAPACITY AND PRESENT PRODUCTION LEVELS*

by

PROF. C. N. VAKIL

The problem of expanding the industrial potential of India has loomed large in official and non-official circles during the last two years. It is held that the place accorded to industry in the first Five Year Plan is not adequate and that, unless expansion at a rapid pace in several industrial activities is brought about, India's standard of living would not show any appreciable improvement. Efforts are being made to afford greater incentives to industrialists in India so that the private sector may be enabled to participate more vigorously in the national programmes of economic development. The Shroff Committee dealt specifically with the problem of provision of finance for the private sector. The Ministry of Commerce and Industry has set up the new Industrial Development Corporation for undertaking long range schemes of industrial expansion. Negotiations have been completed with a view to obtaining assistance from the U. S. A. and the U. K. for the establishment of another private corporation (Industrial Credit and Investment Corporation) for a more or less similar purpose.

There is no doubt that all these efforts are conceived with a laudable objective. The question may, however, be raised whether industrial progress can be brought about by the mere process of increasing the supply of finance for industrial development schemes to the private or the public sector. Is the industrial structure that is emerging evenly balanced both in relation to each of the industries included within the structure and also in relation to the other sectors of the economy? Should not the plans of expansion take into account the needs and requirements in specific fields? Is it true to say that industries, once they are started, find that the problems of adequate markets and of effective utilisation of their capacity are automatically solved? These are somewhat inconvenient questions, but no one can deny that they are important. If we are to achieve planned industrial development and obtain the maximum results by utilising our limited resources to the best advantage, we have to face these problems and solve them. It is not possible for us to go into the pros and cons of each of the above issues. We shall, however, examine one of them, namely, the problem of the level of utilisation of capacity as an illustration of what we suggest.

On the basis of the figures available from the *Monthly Statistics of Production of Selected Industries in India*, which lists more than eighty types of industrial activities, we have attempted to find out the levels at which different industries have been working during the last eight

* This is based on an article on the same subject contributed by me to the Annual Number of *The Capital* December, 1954. It has been slightly revised.

years. After working out the percentage of utilisation in each year to the available capacity, we have tried to present the position in a nutshell by classifying the different industries according to the degree of utilisation of capacity in each year. The table below shows the position in this respect.

Number of Industries classified according to utilisation of capacity

Utilisation of capacity	Number of Industries							
	1946	1947	1948	1949	1950	1951	1952	1953
Less than 25%	6 (18)	4 (10)	4 (7)	13 (20)	8 (10)	8 (10)	14 (18)	13 (16)
25%—50%	9 (27)	16 (39)	18 (32)	20 (31)	25 (32)	23 (30)	25 (31)	27 (33)
50%—75%	9 (27)	9 (22)	19 (34)	18 (28)	27 (34)	18 (23)	22 (27)	21 (26)
75% and above	10 (30)	12 (30)	16 (28)	14 (22)	19 (24)	29 (37)	19 (24)	20 (24)
TOTAL	34 (100)	41 (100)	57 (100)	65 (100)	79 (100)	78 (100)	80 (100)	81 (100)

N. B. :—Figures in brackets give percentage.

Figures are rounded and may not add up.

It may be noted that the number of industries for which figures of capacity are available has varied from year to year. Anyway, the table brings out the important fact that in both 1952 and 1953, nearly half the number of industries worked at a level of utilisation which was less than 50 per cent of their capacity. Detailed figures of capacity are available for all the four years between 1950 and 1953, for 78 industries. Out of this, 28 industries were throughout working at less than 60 per cent of capacity for a period of three years. Thus, in all 40 industries out of a total of 78 were working at less than 60 per cent of capacity for a period of three years or more. In other words, about 57 per cent of the industries worked for a period of three years or more at less than 60 per cent of capacity. This requires careful consideration before any expansion is decided upon. No wonder that a number of industries are complaining about lack of adequate markets. The pressure for grant or continuation of protection has been increasing. Complaints from business men to the effect that some of the new State enterprises would increase capacity in fields where even the existing capacity is not being adequately utilised are heard. Is the problem more of finance for expansion or of utilisation of existing plants and equipment? It is in the context of the low level of utilisation of a number of industries that the problems of rationalisation and weeding out the inefficient and marginal units in each of the industries have to be faced.

Another point to which attention may be drawn in this context is that in the case of some of the industrial units, considerable expansion has taken place during many years past. The low level of utilisation persists in the face of an increasing extent of capacity. In other words, if the level of utilisation of capacity is less than that which is desired by the existing units and by the economy, the absolute extent of such under-utilisation tends to be considerably larger than in the earlier years. It may be interesting to note that in the case of 26 industries, the average rate of increase in capacity between 1950 and 1954 has been higher by more than 5 per cent as compared with the rate of increase in production.

EXPECTATION AND RESULTS

A commonsense question that can be asked is, how capacity can increase if there is no improvement in the level of utilisation. Not always do industrial plants work to full capacity. Most of the industrial firms would like to have some reserve capacity to meet sudden demands. This would explain some under-utilisation. But the extent of under-utilisation that is observable in the case of a number of Indian Industries is definitely above that which can be explained on the above basis. Secondly, not all industrial plants can always theoretically adjust the pace of their expansion just according to requirements. This is because the technological character of certain categories of industries makes it inevitable that the minimum possible extent of expansion may be substantially more than what is required. This phenomenon is termed by economists as the surplus capacity arising out of indivisibilities. Only detailed investigations can reveal how much of the surplus capacity is due to indivisibilities, how much to the normal desire of business men to have some excess capacity and how much to a lack of correspondence between expectations and results. It may be noted that India emerged after the war with a large pent-up demand for various types of consumer and producer goods. Fortunately for us, we had accumulated during the war a surplus in our balance of payments. On the one hand, the pent-up demand showed itself in the form of imports of various categories of goods. This in itself was a sufficient pointer to the private sector to expand several industrial activities and establish several new industrial units. Another advantageous factor was that in the immediate post-war period, the Indian consumer goods industries were in a position to export goods. This was because both Continental countries and Japan took some time to rehabilitate their war-shattered economies. In the meantime, an additional spurt was given by the Korean boom. One can understand why and how, in the face of the above conjunctural advantages, a considerable rate of expansion in several industrial fields was brought about. But there was a snag in the whole process. In the face of a situation which clamours for expansion of activities, it is rarely true that the expansion that is brought about is only of the requisite extent. In a competitive world, the different business units plan their schemes autonomously of one another, and while each one responds to a particular stimulus, the net result of all their activities would in many cases exceed the required response to the stimuli. Those who are acquainted with the problems of business cycles are aware of this phenomenon. Some such process appears to have been working in India during the post-war period.

There is also another aspect to the expansion process. It is not always true that expansion is brought about only by efficient firms. In the face of a given stimulus, there is a response from a number of firms. It happens that not merely is the extent of expansion that is brought about larger than what is required, or what is then required, but there are also wide divergences in the efficiencies of different firms. Once sub-marginal and inefficient firms get entrenched, there are any number of resistances to the process of weeding out.

It may be argued that the problem of the gap between capacity and production might not have become so conspicuous as to attract the attention of the planners.* But, is there sufficient reason to believe that the industrial structure of India is evenly balanced? More than ever before, Government spokesmen are laying emphasis on the need to establish and expand producer goods industries. It is the rate at which the demand for consumer goods grows that determines the rate at which the demand for machinery and plants, both for replacement and expansion purposes, proceeds. After all, producer goods industries in a Welfare State like India are not desired for their own sake. The objective is to facilitate the rapid expansion of consumer goods industries. In this context, unless we make detailed enquiries about the course of demand for diverse consumer goods in recent years, we may find ourselves in a situation in which there is considerable excess capacity in the producer goods industries. The capital at stake is not a small amount. These industries require vast capital outlays; they require a considerably longer period. In view of this, the most careful husbanding of our limited resources is necessary. This, however, requires a minute study of the factors that have determined and are expected to determine the rate of growth of the demand for consumer goods. The crucial question is whether the excess capacity that is observable in a number of industries is a continuing phenomenon. If it is not so, is the mere experience of the recent past in which considerable expansion in capacity took place on account of the reasons stated earlier—a number of which are purely transitory—sufficient to warrant the assumption that the same rate of expansion will take place in the future also? Is it wise to assume that business men and industrialists would somehow go on adding to their industrial capacity both by expansion of existing units and by the establishment of new industries, irrespective of what is the level of utilisation of the existing capacity? Businesses cannot continue to flourish under these conditions.

In connection with our efforts at planned economic development of the country, regulation and control of industries are being carried out. Whereas regulation is practised according to rules for each given case, one is not clear whether it is realised that in the process of development and regulation new economic forces may arise, if the process is not properly studied from the overall point of view to determine the trends and control them in the right

* In this connection the view that as excess capacity prevails in a number of industries, deficit financing would not lead to a spurt in the price level may not be true. In order that deficit financing should be justified on the score of prevalence of excess capacity we must have surplus capacity in those fields for which demand would increase as a result of the expansion of money incomes. The problem of lack of balance cannot therefore be solved in this way.

direction. We have come to a stage when planning need no longer be the addition of scattered schemes made by various governmental units in different parts of the country. It is time we were able to view the working of economic forces in the country as a whole in their true perspective, anticipate the working of new forces which are likely to arise and think of regulating them in a manner that will yield the best results. For this purpose what is necessary is to have a continuous, detached and scientific examination with a view to ascertaining the working of economic forces by competent economic experts. This requires the capacity to analyse available data and perceive the weak spots. The Government comes in possession of a lot of material in the process of administration such as data with the office of the Controller of Capital Issues, data arising out of the licensing of industries, production and other data obtained under the Industrial Statistics Act and so on. Though there is room for improvement in the statistical machinery, it appears that even the available data are not fully utilised to study economic forces. What we have attempted is to indicate the manner in which existing and published data can be interpreted to find weak spots in the economy which should be remedied first before further industrial expansion is decided upon.

INSTALLED CAPACITY AND ITS UTILISATION IN INDIAN INDUSTRIES

(*Economic Division, Planning Commission*)

1. The First Five Year Plan laid considerable stress on fuller utilisation of idle capacity. The increase in the supply of consumer goods, it was proposed, should come mainly from fuller utilisation of existing capacity. "By and large, the capacity of industries producing essential goods like cotton textiles, sugar, salt, matches and soap is adequate for present requirements. The emphasis of policy in regard to them must, therefore, be on increasing the efficiency of existing plants by renovation and modernisation and by securing a better balance in the plants.....In the case of consumer goods of secondary importance such as radios, bicycles, automobiles, electric fans, etc. the problem again is one of utilizing existing capacity fully, of developing the units which have already been set up or are under construction to at least the minimum economic size, and of promoting a progressive switch over of assembly plants to manufacturing"*.

2. In the last three or four years, unutilised capacity in some industries (*e.g.*, cotton textiles) has been drawn upon, but there is still a considerable amount of unutilised capacity in various industries—in consumer as well as in producer goods industries. The following table shows the unutilised capacity in some selected industries.

Considerable Expansion

It is seen from the table that a considerable amount of idle capacity exists in many industries. For example, in the automobile industry, as much as 80.3 per cent of the installed capacity remained idle during 1953, and 81.7 per cent during 1954 (first 9 months). In the case of some of the industrial units, considerable expansion has taken place during the last few years, as is evident from Statement I. The low level of utilisation persists, in the face of increasing capacity. The growth of production has, generally speaking, lagged behind that of capacity in a large number of industries.

* *The First Five Year Plan* ; page 427.

TABLE I—*Unutilised Capacity in Selected Industries*

(As percentage of Installed Capacity)

	1946	1947	1948	1949	1950	1951	1952	1953	1954 (First Nine Months)	
<i>A. Consumer Goods Industries</i>										
1. Sugar (1)	22·7	10·3	16·5	23·1	12·2	(—)10·1	..	38·6	..	
2. Cigarettes . . . . .	..	37·1	27·3	27·0	21·2	28·5	32·9	18·4	15·4
3. Cotton Cloth (2) (Mill-made). . . . .	..	..	..	..	21·6	..	..	0·3	..
4. Leather Footwear . . . . .	..	..	..	..	39·9	22·9	28·7	27·3	41·2
5. Paints & Varnishes . . . . .	..	..	..	..	53·4	48·3	50·4	50·5	46·4
6. Matches	48·6	41·8	33·4	34·2	34·6	18·0	12·2	16·3	28·2	
7. Soap . . . . .	..	..	..	..	63·5	56·5	55·4	57·5	59·6
<i>B. Durable Consumer Goods</i>										
8. Hurricane Lanterns	27·5	9·1	24·7	8·6	22·0	6·6	20·1	5·9	(—)10·7	
9. Sewing Machines	58·4	51·2	16·6	1·8	17·6	(—)18·6	(—)20·6	(—)50·4	(—)96·2	
10. Electric Fans	20·0	36·1	27·9	40·4	30·6	23·7	33·5	34·4	26·9	
11. Radio Receivers . . . . .	..	62·1	(—)4·2	71·9	42·6	5·1	53·3	63·2	58·2*
12. Automobiles . . . . .	..	..	..	72·1	81·3	71·5	78·4	80·3	81·7
13. Bicycles	21·1	46·9	41·6	32·2	14·0	4·8	(—)64·1	36·7	22·8	

(1) Figures relate to the crop year (November to October), and are in respect of cane sugar only.

(2) Figures relate to fiscal year.

* For first 8 months only.

N.B.—The minus figures indicate that capacity was over-utilised (by extra shifts).

	1946	1947	1948	1949	1950	1951	1952	1953	1954 (First nine Months)	
<i>C. Producer Goods Industries</i>										
14. Jute (1) . . . . .	..	..	..	..	25.7	..	..	28.0	..
15. Sulphuric Acid	25.0	25.0	19.9	33.7	31.7	46.7	49.9	42.3	26.3	
16. Caustic Soda	72.3	68.5	63.5	53.3	43.1	46.6	51.2	39.9	27.1	
17. Superphosphates . . . . .	..	90.0	71.5	48.1	61.1	64.6	76.4	75.1	49.4
18. Ammonium Sulphate . . . . .	..	..	..	..	..	87.7	49.0	25.1	25.6
19. Cement	23.5	31.5	26.6	25.3	16.4	11.1	6.8	9.7	(-)2.0	
20. Steel Ingots & Metal for Casting. . . . .	..	..	..	..	6.8	2.7	(-)2.3	2.3	(-)7.5
21. Steel tubes . . . . .	..	..	..	92.2	95.2	94.9	99.0	98.7	..
22. Aluminium	19.1	19.6	16.0	12.8	10.1	3.8	10.8	6.0	(-)0.9	
23. Wood Screws . . . . .	..	88.6	78.6	56.0	24.2	49.0	59.9	46.9	(-)8.8
24. Machine Screws . . . . .	..	..	..	..	..	..	55.3	62.2	50.8
25. Diesel Engines	40.0	51.3	74.5	54.8	13.4	(-)36.9	32.8	71.7	38.4	

(1) Figures relate to fiscal year.

N.B.—The minus figures indicate that capacity was over-utilised (by extra shifts).

Causes for Under-utilisation of Capacity

3. It may be asked how capacity can increase if there is no improvement in the level of utilisation. Not always do industrial plants work to full capacity. Most of the industrial firms would like to have some reserve capacity to meet sudden demands. This would explain some under-utilisation. But the extent of under-utilisation that is observable in the case of a number of Indian industries is definitely above that which can be explained on this basis.

Secondly, not all industrial plants can always theoretically adjust the pace of their expansion just according to requirements. This is because, for reasons of technology, the minimum possible extent of expansion may be substantially more than what is required.

Unutilised capacity may also arise due to a lack of correspondence between expectations and results. It may arise due to a shortage of raw materials, labour trouble or due to lack of demand in internal or external markets. Given a certain amount of unutilised capacity in an industry, it is difficult to say precisely how much of the unutilised capacity is due to each of these causes. But some broad generalisations may be possible.

In India, many of the industries are new and have not established sufficient goodwill with the consumer. The quality of goods also, in many cases, leaves much to be desired. There is thus considerable scope for improvement not only in the quality of goods but also in effective publicity and advertisement to overcome the consumer's prejudice against indigenous products.

The march of technology is always making existing equipment obsolete, and at any one moment a part of the capacity of any industry necessarily consists of machines and plants that are nearing the end of their usefulness and will shortly be scrapped (*e.g.*, in the cotton textile industry). They are employed for stand-by service and their use factor is low. Meantime, the efficient equipment may be working close to capacity. Of course, from the social point of view the elimination of wasteful methods and obsolete plants may be a gain.

Another reason may be that the purchasing power in the hands of the consumers is not growing as fast as industrial capacity. The high prices of some of the commodities may be keeping large numbers of consumers off the market.

Effect of Possible Increased Production

4. If the general level of productivity is to be raised, all industries would have to enlarge their operations. However, there would be a striking difference in the amounts by which production might be expanded in separate branches of industry. For example, if production of commodity A is to be increased by 20 per cent, the production of commodity B may only need to be increased by 5 per cent. If, therefore, we were to start running each of the industries at its existing full capacity we would soon be piling up huge stocks of certain types of goods, for which there would be no present use. It is necessary, therefore, to plan for a balanced utilisation of idle capacity, so as to maximise total production.

Industrial Expansion in India : Insufficient Planning

5. Since 1939, a considerable amount of expansion has occurred in various industrial fields. In an unplanned expansion of this kind, it is rarely true that the expansion that is brought about is only of the requisite extent. In a competitive world, the different business units plan their schemes autonomously of one another, and while each one responds to a particular stimulus the net result of all their activities would in many cases exceed the required response to the stimuli. Some such process appears to have been working in India during the post-war period.

It happens that not merely is the extent of expansion that is brought about under a stimulus larger than what is required, or what is then required but there are also wide divergences in the efficiencies of different firms. Once sub-marginal and inefficient firms get entrenched there are any number of resistances to the process of weeding out.

Producer Goods Industries

At present emphasis is being laid on the need to establish and expand producer goods industries. It is the rate at which the demand for consumer goods grows that determines the rate at which the demand for machinery and plants, both for replacement and expansion purposes, proceeds. The establishment and expansion of producer goods industries must, therefore, be co-ordinated with the trends in the demand for consumer goods. The crucial question is how this is to be done.

A BRIEF SURVEY OF SOME IMPORTANT INDUSTRIES

6.1 The Five Year Plan Progress Report for 1953-54 (September 1954) stated that "during 1953-54, the overall industrial production of the country reached a post-war peak level mainly as a result of the greater availability of raw materials and a stricter import policy. The index of production rose during the year to 136.3 as against 117.2 in 1951 and 128.9 in 1952. It would have been still higher but for a decline in production in the three major industries of Jute, Sugar and Iron and Steel. Despite the general rise, production in most industries was still much below capacity due, in most cases, to lack of demand at current prices in the domestic and external markets. Falling off of demand in the latter was in some instances checked by appropriate revision of export duties."

Statement I shows the installed capacity, production and unutilised capacity as a percentage of installed capacity in 53 industries. The position in some selected industries is stated below.

Consumer Goods Industries

6.2 *Food Industries.*—It will be seen that a considerable amount of capacity remained unutilised in the sugar, wheat flour and vegetable oil products industries in recent years. 38.6 per cent of the capacity remained unutilised during 1953-54 in the sugar industry. The main problem in the industry is the supply of adequate quantities of good quality sugarcane at an economic price. A serious handicap from which the Indian sugar industry suffers is the

comparatively poor quality of the cane and its high price owing to low yield per acre. Another problem is the high cost of production of sugar. There is considerable scope for improving the standards of efficiency of the industry to bring down its costs. There is large scope for the profitable utilisation of many of the by-products of the sugar industry. Better utilisation of these by-products would also help to reduce the cost of production of sugar.

6.3 *Textiles*.—In the case of mill-made cotton cloth, the existing capacity was fully utilised during 1953-54. However, there was some unutilised capacity in the cotton yarn industry—14.5 per cent in 1953-54. In the case of woollen manufactures also, the position has been fairly satisfactory—the idle capacity being 3.8 per cent in 1953 and 9.7 per cent in 1954 (first 9 months).

6.4 *Footwear*.—In the case of footwear a considerable amount of unutilised capacity persists. In the leather footwear industry, the unutilised capacity was 27.3 per cent in 1953 and 41.2 per cent during 1954 (first 9 months).

The trends in installed capacity and production in recent years have been as follows:—

TABLE 2.—*Leather Footwear Industry*

(In thousand pairs)

	1951	1952	1953	1954 (first 9 months)
(i) Installed capacity	393.7		383.7	490.4
(ii) Production	303.4	280.6	379.0	288.5

(Figures represent monthly averages.)

The exports of leather footwear increased from 999,536 pairs in 1952-53 to 11,62,942 pairs in 1953-54. The slow turnover of leather footwear in the home market appears to be the main cause of the idle capacity in the leather footwear industry.

6.5 *Paints and Varnishes*.—A considerable amount of idle capacity exists in the Paints and varnishes industry, as is shown by the following :—

TABLE 3.—*Paints and Varnishes*.

Unutilised capacity as percentage of installed capacity.

1950	1951	1952	1953	1954 (first 9 months)
53.4	48.3	50.4	50.5	46.4

The value of exports of paints and painter's materials declined from Rs. 62 lakhs in 1951-52 to Rs. 22 lakhs in 1953-54. The low level of demand in the internal market seems to be another cause for the idle capacity.

6.6 *Matches.*—In the match industry, 16.3 per cent of the capacity remained unutilised in 1953 and 28.2 per cent in 1954 (first 9 months). Imports have been negligible and exports which reached a figure of 0.3 million gross boxes in 1949-50 have since then dwindled to almost nothing. It had been expected in the plan that exports would continue at about the 1949-50 level. The installed capacity of the industry has remained, since 1951, at more or less the same level.

6.7 *Soap.*—In the soap industry the figures of unutilised capacity are 57.5 per cent for 1953 and 59.6 per cent for 1954 (first 9 months). In 1951 the capacity of the soap industry was estimated at 265,000 tons per annum (including 73,000 tons estimated as the capacity of cottage scale units).* In 1954, this had increased to 282,000 tons as a result of improvement in production technique in the factories of Messrs Lever Brothers (India) Ltd. The Planning Commission had envisaged the expansion of capacity to 280,000 tons in 1955-56. As a large part of the existing capacity is idle, further expansion in the organised sector of the industry has not been permitted so far. The main cause for the idle capacity is probably the low level of demand in the home market. Exports also have not come up to the expected level. The Plan envisaged the export of about 10,000 tons of soap per annum by 1955-56. It seems unlikely that this will be achieved. Exports and imports of soap in recent years have been as follows :—

TABLE 4.—*Imports and Exports of Soap*

(In tons)

	1950-51	1951-52	1952-53	1953-54
Imports	172	120	61	27
Exports	280	1,580	1,300	570

*The figures given in Statement I are for the organised sector of the industry only.

Durable Consumer Goods Industries

6.8 *Hurricane Lanterns.*—The position regarding hurricane lanterns has been fairly satisfactory—only 5.9 per cent of the capacity remained idle in 1953, while in 1954 (first 9 months) the production was 10.7 per cent more than the installed capacity. Incidentally the hurricane lantern is an important indicator of living standards in the rural areas.

6.9 *Sewing Machines.*—In the case of sewing machines, the actual production has been much in excess of installed capacity in recent years—this has been achieved by one of the two units working more than one shift. Besides home demand, an export market has also been established. Over 8,000 machines were exported during 1952, and during 1953-54 exports rose to 11,023 machines valued at Rs. 18.8 lakhs. The target set in the Plan for 1955-56 is 11,500 machines. The trends in production in recent years have been as follows :—

TABLE 5.—*Production of Sewing Machines.*

	(Nos. '000)
	Production Target
1950-51	33
1951-52	48
1952-53	52
1953-54	64
1955-56	92

6.10 *Radio Receivers.*—A considerable amount of idle capacity exists in the radio receivers industry—the unutilised capacity was 53.3 per cent in 1952, 63.2 per cent in 1953 and 58.2 per cent in 1954 (first 8 months). There are at present 15 units assembling radio sets with a capacity of 153,000 sets per year as against 11 units with a capacity of 77,200 in 1950-51. The Plan envisaged the annual rated capacity at 380,000 sets by 1955-56. The trends in production have been as follows :—

TABLE 6.—*Production of Radio Receivers.*

1950-51	49,053
1951-52	87,700
1952-53	68,900
1953-54	57,800

The Plan had envisaged that by 1955-56 production might rise to 350,000 sets. However, actual production has remained at a low level in recent years, due mainly to lack of sufficient demand. It is expected, however, that the demand for radio sets will expand as soon as the new medium wave transmitting stations are completed.

6.11 *Automobiles.*—The idle capacity in the automobile industry in recent years has been as follows :—

TABLE 7.—*Unutilised Capacity in Automobile Industry.*

(As percentage of installed capacity)

1952	78.4
1953	80.3
1954	81.7

(First 9 months)

The actual production of the whole industry, comprising 12 manufacturers and assemblers, went down from 23,576 automobiles in 1951-52 to 13,294 in 1952-53 and 12,629 in 1953-54, mainly due to a fall in demand. The high prices of motor vehicles tend to limit the size of the home market.

6.12 *Bicycles.*—The production of bicycles, though still far below the rated capacity, has been steadily increasing in recent years, as shown below :—

TABLE 8.—*Production of Bicycles.*

	Actual Production. (In Nos.)	Plan Target (In Nos.)
1950-51	101,000	
1951-52	120,000	
1952-53	210,000	
1953-54	289,000	
1954	338,000*	
1955-56 . . . . .	..	530,000

*Estimated.

□ The idle capacity in the bicycle industry was 36.7 per cent in 1953 and 22.8 per cent in 1954 (first 9 months). The industry has been granted protection up to the end of 1956. But in spite of this and the consequent high prices of imported bicycles, the consumer's prejudice against the domestic product persists to some extent. There is considerable scope for improvement in the quality of the home-made product.

Producer Goods Industries

6.13 *jute*.—In the case of the Jute textiles, 28 per cent of the installed capacity remained unutilised during 1953-54. This is due to a fall in exports, as is shown by the following :—

TABLE 9.—*Exports of Jute Manufactures.*

	Actual Exports (in tons)	Targets (in tons)
1950-51	6,50,000	..
1951-52	8,07,000	..
1952-53	7,06,000	8,25,000
1953-54	7,78,000	..
1955-56 . . . . .	..	10,00,000

This decline in exports has been serious, for the industry caters primarily to foreign markets. The decline is attributed to keen competition from other producing countries and from alternate packing materials like paper and cotton bags and to a general decrease in the level of demand. Suitable adjustments in export duties were effected to strengthen the competitive power of the industry.

6.14 *Plywood*.—In the plywood industry, 62.2 per cent of the installed capacity remained unutilised during 1953 and 4.9 per cent in 1954 (first 9 months). The actual production of tea-chest plywood since 1950-51 has been as follows :—

TABLE 10.—*Production of Plywood.*

	Actual Production (Sq. ft. million)	Target (Sq. ft. million)
1950-51	45	..
1951-52	65	..
1952-53	71	75
1953-54	51	..
1955-56 . . . . .	..	100

The decline in production in 1953-54 was due to accumulation of stocks following a slump in the tea trade. Protection to the industry has been extended up to the end of 1957.

6.15 *Chemical Industries.*—A substantial portion of the installed capacity in the chemical goods industries has remained idle in recent years, as is shown by the following :—

TABLE II.—*Unutilised Capacity in Chemical Industries.*

(As percentage of Installed Capacity)

	1952	1953	1954 (first nine months)
Sulphuric Acid	49.9	42.3	26.3
Caustic Soda	51.2	39.9	27.1
Soda Ash	17.9	7.1	23.3
Chlorine Liquid	53.8	55.7	48.7
Bleaching Powder	89.8	75.1	62.0
Superphosphates	76.4	75.1	49.4
Glycerine (Refined)	37.5	28.7	40.6

One cause for this idle capacity is the comparatively low quality of the products of domestic manufacture as compared to the imported stuff. The slow development of industries using these chemical products is probably another reason. For instance, as seen above, the considerable amount of idle capacity in the soap industry inevitably leads to the capacity in the caustic soda industry to remain under-utilised.

6.16 *Cement.*—The position regarding cement has been satisfactory. Only 9.7 per cent of capacity was idle in 1953, while the actual production was 2 per cent more than the installed capacity in 1954 (first 9 months).

6.17 *Wood Screw Industry.*—The idle capacity in the wood screw industry was 46.9 per cent in 1953, while in 1954 (first 9 months) the actual production was 8.8 per cent above the installed capacity. The main difficulties of the industry have been (1) consumer's prejudice against Indian-made products and (2) the difficulty of getting an adequate supply of raw materials.

Protection has been granted to the industry up to the end of 1957.

6.18 *Complete Ring Spinning Frames.*—The idle capacity in the complete ring spinning frames industry was 48.5 per cent in 1953 and 50.0 per cent in 1954 (first 9 months). The position regarding installed capacity and production has been as follows :—

TABLE 12.—*Capacity and Production in Ring Spinning Frames.*

	1951	1952	1953	1954 (first nine months)
Installed Capacity	30	33	33	50
Production	23	24	17	25

NOTE.—Figures represent monthly averages.

The actual production has, as shown above, declined and falls far short of the existing capacity. This fall in production is to some extent due to a general prejudice against the products of the indigenous industry.

6.19 *Storage Batteries.*—The position regarding the utilisation of installed capacity in the storage batteries industry has been far from satisfactory, as is shown below :—

TABLE 13.—*Storage Batteries.*

	(In thousands)			
	1951	1952	1953	1954 (First 9 months)
(i) Installed capacity	26.5	29.2	29.2	26.0
(ii) Production	17.7	13.2	14.7	15.0
(iii) Unutilised capacity as percentage of installed capacity.	33.2	54.8	49.7	42.3

N. B.—Figures represent monthly averages.

The decline in production since 1951 is due to the set-back in the automobile industry. Protection to the Motor Vehicle Battery industry has been extended up to the end of 1955.

6.20 *Power Transformers.*—The position regarding installed capacity and production in the power transformers industry in recent years has been as follows :—

TABLE 14.—*Power Transformers.*

	(Thousand (kVa))			
	1951	1952	1953	1954 (First 9 months)
(i) Installed capacity	25.0	25.3	27.3	27.3
(ii) Production	16.3	17.9	25.7	32.4
(iii) Unutilised capacity as percentage of installed capacity	34.8	29.2	5.9	(—)18.7*

N. B. Figures represent monthly averages.

*The minus figure indicates that actual production was 18.7 per cent in excess of installed capacity.

It will be seen from the above table that production of power transformers has been steadily increasing in recent years, and in 1954 (first 9 months) actual production was in excess of installed capacity.

Protection to the industry has been granted up to the end of 1955. The Tariff Commission have drawn the attention of the industry to certain defects pointed out by consumers particularly to the leakage of oil from tanks and inferior workmanship.

7. The object of this paper is not to suggest a solution, but to bring together the facts of the situation. Clearly, if investment in the next Plan period is to bear maximum fruit, the Plan will have to provide for balanced utilisation of existing capacity to the fullest extent, and this involves an analysis of technical as well as economic factors.

STATEMENT I

Showing Installed Capacity, Production and Unutilised Capacity as percentage of Installed Capacity in Selected Industries.
(Figures represent monthly averages)

	1946	1947	1948	1949	1950	1951	1952	1953 (1st 9 months)	1954
A. Consumer Goods Industries									
1. Sugar (1) (in thousand tons)									
(i) Installed capacity .	97.1	99.9	99.9	105.8	105.8	113.1	..	135.8	..
(ii) Production . .	75.1	89.6	83.4	91.4	92.9	124.5	107.6	83.4	..
(iii) Unutilised capacity as percentage of installed capacity.	22.7	10.3	16.5	23.1	12.2	(—)10.1	..	38.6	..
2. Wheat Flour (2) (thousand tons)									
(i) Installed capacity .	..	..	..	..	104.2	104.2	122.0	127.0	122.3
(ii) Production . .	..	..	..	34.8	39.8	40.5	42.7	40.3	36.8
(iii) Unutilised capacity as percentage of installed capacity.	..	..	..	..	61.8	61.1	65.0	68.3	69.9
3. Vegetable Oil Products (in tons) (Vanaspati)									
(i) Installed capacity .	16,019	16,894	18,019	23,644	26,644	27,144	28,269	30,686	30,686
(ii) Production . .	11,258	7,926	10,808	12,962	14,303	14,360	15,901	15,971	19,586
(iii) Unutilised capacity as percentage of installed capacity.	29.7	53.9	40.0	45.2	46.3	47.1	43.8	47.9	36.1
4. Cigarettes (In lakhs)									
(i) Installed capacity .	..	25,000	25,000	25,000	25,000	25,000	25,000	20,260	20,208
(ii) Production . .	..	15,733	18,187	18,242	19,691	17,874	16,766	16,528	17,087
(iii) Unutilised capacity as percentage of installed capacity.	..	37.1	27.3	27.0	21.2	28.5	32.9	18.4	15.4

5. Cotton Yarn (1) (lbs. million)										
(i)	Installed capacity	..	..	..	..	139.1	..	..	147.9*	..
(ii)	Production	..	..	..	..	98.3	111.2	123.0	126.7	..
(iii)	Unutilised capacity as percentage of installed capacity.	..	..	..	..	29.3	..	..	14.5	..
6. Cotton Cloth (1) (Mill-made) (Yds. million)										
(i)	Installed capacity	..	..	..	..	395.3	..	..	410.2	..
(ii)	Production	..	..	..	..	309.8	344.5	397.5	408.8	..
(iii)	Unutilised capacity as percentage of installed capacity.	..	..	..	..	21.6	..	..	0.3	..
7. Woollen Manufactures (thousand lbs.)										
(i)	Installed capacity	2,500	2,500	2,500	2,500	2,500	1,667	1,667	1,667	1,667
(ii)	Production	2,250	2,000	1,667	1,750	1,500	1,475	1,382	1,604	1,505
(iii)	Unutilised capacity as percentage of installed capacity.	10.0	20.0	33.3	30.0	40.0	11.5	17.1	3.8	9.7
8. Leather Footwear (Western type)										
(i)	Installed capacity (thousand pairs)	..	..	..	..	393.7	393.7	393.7	383.7	490.4
(ii)	Production (thousand pairs)	..	..	266.8	237.5	236.4	303.4	280.6	279.0	288.5
(iii)	Unutilised capacity percentage of installed capacity.	..	..	..	..	39.9	22.9	28.7	27.3	41.2

(1) Figures relate to fiscal year.

(2) Figures relate to the production of only large flour mills.

*As on January 1, 1954.

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	1946	1947	1948	1949	1950	1951	1952	1953 (1st 9 months)	1954
9. Rubber Footwear (lakh pairs)									
(i) Installed capacity	..	..	26.3	19.9	21.4	24.3	29.6	30.5	33.8
(ii) Production	12.0	..	15.6	14.8	13.8	19.2	19.0	20.0	24.9
(iii) Unutilised capacity as percentage of installed capacity.	..	..	40.7	25.6	35.5	21.0	35.8	34.4	26.3
10. Paper and Paper Boards (tons)									
(i) Installed capacity	8,750	8,750	8,750	9,167	9,908	11,417	12,292	12,583	14,324
(ii) Production	3,333	7,758	8,159	8,600	9,076	10,993	11,459	11,642	12,224
(iii) Unutilised capacity as percentage of installed capacity.	(-)0.9	11.3	6.8	6.2	8.3	3.7	6.8	7.5	14.7
Paints and varnishes (tons)									
(i) Installed capacity	..	..	..	..	5,000	5,400	5,400	5,400	5,400
(ii) Production	3,200	3,217	2,977	2,577	2,329	2,790	2,681	2,671	2,895
(iii) Unutilised capacity as percentage of installed capacity.	..	..	..	..	53.4	48.3	50.4	50.5	46.4
12. Matches (thousand cases)									
(i) Installed capacity	66.7	66.7	66.7	66.7	66.7	58.8	58.8	58.8	58.8
(ii) Production	34.3	38.8	44.4	43.9	43.6	48.2	51.6	49.2	42.1
(iii) Unutilised capacity as percentage of installed capacity.	48.6	41.8	33.4	34.2	34.6	18.0	12.2	16.3	28.2

THE SECOND FIVE YEAR PLAN

13. Soap (tons)

(i) Installed capacity	..	..	..	..	16,600	16,000	16,125	16,125	16,125
(ii) Production	..	..	6,300	5,917	6,058	6,953	7,198	6,850	6,519
(iii) Unutilised capacity as percentage of installed capacity.	..	..	..	..	63.5	56.5	55.4	57.5	59.6

B. Durable Consumer Goods :

14. Hurricane Lanterns (in thousands)

(i) Installed capacity	.. 54.1	.. 83.3	.. 108.3	.. 157.5	.. 300.0	.. 355.0	.. 367.5	.. 381.9	.. 381.9
(ii) Production	.. 39.2	.. 75.8	.. 81.6	.. 144.0	.. 233.9	.. 331.4	.. 293.6	.. 359.4	.. 422.8
(iii) Unutilised capacity as percentage of installed capacity.	.. 27.5	.. 9.1	.. 24.7	.. 8.6	.. 22.0	.. 6.6	.. 20.1	.. 5.9	(-)10.7

15. Sewing Machines (in nos.)

(i) Installed capacity	.. 1,225	.. 1,000	.. 2,000	.. 2,125	.. 3,125	.. 3,125	.. 3,458	.. 3,458	.. 3,458
(ii) Production	.. 510	.. 488	.. 1,668	.. 2,086	.. 2,574	.. 3,705	.. 4,170	.. 5,202	.. 6,785
(iii) Unutilised capacity as percentage of installed capacity	.. 58.4	.. 51.2	.. 16.6	.. 1.2	.. 17.6	(-)18.6	(-)20.6	(-)50.4	(-)90.2

16. Electric Lamps (in thousands)

(i) Installed capacity	.. 1,083.0	.. 1,083.0	.. 1,196.0	.. 1,500.0	.. 1,920.0	.. 1,920.0	.. 2,167.0	.. 2,433.3	.. 2,433.3
(ii) Production	.. 676.2	.. 635.0	.. 771.0	.. 1,137.0	.. 1,192.0	.. 1,293.0	.. 1,740.0	.. 1,647.3	.. 1,910.3
(iii) Unutilised capacity as percentage of installed capacity.	.. 37.6	.. 41.4	.. 35.5	.. 24.2	.. 37.9	.. 32.7	.. 19.7	.. 32.3	.. 21.9

17. Domestic Refrigerators (nos.)

(i) Installed capacity	..	..	..	..	..	..	.. 300	.. 300	.. 300
(ii) Production	..	..	..	..	..	..	.. 50	.. 55	.. 111.7
(iii) Unutilised capacity as percentage of installed capacity. 83.3	.. 8.3	.. 26.9

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	1946	1947	1948	1949	1950	1951	1952	1953	1954 (1st 9 months)
18. Electric Fans (in thousands)									
(i) Installed capacity	11.5	20.8	20.8	25.0	23.2	23.2	24.5	25.3	25.3
(ii) Production	9.2	13.3	15.0	14.9	16.1	17.7	16.3	16.6	18.8
(iii) Unutilised capacity as percentage of installed capacity.	20.0	36.1	27.9	40.4	30.6	23.7	33.5	34.4	26.9
19. Radio Receivers (nos.)									
(i) Installed capacity . . . . .	..	667	2,000	5,000	6,433	7,267	12,758	12,758	12,758
(ii) Production . . . . .	..	253	2,083	1,403	3,695	6,899	5,958	4,689	5,329*
(iii) Unutilised capacity as percentage of installed capacity.	..	62.1	(—)4.2	71.9	42.6	5.1	53.3	63.2	58.2
20. Automobiles (nos.)									
(i) Installed capacity . . . . .	..	..	..	6,521	6,521	6,521	5,892	5,892	5,980
(ii) Production . . . . .	..	..	..	1,817	1,217	1,856	1,274	1,160	1,095
(iii) Unutilised capacity as percentage of installed capacity.	..	..	..	72.1	81.3	71.5	78.4	80.3	81.7
21. Bicycles (nos.)									
(i) Installed capacity	4,542	5,000	7,917	7,917	10,000	10,000	10,000	34,792	36,458
(ii) Production	3,582	2,655	4,621	5,369	8,596	9,523	16,413	22,014	28,149
(iii) Unutilised capacity as percentage of installed capacity.	21.1	46.9	41.6	32.2	14.0	4.8	(—)64.1	36.7	22.8

THE SECOND FIVE YEAR PLAN

C. Producer Goods Industries:

22. Jute (I) (thousand tons)

(i) Installed capacity	..	..	..	..	100	..	..	100	..
(ii) Production	..	..	..	..	74.3	77.6	75.8	72.0	..
(iii) Unutilised capacity as percentage of installed capacity.	..	..	..	..	25.7	..	..	28.0	..

23. Plywood (thousand sq. ft.)

(i) Installed capacity	..	..	5,250	8,333	11,570	12,500	13,500	13,500	12,000
(ii) Production	4,900	2,858	4,478	3,970	4,185	5,904	7,545	5,100	6,044
(iii) Unutilised capacity as percentage of installed capacity.	..	..	14.7	52.4	63.8	52.8	41.1	62.2	49.6

24. Sulphuric Acid (tons)

(i) Installed capacity	6,667	6,667	8,333	12,500	12,500	16,777	15,998	15,750	16,435
(ii) Production	5,000	5,000	6,667	8,288	8,540	8,911	8,007	9,091	12,111
(iii) Unutilised capacity as percentage of installed capacity.	25.0	25.0	19.9	33.7	31.7	46.7	49.9	42.3	26.3

25. Caustic Soda (in tons)

(i) Installed capacity	875	875	1,000	1,125	1,589	2,296	2,912	3,176	3,209
(ii) Production	242	276	365	525	904	1,227	1,422	1,909	2,340
(iii) Unutilised capacity as percentage of installed capacity.	72.3	68.5	63.5	53.3	43.1	46.6	51.2	39.9	27.1

26. Soda Ash (in tons)

(i) Installed capacity	4,500	4,500	4,500	4,500	4,500	4,500	4,500	5,100	5,100
(ii) Production	1,000	1,135	2,439	1,493	3,649	3,961	3,694	4,739	3,911
(iii) Unutilised capacity as percentage of installed capacity.	77.8	74.8	46.0	69.0	18.9	12.9	17.9	17.3	12.3

(I) Figures relate to fiscal year.

*Monthly average for first 8 months only.

STATEMENT I—contd.

	1946	1947	1948	1949	1950	1951	1952	1953 (1st 9 months)	1954 (1st 9 months)
27. Chlorine Liquid (tons)									
(i) Installed capacity	166	166	166	233	545	1,090	1,126	1,529	1,529
(ii) Production	125	142	150	221	331	439	520	678	785
(iii) Unutilised capacity as percentage of installed capacity.	24.7	14.5	9.6	5.2	39.3	59.7	53.8	55.7	48.7
28. Bleaching Powder (in tons)									
(i) Installed capacity	430	430	430	430	430	650	650	650	650
(ii) Production	167	213	236	206	276	299	66	162	247
(iii) Unutilised capacity as percentage of installed capacity.	61.2	50.5	45.1	52.1	36.7	54.0	89.9	75.1	62.0
29. Bichromates (in tons)									
(i) Installed capacity	459	459	459	460	460	463	493	493	493
(ii) Production	173	192	245	143	165	273	122	209	261
(iii) Unutilised capacity as percentage of installed capacity.	62.3	58.2	46.6	68.9	64.1	41.0	75.3	57.6	47.1
30. Superphosphates (in tons)									
(i) Installed capacity	..	4,167	6,250	7,500	11,233	14,505	16,482	16,165	17,573
(ii) Production	375	417	1,780	3,894	4,369	5,085	3,888	4,025	8,885
(iii) Unutilised capacity as percentage of installed capacity.	..	90.0	71.5	48.1	61.1	64.6	76.4	75.1	49.4
31. Ammonium Sulphate (in tons)									
(i) Installed capacity	..	..	..	..	..	35,586	36,014	35,571	35,571
(ii) Production	1,872	1,773	2,934	3,828	3,942	4,392	18,359	26,635	26,455
(iii) Unutilised capacity as percentage of installed capacity.	..	..	..	..	..	87.7	49.0	25.1	25.6

32. Copper sulphate (in tons)										
(i) Installed capacity	..	..	144	144	144	144	162	165	165	
(ii) Production	..	..	36	38	36	42	28	43	63	
(iii) Unutilised capacity as percentage of installed capacity.	..	..	75.0	73.6	75.0	70.8	82.7	73.9	61.8	
33. Sodium Sulphide (in tons)										
(i) Installed capacity	..	..	..	..	..	..	662	667	631	
(ii) Production	..	..	96	44	66	161	119	225	262	
(iii) Unutilised capacity as percentage of installed capacity.	..	..	..	..	..	..	82.0	66.3	58.5	
34. Glycerine (tons) (Refined)										
(i) Installed capacity	263	263	263	263	263	264	293	293	293	
(ii) Production	149	111	179	145	167	202	185	209	174	
(iii) Unutilised capacity as percentage of installed capacity.	43.3	57.8	31.9	44.9	36.5	15.9	37.5	28.7	40.6	
35. Cement (thousand tons)										
(i) Installed capacity	167.9	176.3	176.3	234.6	260.4	296.3	316.3	349.0	354.9	
(ii) Production	128.5	120.6	129.4	175.2	217.7	266.3	294.8	315.0	362.1	
(iii) Unutilised capacity as percentage of installed capacity.	23.5	31.5	26.6	25.3	16.4	11.1	6.8	9.7	(-) 2.0	
36. Asbestos (thousand tons)										
(i) Installed capacity	..	..	6.4	8.4	8.8	9.8	9.8	11.8	11.8	
(ii) Production	2.1	..	6.4	7.2	7.2	6.9	7.3	6.3	6.7	
(iii) Unutilised capacity as percentage of installed capacity.	..	..	0.0	14.3	18.1	29.6	25.5	46.6	43.2	

STATEMENT I—contd.

	1946	1947	1948	1949	1950	1951	1952	1953	1954 (1st 9 months)
37. <i>Pig Iron</i> (thousand tons)									
(i) Installed capacity	..	..	..	..	156.5*	..	..	..	185.1
(ii) Production	..	..	..	..	131.0*	145.0*	141.0*	137.6*	147.1
(iii) Unutilised capacity as percentage of installed capacity	..	..	..	..	16.3*	..	..	..	20.5
38. <i>Steel Ingots & Metal for Casting</i> (thousand tons)									
(i) Installed capacity	..	..	..	..	128.5	128.5	128.5	128.5	128.5
(ii) Production	107.8	104.7	104.7	112.7	119.8	125.0	131.5	125.6	138.1
(iii) Unutilised capacity as percentage of installed capacity	..	..	..	..	6.8	2.7	(-)-2.3	2.3	(-)-7.5
39. <i>Semi-Finished Steel</i> (thousand tons)									
(i) Installed capacity	..	..	..	..	..	..	..	..	113.8
(ii) Production	85.9	85.6	84.6	92.1	95.2	104.1	109.0	102.5	119.0
(iii) Unutilised capacity as percentage of installed capacity	..	..	..	..	..	..	..	..	(-)-4.6
40. <i>Finished Steel</i> (thousand tons)									
(i) Installed capacity	..	..	..	..	84.6 ¹	..	..	95.0*	143.3
(ii) Production	..	..	..	..	81.3*	90.3 ¹	90.5*	90.1*	101.9
(iii) Unutilised capacity as percentage of installed capacity	..	..	..	..	3.9	..	..	5.2	28.9
41. <i>Steel Tubes</i> (in tons)									
(i) Installed capacity	..	..	..	500.0	750.0	750.0	1725.0	1725.0	1725.0
(ii) Production	..	..	..	39.2	35.6	38.0	17.9	22.3	..
(iii) Unutilised capacity as percentage of installed capacity	..	..	..	92.2	95.2	94.9	99.0	98.7	..

* Figures relate to fiscal year and are for the main producers only.

42. <i>Aluminium</i> (in tons)										
(i) Installed capacity	333·3	333·3	333·3	333·3	333·3	333·3	333·3	333·3	333·3	377·9
(ii) Production	269·7	267·9	280·1	290·8	299·7	320·7	297·2	313·2	313·2	381·4
(iii) Unutilised capacity as percentage of installed capacity	19·1	19·6	16·0	12·8	10·1	3·8	10·8	6·0	6·0	(—)0·9
43. <i>Wood Screws</i> (thousand gross)										
(i) Installed capacity	..	54·3	65·3	65·3	77·3	130·1	276·3	403·5	403·5	386·0
(ii) Production	..	6·2	14·0	28·7	58·6	66·4	110·8	214·3	214·3	420·1
(iii) Unutilised capacity as percentage of installed capacity	..	88·6	78·6	56·0	24·2	49·0	59·9	46·9	46·9	(—)8·8
44. <i>Machine Screws</i> (thousand gross)										
(i) Installed capacity	..	..	..	..	..	..	27·5	37·0	37·0	37·0
(ii) Production	..	..	2·6	7·3	13·3	10·6	12·3	14·0	14·0	18·2
(iii) Unutilised capacity as percentage of installed capacity	..	..	..	..	..	..	55·3	62·2	62·2	50·8
45. <i>Diesel Engines</i> (in nos.)										
(i) Installed capacity	.. 65	117	333	383	442	442	527	1,097	1,097	1,097
(ii) Production	.. 39	57	85	173	383	604	354	310	310	676
(iii) Unutilised capacity as percentage of installed capacity	.. 40·0	51·3	74·5	54·8	13·4	(—)36·9	32·8	71·8	71·8	38·4
46. <i>Plain Calico Looms</i> (in nos.)										
(i) Installed capacity	..	..	..	..	..	300	350	350	350	352
(ii) Production	..	..	..	..	..	190	114	151	151	127
(iii) Unutilised capacity as percentage of installed capacity	..	..	..	..	..	36·7	67·4	56·9	56·9	63·9
47. <i>Complete Ring Spinning Frames</i> (in nos.)										
(i) Installed capacity	..	..	..	..	..	30	33	33	33	50
(ii) Production	..	..	..	..	..	23	24	17	17	25
(iii) Unutilised capacity as percentage of installed capacity	..	..	..	..	..	23·3	27·3	48·5	48·5	50·0

STATEMENT I—concl'd.

	1946	1947	1948	1949	1950	1951	1952	1953 (1st 9 months)	1954
48. Grinding Wheels (thousand lbs.)									
(i) Installed Capacity	..	..	..	..	..	74.7	93.3	93.3	98.5
(ii) Production	..	..	..	58.9	41.7	59.0	72.1	67.3	79.1
(iii) Unutilised capacity as percentage of installed capacity	..	..	..	..	..	21.0	22.7	27.9	19.7
49. Dry Cells (in lakhs)									
(i) Installed capacity	..	110.0	118.3	155.8	153.7	153.7	163.8	184.6	184.6
(ii) Production	73.3	73.3	103.2	126.8	115.1	119.5	108.5	123.7	132.4
(iii) Unutilised capacity as percentage of installed capacity	..	33.4	12.8	18.6	25.1	22.3	33.8	33.0	28.3
50. Storage Batteries (in thousands)									
(i) Installed capacity	14.3	14.3	22.3	22.3	24.8	26.5	29.2	29.2	26.0
(ii) Production	2.3	5.8	9.2	8.9	15.6	17.7	13.2	14.7	15.0
(iii) Unutilised capacity as percentage of installed capacity	83.9	59.4	58.7	60.1	37.1	33.2	54.8	49.7	42.3
51. Electric Motors (thousand h.p.)									
(i) Installed capacity	5.0	8.3	12.5	16.7	12.5	12.7	16.7	16.7	16.7
(ii) Production	3.8	3.2	5.0	5.7	6.8	11.9	13.1	13.6	15.1
(iii) Unutilised capacity as percentage of installed capacity	24.0	61.4	60.0	65.9	45.6	6.3	21.6	18.6	9.6
52. Power Transformers (thousand K V A)									
(i) Installed capacity	6.5	8.5	14.6	18.6	22.5	25.0	25.3	27.3	27.3
(ii) Production	3.3	2.7	6.8	9.1	14.3	16.3	17.9	25.7	32.4
(iii) Unutilised capacity as percentage of installed capacity	49.2	68.2	53.4	51.1	36.4	34.8	29.2	5.9	(—)18.7

D. Capital Goods Industries

53. Machine Tools (value)

(i) Installed capacity	..	..	..	..	..	..	..	..	..
(ii) Production (thousand Rs.)	760.4	382.3	456.1	394.1	221.7	394.2	369.8	367.3	..
(iii) Unutilised capacity as percentage of installed capacity.	..	..	..	..	..	..	..	..	..

NOTES: I. Source :

- (i) Monthly statistics of the production of selected industries of India for October, 1954.
- (ii) Five Year Plan Progress Report, 1953-54 (September, 1954)

II. Installed Capacity :

- (i) *Sugar Industry*: The quantity of sugar-cane crushed by each factory per day of 22 hours' operation was calculated for each of the sugar years (November to October) 1946-47 to 1951-52. For each season this daily average crush was aggregated for all the working factories. To this were added the rated capacities of the factories which did not work. The daily sugar producing capacity is a tenth of the daily cane crushing capacity. The daily sugar producing capacity multiplied by 110 is the installed capacity of the industry for the year.
- (ii) *Iron & Steel*: Installed capacity for the Iron and Steel Industry has been estimated assuming continuous operation of plant throughout the year. Suitable deductions have, however, been made for shut-downs of parts of the plant from time to time for normal repairs and maintenance.
- (iii) Installed capacities of the remaining industries have been computed assuming the following duration of working:

Industry	No. of working days	No. of shifts
Sulphuric Acid	330	3
Caustic Soda		
Soda Ash		
Chlorine Liquid		
Bleaching Power		
Bichromates		
Superphosphates		
Ammonium Sulphate	300	3
Vanaspati		
Paper and Paper Boards		
Cement		
Paints and Varnishes	300	2
Other Industries	300	1

The Installed Capacity in every case refers to the close of the period.

IV. EMPLOYMENT AND THE OCCUPATIONAL STRUCTURE

EMPLOYMENT SITUATION AND POLICY

(Gokhale Institute of Politics and Economics)

I. OCCUPATIONAL STRUCTURE

For an appreciation of the possible and desired employment policies it is necessary to understand the existing occupational structure. The only detailed data relating to this are those of the Census of 1951. There is no reason to think that the structure is materially different today from that in 1951. The following tables (A1 to A3) set out the distribution of the total "working force" among various occupational categories as prepared by the National Income Committee. In this distribution of the "working force" no distinction has been made between the census classes of "self-supporting persons" and "earning dependents" and the total working force represents the numbers in both these classes added together. The classification of the categories is somewhat different from that adopted in the census and is, perhaps more useful for a consideration of employment policies. In this classification stock raising, fishery and forestry have been put together in the general class 'Agriculture.'. There is also some regrouping of other classes of the Census. The most useful feature, for our purpose of the N.I.C. classification is the estimate it contains of those engaged in small industrial establishments. No distinction between those employed in small and large enterprises or in machine and hand industry was made in the Census. The N.I. Committee attempted with the help of the data available on the subject to separate the numbers employed in factory establishments from those employed in small enterprises. It will be seen from the table that agriculture and small enterprises together account for 80.4 p. c. of the total working force. The next important classes are "other commerce and transport" 6.7 p.c. and "professions and liberal arts" 4.5 p.c. Government services (administrative) account for 2.7 p.c. while the percentage of those engaged in domestic service is 2.1 p.c. Factory establishments and mining employ 2.6 p.c. of the working force and the railways, post, telegraph and telephone together with organized banking and insurance employ 1.0 p.c.

Certain other aspects of the employment situation are illustrated by another set of tables appended herewith (B1 to B4). These bring out the difference in the situation between the urban and rural working force and give details of the distribution of employees between the various occupational categories. The latter has special relevance to policies directed towards creation of fresh employment opportunities. This classification is available only for the category of "self-supporting persons" who represent nearly 30 p.c. of the total population and nearly three-fourths of the total working force classified in the N.I.C. report. The "earning dependants" who represent the remaining quarter of the working force are concentrated in the rural areas and are largely female as the following table will show.

	Earning dependents	
	Number (in lakhs)	Per- centage.
Rural males	119	7.9
Urban males	15	4.6
Rural females	232	16.0
Urban females	13	4.5
TOTAL	379	10.6

For those employed in Agriculture the classification is of land-owners, owner-cultivators, tenant-cultivators and agricultural labourers. Treating the first three categories as representing employers and independent workers and the fourth category as representing employees we have a total of 1034 lakhs self-supporting persons among whom 297 lakhs are employees, 149 lakhs agricultural and 148 lakhs non-agricultural. The remaining 737 lakh persons are either employers or independent workers divided into 561 lakhs agricultural and 176 lakhs non-agricultural. Confining attention to the 324 lakh self-supporting persons engaged in occupations other than agricultural, these are found to be distributed fairly evenly into urban and rural areas, the urban slightly outnumbering the rural: 165 lakhs urban 159, lakhs rural totalling 324 lakhs. The 140 lakh non-agricultural employees are somewhat unevenly divided into 87.5 lakhs urban and 60.5 lakhs rural.

Some brief notes would suffice to draw attention to the salient characteristics of the more detailed classification. The class of primary industries other than cultivation, mining and quarrying, consists chiefly of those engaged on plantations, and in stock raising, fishery and forestry. The class is mainly rural and in it the most important class of employees is of those engaged on plantations, numbering 9.5 lakhs. The independent workers dominate the other categories included in this class. The next class—mining and quarrying—is a small one which is largely rural and in which employees are predominant; in this class independent workers are important only in the category "stone-quarrying, clay and sand-pits".

In the three classes in which the whole of processing and manufacture has been divided the total working population is fairly evenly divided between rural and urban. However, the employees are in a large majority in the urban area, while the opposite is the case in the rural. The sugar industries form an important exception in which employees outnumber independent workers even in the rural area. On the other hand, independent workers are much more important than employees even in urban areas in the categories leather, leather products and footwear, wearing apparel and made up textile goods and wood products other than furniture and fixtures. In cotton textiles independent workers dominate the rural area working force as much as employees dominate the corresponding urban category. In commerce the important class numerically is of those engaged in retail trade. In this

class independent workers are predominant in the urban area and even more so in the rural. On the other hand, in transport, storage and communication employees constitute about two-thirds of the total working force both in rural and urban areas. Independent workers are important only in the road transport category in this class. In health, education and public administration employees are overwhelmingly important throughout. The census class of construction and utilities is a mixed class. It includes a large element of state and local authority employees. Scavengers have been placed in this class also. The private sector it includes is chiefly of those engaged in building and construction.

Table A (1).—Distribution of Working Force by Industries

Items	Number	Per cent
I	2	3
1. Agriculture, animal husbandry and ancillary activities	102711	71.8
2. Forestry	350	0.2
3. Fishery	579	0.4
4. Total of agriculture	103640	72.4
5. Mining	780	0.5
6. Factory establishments	2969	2.1
7. Small enterprises	11521	8.0
8. Total of mining, manufacturing and hand-trades	15270	10.6
9. Communications (post, telegraph and telephone)	195	0.1
10. Railways	1178	0.8
11. Organised banking and insurance	147	0.1
12. Other commerce and transport	9533	6.7
13. Total of commerce, transport and communications	11053	7.7
14. Professions and liberal arts	6425	4.5
15. Government services (Administration)	3886	2.7
16. Domestic service	2947	2.1
17. House property . . . . .	..	..
18. Total of other services	13258	9.3
19. Total working force	143221	100.0
20. Population	359334	..

Reference : *Final Report of the National Income Committee, February 1954*,
Government of India. (Page 23).

TABLE A (2).—*Number of Persons engaged in Small Enterprises*

Industrial groups	Number of persons engaged (thousand)	Per cent
1. Textile including tailoring	3246	28·18
2. Leather, its product and footwear	763	6·62
3. Wood, glass, ceramics, building and construction	4225	36·68
4. Metal manufacturing and engineering	1066	9·25
5. Chemicals	81	0·70
6. Food, drink and tobacco	1492	12·95
7. Other industries	648	5·62
8. All groups : total	11521	100·00
9. Allowance of factor payments . . . . .	..	..

Reference : *Final Report of the National Income Committee,*
February 1954, Government of India (Page 71),

TABLE A (3).—*Number of Persons engaged in Professions and Liberal Arts.*

Professions and liberal arts	Number of persons engaged (thousand)	Per cent
1. Medical and other health services	757	11·78
2. Educational services	1036	16·12
3. Letters, arts and science etc.	722	11·24
4. Legal services	253	3·94
5. Religious, charitable services	763	11·88
6. Sanitary services—scavengers	669	10·41
7. Barbers and hairdressers	1057	16·45
8. Laundries—washermen	1168	18·18
TOTAL	6425	100·00

Reference : *Final Report of the National Income Committee,*
February 1954, Government of India (Page 91),

TABLE B(1).—*Classification of Self-supporting Agriculturists.*

	(Number in Lakhs)
1. Cultivators of land wholly or mainly owned	457
2. Cultivators of land wholly or mainly un-owned	88
3. Cultivating Labourers	149
4. Non-cultivating owners of land and other agricultural rent-receivers	16
TOTAL	710

TABLE B (2). *Classification of Self-supporting Persons in classes other than Agriculture.*

Divisions	Employers (No. of persons)	Employees (No. of persons)	Independent workers (No. of persons)	Total working population (No. of persons)
0 Primary Industries not elsewhere specified	4.23 46,758	1.95 52.20 12,53,287	8.47 6.68 11,00,633	7.42 100.00 24,00,678
1 Mining and Quarrying	0.54 5,936	1.05 78.52 4,45,113	3.01 0.70 1,15,821	1.75 100.00 5,66,870
2 Processing and Manufacture—Food stuffs, Textiles, Leather & Products thereof	16.44 1,81,657	3.30 39.38 21,70,143	14.67 19.18 31,58,274	17.02 100.00 55,10,074
3 Processing and Manufacture—Metals, Chemicals & Products thereof	3.59 39,674	3.21 56.5 6,93,345	4.69 3.06 5,04,028	3.82 100.00 12,37,047
4 Processing and Manufacture — not elsewhere specified	7.41 81,804	3.37 25.38 6,16,503	4.17 10.51 17,30,840	7.50 100.00 24,29,147
5 Construction and Utilities	2.86 31,560	1.99 44.98 7,13,203	4.82 5.11 8,40,963	4.90 100.00 15,85,726
6 Commerce	45.59 5,03,675	8.53 19.23 11,34,886	7.67 25.90 42,62,757	18.23 100.00 59,01,318
7 Transport, Storage & Communications	3.38 37,296	1.96 67.88 12,90,973	8.73 3.48 5,73,702	5.88 100.00 19,01,971
8 Health, Education and Public Administration	2.06 22,708	0.69 92.16 30,32,414	20.49 1.43 2,35,205	10.17 100.00 32,90,327
9 Services not elsewhere specified	13.90 1,53,561	2.04 45.68 34,46,134	23.28 23.95 39,44,030	23.31 100.00 75,43,725
ALL INDUSTRIES AND SERVICES GRAND TOTAL	100.00 11,04,629	3.41 100.00 1,47,96,001	45.71 100.00 1,64,66,253	50.83 100.00 3,23,66,883

THE SECOND FIVE YEAR PLAN

TABLE B (3).—Classification of Self-supporting Persons (Urbans).

Divisions	Employers (No. of persons)	Employees (No. of persons)	Independent workers (No. of persons)	Total working population (No. of persons)
0 Primary Industries not elsewhere specified .	1·67 11,855	4·16 0·86 74,888	26·27 3·08 1,98,286	100·00 2,85,029
1 Mining and Quarrying .	0·35 2,517	2·15 0·96 83,789	71·58 0·48 30,752	100·00 1,17,058
2 Processing and Manufacture—Foodstuffs, Textiles, Leather & Products thereof .	14·56 1,03,234	3·81 17·92 15,67,581	57·91 16·10 10,36,152	100·00 27,06,967
3 Processing and Manufacture—Metals, Chemicals, and Products thereof .	3·88 27,519	3·54 6·29 5,50,300	70·81 3·10 1,99,297	100·00 7,77,116
4 Processing and Manufacture—not elsewhere specified .	6·12 43,441	4·71 4·11 3,59,497	38·94 8·08 5,20,157	100·00 9,23,095
5 Construction and Utilities .	2·50 17,759	2·28 4·61 4,03,532	51·72 5·58 3,58,926	100·00 7,80,217
6 Commerce .	52·08 3,69,318	10·60 10·32 9,02,633	25·92 34·34 22,10,865	100·00 34,82,816
7 Transport, Storage & Communications .	3·85 27,342	2·09 10·38 9,08,460	69·31 5·83 3,74,927	100·00 13,10,729
8 Health, Education and Public Administration	1·94 13,769	0·67 22·19 19,41,546	94·01 1·71 1,09,926	100·00 20,65,241
9 Services not elsewhere specified .	13·05 92,549	2·60 22·36 19,56,365	56·78 21·70 13,96,301	100·00 34,45,215
ALL INDUSTRIES AND SERVICES GRAND TOTAL	100·00 7,09,303	4·46 100·00 87,48,591	55·05 100·00 64,35,589	100·00 1,58,93,483

TABLE B (4).—*Classification of Self-supporting Persons (Rural).*

Divisions	Employers (No. of persons)	Employees (No. of persons)	Independent workers (No. of persons)	Total working population (No. of persons)	
0 Primary Industries not elsewhere specified .	8·83 34,903	1·65 55·70 11,78,399	19·49	42·65 9,02,347	100·00 21,15,649
1 Mining and Quarrying .	0·86 3,419	0·76 80·33 3,61,324	5·97	18·91 85,059	100·00 4,49,812
2 Processing and Manufacture—Foodstuffs, Textiles, Leather and Products thereof .	19·84 78,423	2·80 21·50 6,02,562	9·96	75·70 21,22,122	100·00 28,03,107
3 Processing and Manufacture—Metals, Chemicals and Products thereof .	3·07 12,155	2·64 31·10 1,43,045	2·37	66·26 3,04,731	100·00 4,59,931
4 Processing and Manufacture—not elsewhere specified .	9·70 38,363	2·55 17·06 2,57,006	4·25	80·39 12,10,683	100·00 15,06,052
5 Construction and Utilities .	3·49 13,801	1·71 38·44 3,09,671	5·12	59·85 4,82,037	100·00 8,05,509
6 Commerce .	34·00 1,34,357	5·56 9·60 2,32,253	3·84	84·84 20,51,892	100·00 24,18,502
7 Transport, Storage & Communication .	2·52 9,954	1·68 64·70 3,82,513	6·33	33·62 1,98,775	100·00 5,91,242
8 Health, Education and Public Administration	2·26 8,939	0·73 89·04 10,90,868	18·04	10·23 1,25,279	100·00 12,25,086
9 Services not elsewhere specified .	15·43 61,012	1·49 36·35 14,89,769	24·63	62·16 25,47,729	100·00 40,98,510
ALL INDUSTRIES AND SERVICES GRAND TOTAL .	100·00 3,95,326	2·40 36·71 60,47,410	100·00	60·89 1,00,30,664	100·00 1,64,73,400

II. THE PRESENT STATE OF UNEMPLOYMENT

Though there is a good deal that is being said and written about the present state of unemployment in the country, reliable data regarding it are very meagre and insufficient. This is partly because the major part of the unemployment in India is of the concealed under-employment type which is completely missed by the ordinary unemployment reporting. We will touch this aspect of the question later. The paucity of information regarding unemployment should urge us to make the best use of whatever information is available on this point. In the following this is attempted separately for the urban and the rural sectors.

A. Urban Unemployment

Information regarding this is available from two sources. The survey of unemployment carried out by the Government of West Bengal in Calcutta and the industrial area adjoining it gives some useful data. The other source is the several urban surveys carried out by the Gokhale Institute before and since the war. Three cities surveyed by the Institute are Poona (1936-37), Sholapur (1938-39) and Kolhapur (1945-46). Recently a resurvey of Poona has been carried out and advanced tabulations of information gathered therein are presented here. These are particularly valuable because of the comparative picture presented of developments between the data of the first and the second survey of Poona City.

Unemployment in Calcutta Corporation Area and the Calcutta Industrial Area, 1953—In the Calcutta Corporation area a random sample of 20 per cent of the families were surveyed. Of these 51 per cent were Bengali speaking, 35 per cent Hindustani speaking, 3.3 per cent Oriya speaking and the rest speaking other languages. The total families were also classified into middle class and others, though the basis of this classification is not given in the report. Nearly 37 per cent of the total families were middle class and of this 78 per cent were Bengali speaking. Among the others, 66 per cent were other than Bengali speaking.

In 28 per cent of all the families there was at least one person who was without full time employment but was seeking such employment. This included persons who were holding purely temporary employment whose total duration would not have exceeded 6 months. Broadly, 28 per cent of the total families were 'affected by unemployment problem'. Of the families so affected 70 per cent were Bengali speaking and 20 per cent were Hindustani speaking. If the unemployed persons in the sample (*i.e.* those having no full time employment but seeking such employment) are related to those who have full time employment in the sample families, we find that they were 29 per cent of the latter. 65 per cent of the total unemployed were either matriculates or of higher educational attainments. 71 per cent were willing to do manual work. Among the total unemployed 72 per cent were Bengali speaking and 19 per cent Hindustani speaking.

Of the total families affected by unemployment 51 per cent belonged to the middle class and the rest to the working class. 38 per cent of the middle class families were affected by unemployment. Unemployed persons (of 16-60 years) were about 40 per cent of the total persons with full time employment in the middle class family sample. Of those who had full time employment 77 per cent were Bengali speaking and 12 per cent Hindustani speaking. Of the total unemployed persons in the middle class families 91 per cent were Bengali speaking and 6 per cent Hindustani speaking. In the middle class families 78 per cent were Bengali speaking and 12 per cent were Hindustani speaking.

22 per cent of the total working class families were affected by unemployment. Of these 50 per cent were Bengali speaking and 35 per cent Hindustani speaking. The total unemployed persons were 23 per cent of the total number having full time employment. Of these who had full time employment, 32 per cent were Bengali speaking and 51 per cent Hindustani speaking. Of the total unemployed 49 per cent were Bengali speaking, and 36 per cent Hindustani speaking. Only 5 per cent were matriculates or with higher educational attainments.

Calcutta Industrial Area—A random 20 per cent sample was investigated. Of the total 25 per cent families belonged to the middle class. 26 per cent of the total families in the area were affected by unemployment. There were no differences in the rural and urban parts in this respect. Of the total families affected with unemployment 63 per cent were Bengali speaking.

The unemployed persons were about 27 per cent of the persons having full time employment. Of those who had full time employment 45 per cent were Bengali speaking. Among the unemployed 65 per cent were Bengali speaking. 40 per cent of the unemployed persons were matriculates or with higher educational qualifications and of these 97 per cent were Bengali speaking.

Forty per cent of the middle class families were affected with unemployment. Of these 98 per cent were Bengali speaking. Total persons unemployed were 44 per cent of persons with full time jobs. 93 per cent of the persons with full time employment were Bengali speaking. Of the total unemployed 98 per cent were Bengali speaking. 35 per cent of them were matriculates or with higher educational qualifications.

Twentytwo per cent of the working class families were affected with unemployment. Of these only 42 per cent were Bengali speaking. The total unemployed persons were about 19 per cent of the total having full time employment. Of those having full time employment only 29 per cent were Bengali speaking. Of the total unemployed 41 per cent were Bengali speaking. Less than 2 per cent of the unemployed were matriculates or higher educational attainments. Of these 85 per cent were Bengali speaking.

Information available from the Gokhale Institute City Surveys— The Poona, Sholapur and Kolhapur surveys employ identical definition of unemployed. By 'unemployed' is meant a person who was previously employed but was not employed at the time of the survey and who was looking for work. The class of unemployed therefore did not include those who were looking for job for the first time.

In Poona a random sample of 1 in 15 residential houses was selected and all the families resident in these houses were investigated. The sample consisted of 4529 families. The total number of earners in these families including the unemployed, who were classed as earners, was 5829 and the unemployed persons numbered 172 or 3 per cent of the total earners. 163 of these were adult males forming 3.4 per cent of the total adult male earners. Of the unemployed 47 were illiterate, and 125 literate among whom 35 were literate in English. A classification of the unemployed by their occupations previous to unemployment cannot be provided because the previous occupations of the unemployed were not noted.

It is however possible to locate the incidence of unemployment among the major castes. The incidence was heaviest among the Scheduled castes. Mahars, who constitute the largest group among these, were represented in the sample by 184 families. Among these there were 12 unemployed, or 5 per cent of the total earners in the 184 families. There were 144 families of other depressed class communities in the sample with 12 unemployed forming 6 per cent of the total earners. Next of these two, the incidence of unemployment was rather marked among Brahmins, Weaving castes and the artisan group consisting of tailors, gold and silver and brass and copper smiths etc. In all these three groups the unemployed formed 3.5 per cent of the total earners in each of the groups. In contrast with these barbers, potters, washermen showed no or little unemployment. We shall refer to the Poona figures again when we give similar information from the recent resurvey of Poona.

In Sholapur (1938-39) the stratified random sample consisted of 10 per cent resident families in the city. A total of 68 unemployed were enumerated among 6952 earners in the total sample, these being a little less than 1 per cent of the total earners 65 of these were adult males. Of the total unemployed 20 were illiterate and 48 literate of which 14 were literate in English. The incidence of unemployment was highest among those literate in English. The percentage of unemployed to total earners of this category worked out at 2.5.

In Kolhapur (1945-46) again a 10 per cent stratified random sample of resident families was surveyed. A total of 25 unemployed were enumerated among 2659 earners accounting for less than 1 per cent of the total earners in the sample. All of them were adult males. Of them 5 were illiterate and 20 literate of whom 6 were literate in English. The incidence of unemployment varied only slightly between the illiterates, literates and literates in English.

The three surveys taken at different times before and after the war are of course not comparable. But generally they can be taken to indicate a broad secular trend, at least in the Bombay, Maharashtra region, of a decline in unemployment generally.

The second survey of Poona was carried out in the first half of 1954. A 4 per cent random sample of families was selected from the rationing office records. A total of 5704 families constituted the sample. The area covered in this survey was much larger than that covered by the first survey. While the second survey covered all the area within the limits of the newly constituted Poona Corporation limits the earlier survey covered only the area under the jurisdiction of the city and the suburban municipalities. We have therefore made separate tabulations for the area covered by the older survey and the new additional area covered, so that comparable figures may be available.

We will first give a general picture of unemployment as revealed by the second survey and then proceed to bring out the main points of comparison between the first and the second surveys. In the second survey the unemployed was defined as a person actively looking for work whether for the first time or not and who had no employment, part time or full time, temporary or permanent, at the time of the survey. In the case of those who were looking for work for the first time, special note was taken of the fact. In the case of those who had lost a job previously held, we noted his previous job, and the duration of unemployment.

The total number of unemployed, according to the above definition, enumerated in the sample came to 754. There were 8347 earners in the sample (including the unemployed) and the unemployed therefore were 9 per cent of the total earners. Of the total unemployed 266 or 35.3 per cent were looking for a job for the first time while the rest had lost their previous job. A distribution of these according to the previous occupations is given in Table No. 4c.

Of the total unemployed (not including freshers) nearly 37 per cent were concentrated in the unskilled manual work occupations, while about 15 per cent each were found in the semi-skilled and highly skilled group of occupations. 7 per cent each were found in lowest occupations and in clerks and shop assistants.

Table Nos. 1, 2 and 3 give separately for old unemployed and freshers, the age distribution, educational status and the sex and marital conditions respectively of all the unemployed in the sample.

TABLE No. 1
Table showing the unemployed classified by age groups

Age-Group	Non-freshers	Freshers	Total
6 to 10 years	1	..	1
11—15	15	24	39
16—20	71	198	219
21—25	113	77	190
26—30	82	11	93
31—35	49	3	52
36—40	37	3	40
41—45	26	..	26
46—50	24	..	24
51 and above	70	..	70
TOTAL	488	266	754

TABLE No. 2

Table showing the unemployed classified by educational qualification

Education	Non-freshers	Freshers	Total
Illiterate	140	14	154
Literate	40	4	44
Upto primary 4th	91	44	135
Upto primary 7th	101	70	171
Upto primary 11th	76	64	140
Matriculates	29	59	88
Graduates	8	8	16
Double Graduates	2	1	3
Technical qualifications	1	2	3
TOTAL	488	266	754

TABLE No. 3

Table showing the unemployed classified by sex and marital conditions

Sex and Marital condition	Non-freshers	Freshers	Total
Male unmarried	150	210	360
Male married	242	23	265
Male widowed	26	..	26
Male separated . . . . .	..	..	..
Female unmarried	7	22	29
Female married	33	8	41
Female widows	27	1	28
Female separated	3	2	5
TOTAL	488	266	754

The freshers, as might be expected, are almost all concentrated in age group between 16-25 years, nearly 85 per cent being found there. There are none above 40. Among the old unemployed the largest concentration was in the age group 21-25 years which contained 23 per cent of them. About 54 per cent of the total were found between the ages of 16 and 30 years. Another 18 per cent were between 31 and 40 years. About 15 per cent were above 50 years of age.

Among the freshers the illiterates were only 5 per cent. About 22 per cent were matriculates, 3 per cent graduates and less than 1 per cent with high thannical qualifications. Among the old unemployed 29 per cent were illiterates, only 6 per cent matriculates, less than 2 per cent graduates and only one fifth of 1 per cent with high technical qualifications.

Among all the unemployed 14 per cent were females. The percentage only slightly differed from this among the old unemployed and the freshers. More than three-fourths of the total freshers were unmarried. Among the old unemployed 37 per cent were unmarried and 56 per cent were married.

In Table 4 the unemployed are classified by occupational groups and the duration of their employment. For concentrating attention on recent unemployment it would be convenient to neglect those who were unemployed for more than 3 years. Such persons were about one fifth among both freshers and the old unemployed.

Among the freshers ignoring the above categories 60 per cent had been unemployed for a period of more than 6 months and less than 2 years, about 15 per cent had been unemployed for between 2 to 3 years, about 9 per cent had started looking for work during 6 months preceding the survey. Among the old unemployed, again ignoring those who reported unemployment lasting for more than 3 years, 22 per cent had lost their jobs during 3 months preceding the survey, nearly 50 per cent has been rendered unemployed in the period 6 months to 2 years preceding the survey.

TABLE No. 4

Table showing the unemployed classified by occupational groups and the duration of their unemployment

Duration of Employment	Non Freshers.																		Total Freshers	Total Freshers	Total ¹
	Occupation prior to loss of—											Employment		Freshers							
	1	2	3	4	5	6	7	8	9	10	11	12	13	Not stated	Total Non- freshers	14	15	16			
Upto 3 months	45	20	6	1	15	7	3	0	1	..	..	..	6	4	108	11	..	..	11	119
Upto 6 months	17	7	5	4	15	6	1	1	1	..	..	..	2	2	61	12	..	1	13	74
Upto 1 year	34	14	5	6	13	1	4	1	..	..	..	..	1	2	81	59	7	1	67	148
Upto 2 years	37	13	6	8	12	8	8	2	..	..	..	..	2	3	99	67	14	..	81	180
Upto 3 years	12	7	6	1	8	3	2	..	..	..	..	..	3	1	43	33	6	1	40	83
Upto 4 to 6 years	24	3	2	4	6	3	3	..	1	..	..	..	..	2	48	28	7	1	36	84
Upto 7 to 10 years	11	4	3	4	3	4	4	2	2	..	..	..	4	2	43	8	3	2	13	56
Upto 11 to 15 years	..	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	..	..	..	2
Upto 16 years and above.	..	..	..	..	..	1	..	..	..	..	..	..	..	2	3	1	1	..	2	5
Not stated	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	3	3
TOTAL	180	68	33	28	72	33	27	6	5	..	..	..	18	18	488	222	38	6	266	754

Occupational Groups

- | | |
|--|---|
| (1) Unskilled Manual Work. | (9) Higher Professional and Salaried Posts. |
| (2) Skilled Manual Work. | (10) Owners of Factories, Large Shops, etc. |
| (3) Lowest Professions and Administrative Posts, Primary
Teachers, etc. | (11) Pensioners. |
| (4) Small Business. | (12) Beggars and Prostitutes. |
| (5) Highly Skilled and Supervisory Manual Work | (13) Cultivators. |
| (6) Clerks and Shop Assistants. | (14) Education. |
| (7) Intermediate Professions, Salaried Posts, Secondary
Teachers, etc. | (15) No work. |
| (8) Medium Business. | (16) Household work. |

Table No 5 gives the distribution of the unemployed by broad caste groups together with the total number of earners (including the unemployed) in those groups.

TABLE No. 5

Table showing the number of earners and number of unemployed and percentage of freshers and non-freshers to the total number of earners (including the unemployed) in different communities

	Total earners	Unemployed Non-freshers	Unemployed Freshers	Total Unemployed	Total
Maratha	1683	115 (6.2)	44 (2.4)	159 (8.6)	1842
Brahmins	1272	69 (4.9)	56 (4.0)	125 (8.9)	1397
Mahars	497	51 (9.0)	21 (3.6)	72 (12.6)	569
Other Depressed	517	33 (5.9)	13 (2.3)	46 (8.2)	563
Muslims	655	52 (7.1)	27 (3.7)	79 (10.8)	734
Christians	270	30 (9.3)	22 (6.8)	52 (16.1)	322
Artisans groups	173	21 (10.3)	10 (4.9)	31 (15.2)	204
Weavers	265	7 (2.5)	3 (1.1)	10 (3.6)	275

Of the non-fresh unemployed 22 percent were Marathas, 15 percent Brahmins, 11 percent each were Mahars and Muhammedans, 7 percent depressed classes other than Mahars and 6 percent Christians. Among the freshers 20 percent each came from the Marathas, and Brahmins, about 8 percent each from Muhammedans, Christians and Mahars and 5 percent from Scheduled castes other than Mahars.

The relative incidence of unemployment among different communities cannot be gauged unless the number of unemployed in them are related to the total number of earners (including unemployed) in that community as enumerated in the sample. This is shown separately for freshers and non-freshers in the different communities in Table No. 5. The incidence of unemployment was heavy among Christians, and Artisans (group I). Next to them came Mahars and Muhammedans followed closely. The incidence was fairly equal among Brahmins and Marathas and Scheduled castes other than Mahars. Among weaving castes it was very low.

Comparative picture of Unemployment as revealed by the first (1936-37) and the second (1954) surveys of Poona city—The second survey covered a larger area than the first survey. In order to make a comparison possible we have tabulated the results of the survey separately for the area covered by the first survey. Secondly, as by 'unemployed' was meant in the first survey, a person who had a job before but had no job at the time of the survey and exclude those who were seeking employment for the first time, we can only compare the non-freshers among the unemployed enumerated in the second survey with the unemployed noted in the first survey.

We will begin by presenting the general picture of the occupational distribution of all earners in the sample in the first and the second surveys :

Percentage distribution of earners among the occupational grades.

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
First Survey	26	20	8	12	8	8	4	8	1	<1	2	2
Second Survey	26	16	9	9	12	10	6	6	2	2	2	<1

It would be observed that the occupational distribution in its basic pattern has hardly changed during the period. The highly skilled occupations have gained in importance and to a less extent the group clerks and shop assistants has also gained. The skilled and semiskilled occupations have somewhat lost importance but the proportion of unskilled manual workers is the same in both surveys. The figures are sufficient to show that no basic changes have taken place in the occupational structure of Poona city during the period.

There were 6259 earners (including unemployed) in the second survey and the unemployed were 379 or 6 per cent as compared with only 3 per cent revealed by the first survey. Of these 14 per cent were females as against 5 per cent in the first survey. A little more than 25 per cent were illiterate as against 27 per cent in the first survey revealing very little change in this regard.

The incidence of unemployment among different communities as revealed by the first and the second surveys is given in the following table.

Percentage of unemployed to total earners including unemployed in each community group

	1st Survey	2nd Survey
Mahar	5	9.0
Artisans	3.5	8.8
Group I Brahmins	3.5	5.0
Weaving castes I	3.5	2.6
Other depressed castes	6.1	7.0
Marathas	} less than 3	6.7
Muhammedans		7.5
Christians		8.2

Except among the weaving castes the situation was worse at the time of the second survey. As in the first survey the Mahars and the other depressed classes showed a heavy incidence of unemployment but this was also showed, unlike at the first survey, in almost equal measure by Muhammedans, Christians and artisans of Group I.

B. Rural Unemployment

In the rural sector unemployment must be separately studied for the farm and non-farm occupations. Information regarding employment in latter is almost completely absent. In the following, therefore, we shall mainly confine ourselves to unemployment in agriculture.

Data on agricultural employment has been gathered on a rather sizeable scale by (1) Reports of the Agricultural Labour Inquiry Committee, (2) Bureau of Economics and Statistics, Bombay Government and (3) Department of Economics and Statistics, Uttar Pradesh.

Before we go on to examine these data it would be useful to give a few background facts about agricultural employment in India. Those engaged in agriculture can be divided into three broad categories : Owner cultivators, tenant cultivators and agricultural labourers. Owner and tenant cultivators are self employed. Agricultural labourers are the wage earners. They are divided into two main classes, attached and casual. The attached workers enter into a contract for a period of 3, 6 or 12 months with their employer and are paid for the period as a whole. The casual labourers are employed from time to time as and when required. According to the Agricultural Labour Enquiry the attached workers were 11 per cent of the total agricultural labourers.

Agricultural Labour Enquiry (1951)

This investigation carried out on a country-wide scale is confined to agricultural workers only and therefore does not cover the owner and tenant cultivators. "During the survey data on wage employment of all agricultural labourers were collected ; but in respect of their unemployment firm data could be collected only in respect of men labourers who reported wage employment in each month. Thus for those of the labourers, about 14 per cent on an average in each month during the year, who did not report wage employment it is assumed that they were selfemployed for half the period." (P.10; Section III, footnote).

The report further notes, " The wage employment of agricultural labourers was intermittent depending on the agricultural seasons. During the intervening period of agricultural employment, the agricultural labourer was either totally unemployed or was self-employed, the distinction between which was not always sharp. This lack of distinction between self-employment, which might include also periods of self-employment and under-employment sets limits in a way to the reliability of the data on unemployment collected during the intensive family Survey". (p. 13).

With these limitations in mind let us look at the data on unemployment gathered in this Enquiry. The Report splits unemployment into two components: (i) the number of labourers who did not report wage employment during any month, and (ii) the number of days

for which the reporting wage labourers were unemployed. This is shown in the following table for India and 6 Census Zones.

Census Zone	percentage of workers not employed on wages in any month of the year	Average annual un-employment of those employed on wages (days)
North India	4	44
East India	17	73
South India	20	115
West India	14	113
Central India	16	54
North-West India	17	82
All India	16	82

On an average in the Indian Union 16 per cent of the labourers did not report wage employment. The unemployment of those who reported wage employment, amounted to on an average, 82 days during the year. It should be pointed out that the 16 per cent of wage labourers who did not report wage employment in a month were not the same individuals throughout the year. In other words this percentage does not mean that 16 per cent individual labourers are without any wage employment during the year. So too the 82 days of unemployment is not a whole stretch of continuous 82 days but is staggered over all the twelve months of the year. The figures for different zones bring out the acute situation in the South and West zones of India; the situation is comparatively easy in North India.

These data are for all labourers, casual and attached. "The attached labourers were unemployed to a much lesser extent than the casual ones. In the Indian Union as a whole as many as 97 per cent of the attached labourers reported wage employment every month and on an average they were unemployed for only 19 days in the year". (p.14).

For the casual labourers the extent of unemployment was higher than for the whole and the major part of their unemployment was due to want of work. This is given in the following table.

Census zones	Percentage labourers not employed on wages in any month of the year	Average annual unemploy-ment of those employed on wages (days)	Percentage of unemploy-ment accounted for by want of work.
N. India	5	48	67
E. India	18	77	75
S. India	20	116	77
W. India	15	128	84
Central India	22	73	69
N.-W. India	25	120	60
All India	18	90	74

The subjoined statement gives the estimated average extent (for an average agricultural labourer) of wage employment, self-employment and unemployment for all the adult male agricultural labourers including those who did not report wage paid employment in any month. It is assumed that the latter were self-employed and unemployed in equal proportions (p. 15)

Census zones	Employment on wages (days)	Self employment (days)	Unemployment (days)
N. India	289	26	50
E. India	224	49	92
S. India	181	71	113
W. India	196	46	123
Central India.	245	45	75
N. W. India	202	64	99
(All India)	218	49	98

Rural Employment Data gathered by the Bombay Bureau

The Bureau of Economics and Statistics, Bombay Government has carried out since 1949-50 a series of employment surveys in the State. The initial surveys carried out in 1949-50-51 were confined to certain districts, Ratnagiri, E. Khandesh, Ahmednagar, Belgaum, Baroda, etc. The details regarding the methods followed will be found in the Bulletins of the Bureau and need not detain us here. The data were presented in terms of work days, separately for males and females of 16-55 and 55 and above and for children above 6 and below 15. All these were again given separately for 4 categories namely, owner cultivators, tenant cultivators, agricultural labourers and those engaged in non-farm occupations. Information regarding the work done during the previous weeks, giving details regarding work done for wages, in exchange, in own farm, household, etc. was provided.

The survey defined the 'unemployed' as persons "who were not employed at all during the week under consideration and were looking for work. (Persons who work part of the week and also look for work are classified as employed even if they spend most of the time looking for work". Under-employment was defined as "employment for three or less days a week". (p. 22, Vol. IV, No. 2, October, 1952).

The data were presented as percentages of total work days in each case for every month. A full record for 12 months of the year, a full round of seasons, was available for only one or two districts.

The following table for males and females combined in Belgaum District for April 1950 will illustrate the kind of data made available. (Table is given in the next page.)

In general the survey results showed that the percentage of the unemployed was very low. In East Khandesh, Ratnagiri, Ahmednagar and Belgaum, judging from the available statistics, the percentage of total unemployed was less than 3 per cent of the labour force. For cultivators it ranged between 2 to less than 1 per cent; for agricultural labour between less than 1 per cent to 3 per cent.

As per the definition of under-employment adopted by the survey the range of it for cultivators was between 3.2 to 14.4 per cent in Ratnagiri, 3.6 to 9.9 per cent in East Khandesh, 2.2 to 5.1 per cent in Ahmednagar, 11.9 to 27.7 per cent in Baroda, and 3 to 6.2 per cent in Belgaum. For agricultural labourers the range was 3.4 to 19.6 per cent in Ratnagiri, 3.6 to 9.9 in East Khandesh, 1.9 to 14.1 in Ahmednagar, 9.8 to 19.8 in Baroda and 3.1 to 13.6 in Belgaum.

Later on the Bureau carried out a survey of rural employment over the whole of Bombay State by dividing it in 8 zones and then selecting a random sample of villages. The data presented are broadly on the same lines as above though there have been some modifications. The category of under-employment as defined previously has been dropped.

Inquiry into Rural Employment in U. P.

The Departments of Economics and Statistics, U. P. has been conducting a multipurpose sample survey in rural areas from 1951 and they have been publishing in their bulletin data on rural employment gathered in this inquiry.

From each district in U.P. two tahsils were chosen with probability proportionate to size (P.P.S.), one village was chosen from each sample tahsil in the plains and 2 from each tahsil in the Hill districts with P.P.S. All the families in these villages were divided into 3 strata : cottage industries families, trade families and others. From each strata in a village the number of families (for investigation) has been so selected at random with equal probability that the sample is self-weighted for each type of families.

The data were gathered by one Inspector in charge of a district who visited each village on Tuesdays in alternate weeks and collected data in 3 to 4 days for the 14 days ending on the preceding Sunday. The total number of families selected in a village varied from 3 to 20.

The village labour force (V.L.F.) is defined as consisting of "all males who were, at the time of enumeration, either (i) engaged in any productive occupation, or (ii) though not so engaged, expected or intended to join some productive occupation during the year or were in search of employment". (p. 681) Out of the V.L.F. those who could not work temporarily for the entire two periods of two weeks each for some reason or the other, *i.e.* sickness, etc. are excluded to determine the effective labour force of the village for that period. Those included in the effective labour force are called "working members".

The Inspector collects data for the previous 14 days but if this period contains a holiday, religious festival or days with a bad weather, on which no work is possible or is usually not done, are excluded and the remaining are taken as "working days". A working member who works for 8 hours or more on each one of the working days is considered as fully employed. A working member who is completely idle on each one of the working days is considered completely unemployed. All working members not fully employed or completely unemployed

are considered as under-employed. They consist of working members who either did not work or did not have full 8 hours' work on any one or more of the working days.

The following table for July 1954 gives the data according to the above categories.

Rural Employment in U. P. during July 1954

Loss to the unemployed in								
Occupational Classes	Effective Labour Force (Total Labour Force \equiv 100)	Full Employment (E.L.F. \equiv 100)	Complete unemployment (E.L.F. \equiv 100)	Under employment (E.L.F. \equiv 100)	Man hours (Expected work hours \equiv 100)	Days completely idle (working Monday \equiv 100)	Man hours on working days (Expected Man hours on working days \equiv 100)	Total loss to the State from unemployment & under-employment (Total expected work hours \equiv 100)
Cottage Industry	98%	38%	3	59	30	18%	15	21
Trade	95%	37%	5	58	40	24	21	28
Others	96%	35	3	62	29	19	13	21
All occupational classes								
(a) measure	96%	36	3	61	30	19	13	21
(b) Coefficient of variation	10%	7%	48%	5%	6	11	10	5

The data presented earlier from the Agricultural Labour Inquiry Report, with all its limitations, gives a somewhat firm and definite estimate of the extent of complete unemployment prevalent among the agricultural labourers. Most of the agricultural labourers are without land and when they do not get wage employment they are visibly unemployed.

In the Bombay Bureau data the whole rural population is covered and though the agricultural labourers show a higher percentage of complete unemployment than tenants and cultivators the difference is only slight. The range of under-employment, as defined by the survey was, however, markedly larger for the agricultural labourers than for the cultivators.

The Bombay and the U. P. figures of completely unemployed persons are extremely small. They indicate visible unemployment. But the major phenomenon in the rural sector is concealed unemployment which arises out of a deficiency of resources complementary to labour. This is not revealed by these statistics. That is the justification for describing it as concealed.

Concealed unemployment is difficult to measure. It can of course be measured in an abstract way by calculating the total man-hours that a given labour force in an economy is capable of supplying and deducting from it the man-hours that are necessary for producing the current output at the existing technique and organization. It is obviously not possible to convert this measure of under-employment in man-hours into individual labourers who are completely unemployed.

III. EMPLOYMENT POLICY

In the formulation of employment policies in India a difficulty arises because of the relative lack of integration in the economy. In the highly integrated industrial economies of the West it is possible to think in terms of a small number of general measures which would affect the level of employment through almost the entire economy. This is because these economies are comparatively homogeneous and well integrated. In India the lack of intergration has three aspects. Firstly the economies of various regions are not closely linked with each other. Such features as the degree of monetization of the economy, the extent of self-sufficiency, the level of transactions or the tempo of economic activity may differ markedly from region to region. The extent of this may be realised from the data collected for 75 districts in the Rural Credit Survey of the Reserve Bank of India. The other aspect is the difference in the urban and rural economy, especially that in the organised industry, finance and commerce sector of the economy as distinguished from the agricultural and traditional hand industry sector. That the fortunes of the two may differ markedly was brought out during the depression during the thirties; it seems to be also emphasized by conditions during the last two years. A third aspect is the large extent to which small establishments and independent workers predominate in the economy resulting in a very large number of widely dispersed units of economic activity.

These features make it necessary to consider employment policies in India for special sectors separately in the first instance and then attempt to coordinate their effects rather than adopting an aggregative approach initially and trying to work out its effects in special contexts later.

The largest classes in the working population in India are of farmers, agricultural labourers and those engaged in small industry. All these together constitute more than 80 per cent of the total working population in the country. Consideration of employment policies in regard to these classes is complicated by the existence on a wide scale of what is called under-employment among them. As has been indicated already under-employment especially in rural areas fails to be prominent in statistical data. It is to be inferred from data relating to production and earnings. Information available through such recent enquiries as the Agricultural Labour Enquiry and the Rural Credit Survey furnish useful information in this regard. The Rural Credit Survey definition of cultivator included all persons who cultivated even a small field on their own account. These constituted nearly two-thirds of the total rural population in the selected villages. The Rural Credit Survey brought out that for the country as a whole at least half of this class of cultivators derived its maintenance not predominantly from farming but from other sources, chiefly wage receipts. It also brought out that in about

one-fifth of the districts covered by the survey not only the cultivators of the lower half but even those of the upper half could not obtain their major living from farming. These facts together with the level of receipts reported may be indicative of a state of considerable under-employment. These data are reinforced with particular reference to the labouring classes and the smallest cultivators by the data especially relating to level of living and earnings, contained in the reports of Agricultural Labour Enquiry. The data in relation to hand industry are by comparison extremely scanty. The recent report of the Kanungo Committee estimates that an average active handloom is worked only for about 200 days in the year. The same Committee assumes that the proper employment period for handloom should be 300 days in a year. The Committee ignores a large number of handlooms and handloom workers in the country by calling them inactive. These facts give a broad indication of existing under-employment, according to this Committee, in this, the most important hand and small industry in the country. The statistical data presented by the Kanungo Committee have not been published. It is, therefore, difficult to know how the calculations of the Committee have been derived. However, it is highly unlikely that the Committee had available any direct data of days of employment of workers at handlooms. Most probably the Committee based its calculations on data relating to production of handlooms or earnings of handloom weavers. No similar information is available relating to other cottage industries.

The nature of problem of the reduction of under-employment for the three categories mentioned above differs from category to category. For the small farmer the reduction of under-employment may be considered as being possible through one of two alternative ways. The first is to make the units of agricultural operation so large as to afford the farmer adequate employment and earnings through the year from farming. The second is to afford the small farmer supplementary employment suitably located so as to employ him adequately through the year on farm and non-farm activities together and to give him adequate earnings in the total from all sources. It is obvious that the mobility of farmers or of members of their family is restricted to a certain extent. They are tied down to their farm and they are available for additional or alternative employment only during certain times of the year and not at others. The first alternative raises a whole set of problems connected with land reform and the organisation of agriculture and can only be considered as possible in the long term. For the short or immediate period, therefore, the second alternative will have to be adopted. This will mean that additional employment opportunities properly located and timed or additional activities capable of directly increasing the standard of living will have to be made available to this large class.

The problem of affording fuller employment to agricultural labourers is in some respects similar to the problem of the small farmers. The families of agricultural labourers are more mobile and will move over larger distances. At the same time to the extent that their permanent residence is fixed in specific villages and to the extent that the availability of their labour at certain times in the agricultural season is essential for the operation of the agricultural economy, their problem will have to be dealt with in terms similar, though not necessarily as restricted, as those indicated for the smaller farmers.

The problem of under-employment in cottage industry is of an entirely different character. The small farmer and the agricultural labourer cannot be given increased employment in agriculture except to the extent that schemes, such as that of reclamation and irrigation, increase the land surface which is utilised or increase the period for which and the intensity with which it is utilised. Assuming that the possibilities in these directions are extremely limited in relation to the total size of the problem the solution of the problem of under-employment of the small farmer and the agricultural labourer has to be found by affording employment other than agricultural for these classes in the appropriate manner. On the other hand there is no difficulty for continuous and full employment of persons engaged in artisan industry or cottage industries other than the lack of effective demand for their products. The required capital and labour structure at given techniques are already there. If, therefore, the products of these activities are in active demand at given price levels the problem of fuller employment in them would require no other approach. In case, however, the demand for the products of these activities cannot, for one or another reason, be expanded, fuller employment would be possible only through concentrating employment on smaller numbers than the total at present occupied in these activities and transferring the remainder of the personnel to other employment. Obviously, in this case, other employment in the required volume would have to be made available for the displaced. The problem presented by improved techniques in these occupations which makes it possible to meet existing demand through employment of smaller numbers would also create a parallel problem.

This part of the discussion may be summarised in the following manner as bearing on the problem of employment policy. A larger or more profitable demand for products of agriculture would not increase employment among farmers and agricultural labourers. Any increase in earnings of the farmer which this brings about is also not likely to be fully shared by the smaller farmers who have smaller surplus to sell and by agricultural labourers. This was fully exemplified during the time of war. The agricultural labourer improves his position only when many opportunities are created for him of non-agricultural employment, in which case he obtains both a larger return from agricultural labour and fuller employment in non-agricultural occupations. For the artisan raising the total demand for products of his industry would provide fuller employment. However, this effect would be counteracted to the extent that simultaneously improvement in technique was attempted.

The considerations set out above indicate that over a large part of the field of industry employment afforded in small enterprise or hand industry must be considered together with that in the machine industry and factory establishments. This is particularly necessary in such fields as cotton textiles, vegetable oil, leather industries and to some extent wood-work and iron smithy. There are cases also of indirect connections as that of the modern pottery and metal and enamel-ware industry and the traditional sphere of pottery and metal utensils.

The possibility of creating additional employment in agriculture and small industry arises only after existing under-employment has been substantially reduced. Moreover, in agriculture entry of new persons would be possible chiefly where new land surface is brought

under cultivation. Looking to the limited extent of the total land surface and the existing sub-division of farms, it is generally agreed that additional employment in agriculture would not be easy to create and that, in fact, it would be desirable to reduce, if possible, the total number occupied today in agriculture. In traditional forms of small industry new employment would be created only if demand for the products increased to a level beyond that at which the present workers in the industry are fully employed. Also this could happen perhaps, only on the assumption of a stationary technique. The Kanungo Committee which postulates an increase in the domestic demand for cotton textiles of the order of nearly 25 per cent between 1954 and 1960 puts forward a programme of gradual transition which would yet involve a reduction in the total numbers actively employed in the cotton industry by about 20,000 persons a year. Thus in this large field additional employment could be contemplated only with a combination of a large increase in demand and almost no progress in technique.

Another important sphere in which the progress of planned development may not increase employment is that of domestic service. Any progress towards a socialistic pattern, meaning thereby a more equal distribution of income in society would affect domestic service employment in two ways: (i) by reducing the extent to which people could afford to employ domestic servants and: (ii) by reducing the number of people who would find it necessary to resort to domestic service. A high proportion in domestic service, it is well known, is closely associated with general poverty, lack of alternative employment and considerable inequality in distribution of income.

Leaving aside for the moment, large-scale industry and mining we may consider the other major classes which are Commerce and Transport divided into "other commerce and transport" and "organised "banking and insurance" and the class "professions and liberal arts". Employment in organized banking and insurance as well as other commerce and transport may be taken to depend on the general tempo of economic activity and the general rate of increase in it. Employment in other commerce and transport may not be affected, even in the short period, by increases of employment in government transport and organized banking and insurance. Barring the important case of mechanical road transport decreasing during a given stage the employment available for animal transport on roads, in other spheres increase in Government transport and in organized banking and insurance may not lead directly to a decrease in general employment in other commerce and transport. On the other hand, in case increase in Government transport and in organized banking leads to increasing the general availability of transport, trading and financial facilities, employment in ancillary and subsidiary activities embraced in the essentially small enterprises which constitute the major part of other commerce and transport may be increased.

The main constituents of the class "professions and liberal arts" can be put into two subdivisions; first, that connected with public health and education in which the extent of activity and employment would depend partly on general economic activity but to a large extent on Government expenditure and policy and the second sub-division of chiefly personal service trades. The main constituents of the latter are washermen, barbers, priests, astrologers, etc. One may, therefore, say that employment in the class of profession and liberal

arts would depend in one part on Government policy and expenditure and that in the other part it would depend on the general state of economic activity; it being assumed that employment of those employed in the personal service cadre including the religious and charitable class as well as of private practitioners of medicine, etc., would increase or decrease with general economic activity. As with traditional cottage industry it might be assumed that there would be some chronic under-employment in particularly the personal service trades and that the first effect of an improvement in conditions would be seen not so much in increased employment available but rather in some improved earnings of members of that class.

At present workers in large-scale industry *i.e.*, modern manufacturing and mining and organized banking and insurance do not suffer from any marked unemployment. Also State regulation and control of employment and dismissals, rationalization and retrenchment, etc. in this field makes it unlikely that this class will be greatly affected by unemployment in the near future. A plan of industrial development is also likely to increase total employment opportunities for all categories of workers employed in large-scale mining and manufacturing. No doubt, the number of new establishments in these lines being small their location may not be well distributed and the increase in employment may not come about evenly over the country and it may not come about in all types of industries. In particular, it is likely that the employment in consumption goods machine-industry may, because of considerations of development policy, not be increased at all. The limitations arising from uneven distribution and from confining the increase to only some aspects may affect expansion of the industrial labour force in particular areas. However, in relation specially to the skilled and technical personnel, because of their greater transferability and mobility an uneven distribution may not have highly adverse consequences.

The last remaining major class is that of Government service (administration). It is obvious with that employment in this class will depend on the decisions made by the State from time to time regarding the scope of its activities and the expenditure to be incurred on them.

Employment policies of the State in India must be related to the direction in which the State can act and the possible influence of its action in various directions on the employment situation. The State can act on the employment situation directly by expanding the number of jobs offered by it in its different activities. In this connection a threefold division of the activities of the State might be made : (1) General administration, including Defence, (2) Activities referred to formerly as nation-building activities and which might be called today social overheads and (3) Industrial, trading, transport and other economic activities undertaken by the State. A plan of development will lead to an expansion of the employment offered by government authorities in India in all these directions. However, it may be allowed that the effect of a plan of development on Class I will be less direct than that on others. Employment in Class I will be increased chiefly to the extent that a plan of development extends the coverage or complexity or intensity of action by the State. The extent of such increased employment is also likely to be relatively not large. In regard to Class II and Class III the size of increased employment will depend directly on

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policy, including investment decisions incorporated in the Plan. Employment in Class II will depend on what is planned in relation to such fields as education and health. The extent to which expenditure on "social overheads" can be provided for in the Plan will determine the measure of this employment. The chief characteristics of this expenditure will be that it will not be in the nature of an investment making a direct return even in the long period; also, it will be expenditure which will not directly affect the tempo of current economic activity. The employment afforded will be directly related to the extent of government expenditure and will be limited by the extent to which expenditure on social overheads can be afforded in the plan period. In expenditure under Class III two sub-divisions might be made. The first subdivision would include those economic activities which the State undertakes but in which its role is not different from that of any private entrepreneur, industrialist, trader, transport agent, etc. The second sub-division would include activities which though economically important in themselves would, generally under Indian condition, not be undertaken by private enterprise, at least not on the scale or with the measure of coordination required. This second sub-division which comprises mainly such public works and systems as those of irrigation, power and transport and such measures as those of conservation of resources is of great direct importance to a plan of development. This group which may be described as "economic overheads" may contain an element of investment expenditure on which no direct return may be obtained even in the long period. However, a large portion of expenditure in this group would provide a return in the long run, though not usually in the short run. At the same time, expenditure in this group may be undertaken more largely for its total result on the development process than on calculations of direct return on investment. Further, expenditure in this group would have two important effects not usually associated with expenditure on social overheads. Firstly, such expenditure would in the long-run directly affect the volume and nature of economic activities within an area or region and, in the short period, that part of this expenditure which is incurred on the construction of capital works—and this would be an important part of the expenditure—would have important short period effect on the tempo of economic activity in the regions in which this expenditure was concentrated. (It may be remarked here in parenthesis that to the extent that activities called social overheads involve large capital expenditure, such as on buildings, these will also have similar immediate effects.) The expenditure in the first subdivision mentioned above would not differ, by definition, from ordinary economic activity except in that it was conducted by the State. Consideration of the effect of such expenditure can not, therefore, be separated from that of investment, etc. in particular fields of current productive activity whether in the private or public sector.

To sum up this part of the discussion the expenditure on social overheads and on ordinary administration would chiefly have in the short period direct employment effects. The size of the expenditure on social overheads would depend on consideration of the total resources available to the State and the priority that has to be given such expenditure; the expenditure on general administration would merely be a function of the total expansion of the activities of the State and would be more a result of the Plan in other directions

than be planned directly. The expenditure on economic overheads enters more integrally into decisions about the size and structure of the plan ; and decisions about ordinary economic activities in the public sector are completely determined by the general plan of economic activity.

The available data on employment and unemployment seem to indicate that today unemployment in towns is perhaps at a higher level than in even the thirties. Apart from a generally higher level of unemployment, existing unemployment is specially marked in the ranks of the urban educated, specially those seeking general clerical employment, among certain classes of skilled artisans, especially those brought up in the traditional handicrafts and among general casuals and unskilled labour. The data regarding rural employment fail to indicate any class specially affected by unemployment.

Expenditure in the plan which is above the level of existing expenditure may consist of : proposed additional investment in agriculture and industry in the private and public sectors, proposed additional investment in the transport and electricity systems, and in irrigation—major and minor, in soil conservation, in afforestation and other similar activities, proposed additional expenditure on education, health and welfare activities and on general administration. The last two will include an element of capital works and equipment in them. We shall defer consideration of effects of investment in agriculture and industry. A part of the other expenditure will directly increase employment in government administration and government transport systems. It will also have both direct and indirect effects on employment of a group of categories included in the class “professions and liberal arts”. Most of the rest of this expenditure can be broadly described as consisting of a programme of public works. Such a programme will, according to its size and composition, afford employment to unskilled and skilled labour and to educated labour, both technical and general clerical, etc. It is this public works programme together with the direct employment afforded in administration and in social services, direct or aided, that will create the bulk of the new employment opportunities. And it is this total programme that must provide for the two classes whose problems are the most urgent today, the unskilled general labour both rural and urban and the rapidly growing class of the urban educated. The latter class has to depend almost entirely on the new opportunities created by the activities of the State and the former class chiefly on the public works programme of the State and partly on the indirect effects of such programme. As pointed out above, the category of “other commerce and transport” and some of the categories included in “professions and liberal arts” will not be directly affected by State activities but will benefit from the increased tempo of economic activity.

The considerations indicated above make it necessary that the direct State employment and the public works programme must be as large as possible, so that not only is very considerable direct employment created but also as a result of it the pace of general economic activity is significantly increased. The process is essentially no different from that which took place during later war years. At this time direct government employment

including recruitment of military personnel increased largely, there was a large programme of public works of various types spread throughout the country and the fillip given to general economic activity was felt in all parts of the economy and the country. Whatever the difficulties, on account of shortages and inflationary price movements, the situation regarding employment during later war years was, on all evidence, the most satisfactory recorded, at least, within the last three decades. It would be unnecessary to reproduce some features of this situation such as the severe inflation and the high proportion of expenditure on nonproductive activity. It may also not be possible to find a counterpart to the large and continuous direct recruitment of military personnel. However, if the essential features, *viz.* largely increased government employment, large and widespread programme of public works—and one may add the increased demand for the products of hand industry—are reproduced and above all the size of the total investment and expenditure programme is large enough the existing acute state of the problem of employment should pass.

As regards the programme of investment in agriculture, we have noted that in the areas in which it brings about an increase in the area or period of agricultural activity, it might help to diminish under-employment over a small or large area to some extent.

The programme for investment in industry may be divided in this context, in four parts : the producers, goods and consumers, goods division of modern machine industry (in which may be also included mining) and the traditional hand industry and modern repair, etc. divisions in small enterprise. Of these the producer goods part of modern industry employs the smallest numbers today and even a large percentage increase in it will only slightly increase employment in absolute numbers. The modern division of small industry need not be considered separately ; it will move in sympathy with the general progress of economic development and tempo of economic activity. Increase in employment afforded by it is also not likely to cause any large technological unemployment. The traditional hand industry and most of modern consumers' goods industry must be considered together for the effect on employment. However, though the other parts of the industrial structure are not so directly connected with hand industry and the employment afforded by it, developments in them are bound to have an impact on traditional industry in the long run. From the point of view of employment the immediate objective is to increase, if possible, the total employment in the industrial sector and the first step in achieving this is to see that existing employment in this sphere of traditional hand industry is, at least, not diminished. The employment in the category forms so large a part of total industrial employment that a significant diminution in it is not compatible with any increase, however small, in total employment in the industrial sector.

It is difficult to see how this can be properly planned without taking a long-term view of the entire industrial production system. Even if in the initial stages all the emphasis was on increase of basic, heavy and capital goods industries, these would ultimately lead to establishment of units and enterprises which must produce consumption goods with modern

technique. Further, whatever increase in availability of consumption goods production in the immediate future is planned it must be brought about by some one or another existing or improved agency. The planning of consumption goods production and the gradual improvement in the technique of such production are, therefore, problems that cannot be shirked in the immediate future by merely saying that within the next 5 years in the machine production of products of traditional cottage industries no increase will take place. Common production plans in which the immediate production of consumption goods, the rate of increase in such production, the transition in the agency of such production, the finance and capital equipment for such transition and the total increased or reduced employment given at each stage must be carefully thought out.

Unemployment and under-employment must be considered as closely related to existing poverty and low standards of living among large masses in the country. The situation during the last few years has shown that considerable economic activity in restricted spheres or full employment in them is compatible in the Indian economy with low employment and depression in other spheres. In an economy as poor and as loosely integrated as the Indian, effective social service or welfare measures cannot also be contemplated immediately. The cost and the administrative task appear both too large. Therefore, the only way of securing something like a minimum standard over most of the country for all classes is to create additional employment opportunity in sufficient numbers and in appropriate locations and conditions for everybody. Apart, therefore, from employment opportunities utilising idle labour and thus making possible increased production, employment has also to be considered as being necessary as the first step towards not so much a socialistic but some kind of responsible state, *i.e.* a state which though not yet making any progress towards positive welfare or social service activities begins at least by taking seriously its constitutional responsibility of providing employment opportunities for all. These latter considerations have special relevance in relation to the large classes employed in agriculture and small industry. For the under-employment and poverty of the small farmer and agricultural labourer classes a considerable public works programme spread widely over the country and planned to last over a continuous series of years seems to afford the only solution. For the small industry sector the solution is obviously to be sought in terms of careful planning over many 5-year plans of the changing structure of industrial production and determining common production plans for those large fields of consumption goods production in which traditional small industry production continues to play an important part.

The discussion above may be summarised in the following terms of what is possible and what is desired. (1) There is little chance of and it is hardly desirable to have additional numbers employed in agriculture. (2) There is urgent need for affording fuller employment for the classes of the small farmer and the rural labourer. In view of the peculiar requirements in regard to timing and location of additional or supplementary employment of this class only a long-term programme of widespread public works throughout the country, more particularly spread in those areas where agriculture is insecure and the standard of living of small

farmers and agricultural labourers is particularly low, is indicated. Before substantial employment opportunities in other occupations are made available on a scale very much larger than can be immediately contemplated, there appears no alternative to such public works programme. (3) In the field of most small industry employment opportunities for new entrants may become available only if there is considerable increase in demand of product of the industry combined with little or no progress in technique. The total long-term programme of development of particular industries will have to be related to a programme of transition of the structure of industry over a comparatively long period. And in view of this and in view of the comparatively high cost of increasing employment in modern manufacture and mining the total additional employment in the industrial sector in the 2nd Five Year Plan cannot be large. (4) Increased employment in state administration, state social services and state economic enterprises afford the main openings for the continuously increasing number of recruits to the educated urban class. (5) The expansion of state activities to as large an extent as possible in social and economic overheads is indicated by employment considerations. (6) Employment and earnings in the field of small-scale private activity other than agriculture and traditional cottage industry need not be directly operated upon. The general increase of the tempo of economic activity set in motion by a large-scale and widespread expansion of state activities and public works should be sufficient to improve employment and earnings in small commercial and transport and small repair and other establishments which are ancillary to modern industry.

The propositions as stated above are not mutually inconsistent. Only, if affording reasonable employment opportunities is considered a primary aim the propositions indicate certain guiding considerations for the structure of the plan of development. Primarily, they emphasize that the rate at which labour saving techniques are adopted may have to be regulated, to a larger or smaller degree, in most directions. As labour saving techniques hold a central place in most modern technology this would mean a deliberate routing and partial retardation of its total adoption. It would also have the result of increasing at a slower pace, than might otherwise be possible, of the total availability, in terms of both of quality and quantity, of consumer goods. In the interests of a peaceful transition, however, such an indirect approach and such postponement of consumer goods availability may be held necessary and desirable.

In considering what might be planned for the future, a glance at what happened during the decade 1941-51 may be useful. The following table compares the distribution of the total working force between the major livelihood classes in 1951 with that in 1941. It may be noted that this was a period of great economic activity and of considerable increase in industrial production. Even so, it indicates a very small increase in those engaged in industrial and related production and a comparatively large increase in workers in agriculture. The comparison emphasises an important characteristic of the existing and continuing situation in India. As long as employment in other sectors does not increase, the large bulk of the population which lives in the rural area and is supported by agriculture will continue to stay in the rural area and depend on agriculture for support. The continuous growth in population increases the numbers that have to be supported by agriculture and this increase leads to an accentuation of under-employment in agriculture and perpetuation of the low standard of living.

The decade 1941-51 was one in which urbanisation in India proceeded at a faster pace than in any decade since the establishment of the India Census. The result is reflected in the increase of employment noted in "other services and miscellaneous sources" in the table. The proportionate rise in employment in this class is the largest of all. However, in terms of absolute numbers it could not give substantial relief to the pressure that increase in population brought on employment in agriculture. Even a bold plan of development in India cannot create, in the immediate future, such a large number of permanent jobs, in activities other than agriculture, as to absorb the increase in the working force in rural areas. It will take many 5-year plans of development to change the occupational structure in India radically enough for the purpose. This emphasises the undertaking by the State of continuing programmes of public works and other related activities which while helping in the long term to change suitably the occupational structure will employ in the meantime very large numbers in temporary activities acting, in effect, as a transitional relief programme.

Framing the requirement of new employment opportunities in the usual terms of attempting absorption of all new workers in non-agricultural employment we have the following relations. The calculations are made for only that part of the working force called "self-supporting persons." The other category "earning dependents" has been neglected here, as in

Distribution of Working Force as obtained from the Census.

(Lakh persons)

Livelihood Classes	Total working force		Total working force.	
	1941	per cent.	1951	Per cent
I—IV Agricultural classes: total	861	70.00	1003	70.04
V Production other than cultivation :	164	13.33	167	11.66
VI Commerce	69	5.61	73	5.10
VII Transport	16	1.30	20	1.40
VIII Other services and miscellaneous sources	120	9.76	169	11.80
(V—VIII non-agricultural classes : total)	(369)	(30.00)	(429)	(29.96)
GRAND TOTAL	1230	100.00	1432	100.00

Reference : *Final Report of the National Income Committee.* February 1954.
Government of India.
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the tables elsewhere, because the urban-rural breakdown is not available for them in the detailed tables. On the basis of "self-supporting persons" forming nearly 30 p.c. of the total population we may estimate an annual increase in their numbers as being about 13 lakh persons, giving a total additions to this class of about 65 lakhs in five years constituting nearly 20 p.c. of the total self supporting persons in 1951. In view of the graded possibilities of employment

creation in the different classes it is obvious that in the classes in which employment can be most directly affected by the Plan the attempted increase must be very much larger than the 20 p.c. average indicated above. Moreover, these calculations take account of only new entrants into the working force and neglect both existing unemployment and the even larger under-employment. This emphasises that the target of increasing employment in Public Works, Public Administration and Public Services must be put as high as possible from the point of view of employment and that a target of an overall increase of say 30 p.c. in these categories cannot be considered as at all high.

Finally some comment may be made on the supposed ease of undertaking a plan of development in the country because of the existence of idle resources. There appears a large reservoir in the country of idle resources in terms of labour mostly employed in agriculture, traditional cottage industry and to some extent also smaller establishments in many kinds of other activities. Equipment in traditional cottage industry and similar activities may also to some extent be underutilised. Neither land nor agricultural equipment can, however, be considered as being in surplus supply or as being underutilised at present techniques; nor does equipment in any form of modern industry or transport activity appear to be substantially underutilised. The fuller utilisation of the under-employed labour in agriculture and small industry would be dependent on adequate additional supplies of capital resources depending on the activity in which additional employment is found. The under-employed, in the bulk, are also the under-fed today and would have to be adequately fed and perhaps better clothed and sheltered for fuller utilisation of their labour. Use of unutilised equipment in traditional industry would also require increased supply of materials. This would make a demand chiefly on domestic production of raw materials. The limited supply of land makes it unlikely that any scheme of additional utilisation of labour would by itself make available additional primary products required for sustaining such additional employment. From this point of view schemes of irrigation and conservation which widen, over a period, the base of primary production have great importance and should command priority. However, increased supplies of food, consumer goods and raw materials need not all come from production within the country. The limit to the extent of progressive utilisation of idle labour cannot, therefore, be defined in terms of production of specific commodities within the country but must be computed in terms of total resources available for the purpose. Given a level of national income during any year, the additional utilisation of idle labour in the succeeding year will depend on (1) the increase in income during the year over the previous year and (2) additional resources made available by a change in the volume and pattern of consumption as compared with the previous year. Additional income, generated by the utilisation of idle labour would, of course, itself form part of (1) above. Liberal estimates of increase in national income do not exceed 5 p. c. and it is obvious that the whole of this cannot be available for the utilisation of idle labour. These considerations are set out to emphasize two points; firstly, that there are fairly close limits to the extent to which, at least in the initial years, idle labour could be utilised and secondly, that rationalisation of the pattern of consumption expenditure is of considerable importance even in this context.

THE SECOND FIVE YEAR PLAN
EMPLOYMENT PATTERN AND POLICIES

by

DR. V. K. R. V. RAO

It is best to begin with a description of the employment pattern existing in the country in 1951. The Census Report classifies the labour force by what is termed livelihood classes while a more detailed classification is available for non-agricultural workers. The labour force is divided into two broad categories, *viz.* what are called "self-supporting workers" and "earning dependants". A self-supporting worker is defined as 'one who is in receipt of an income and that income is sufficient at least for his own maintenance', while an earning dependant is defined as 'one who secures a regular income even though it may be small but where the income which he secures is not sufficient to support him'. Earning dependants are assigned to the livelihood class of the self-supporting persons on whom they are dependant, but this does not necessarily indicate the livelihood class from which they actually derive their income, however small it may be. Fortunately the Census also contains data on the actual livelihood class from which earning dependants obtain their income. It is important to note this distinction when compiling the livelihood table of the labour force, in view of the fact that whereas about 31 million earning dependants are returned as dependant on self-supporting persons in agriculture, the number returned as actually deriving their income from agriculture was only about 28 millions. The following table gives a classified statement of the labour force in 1951, which totalled about 104 million persons or 40 per cent of the population.

TABLE I

(Figures of workers in '000)

Livelihood class	No. of self-supporting workers	No. of Earning Dependants	Total Labour Force No.	Percentage of labour force in each class to total
Owner cultivators	45,761	12,864	58,625	41.1
Non-owner cultivators	8,766	2,543	11,309	8.0
Cultivating labour	14,882	12,216	27,098	19.0
Rent receivers of agricultural land	1,641	276	1,917	1.4
Production other than agriculture .	12,136	4,402	16,538	11.6
Commerce	5,903	1,336	7,239	5.1
Transport	1,734	227	1,961	1.4
Other services and miscellaneous sources	13,577	4,087	17,664	12.4
Total of agricultural classes	71,050	27,899	98,949	67.5
Total of non-agricultural classes	33,350	10,052	43,402	30.5
GRAND TOTAL	104,400	37,951	142,351	100.0

In addition, a number of members of the labour force had a secondary means of livelihood which went to supplement the income they obtained as self-supporting persons from their principal means of livelihood. The following table gives the relevant figures.

TABLE 2.—*Secondary Occupations of Self-supporting Persons*

	(Figures in '000)
Cultivators of owned land	2,062
Cultivators of unowned land	1,467
Cultivating labour	2,481
Rent receivers of agricultural land	875
Production other than cultivation	3,141
Commerce	1,501
Transport	354
Other Services and Miscellaneous Sources	3,326
Total of Agricultural classes	6,885
Total of Non-agricultural classes	8,322
GRAND TOTAL	<u>15,207</u>

It is interesting to note that of this number, 7 million self-supporting persons having agriculture as their livelihood class had non-agriculture as their secondary means of livelihood, while 2.7 million self-supporting persons having non-agriculture as their livelihood class had agriculture as their secondary means of livelihood.

Of the 142 million persons constituting the labour force, men numbered about 100 million and women 42 million. About 120 million were working in rural areas and about 22 million in urban areas.

The Census also gives figures of the number of employees in both agricultural and non-agricultural categories, an employee being defined as a 'person who ordinarily worked under some other person for a salary or a wage in cash or in kind as a means of earning a livelihood'. This information is not available for earning dependants numbering about 10 million in the non-agricultural class, while we find that of the 28 million earning dependants in the agricultural class, about 12 million persons were returned as cultivating labourers. Leaving out the figures of earning dependants, we find that of the 104 million self-supporting persons, no less than nearly 30 million persons were employees or hired workers, divided practically in equal proportions between agricultural and non-agricultural classes. 30 million workers give India one of the largest national body of employees in the world, the United States having 49 million and U. K. 21 million. If employees who are earning dependants are also added to the Indian figure, our labour force of hired workers would number more than 48 million and would place India second in ranking by size of hired workers among the nations of the world. Thus, contrary to the general impression, India has a large body of employees or persons working for a salary or a wage either in cash or in kind; and this is a highly relevant fact in considering problems of employment and unemployment, wage levels, and impact of price rises on levels of living.

In considering what kind of an employment pattern we should have in India, it is useful to have a look at the employment pattern of some of the economically developed countries of the world. For this purpose, data relating to India as well as some other countries have been re-classified and results are given in the following table.

TABLE 3.—Percentage Distribution of Occupational Distribution of Labour Force.

Category	U.S.A. (1950)	U. K. (1950)	Canada (1951)	U.S.S.R. (1937)	Japan (1950)	India (1951)
Agriculture	12.5	5.0	19.4	58.0	48.7	71.9
Industry	30.6	43.1	29.3	17.8	17.3	9.7
Construction	6.4	6.2	6.6	3.5	4.0	1.0
Transportation and Communi- cation.	7.7	7.8	7.4	5.4	5.0	1.5
Trade	19.0	14.1	16.5	4.4	11.8	5.1
Services.	23.8	23.8	20.8	10.9	13.2	10.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

It is clear from the table that substantial changes are required in the occupational pattern of this country if it is to have a developed economy. It is also clear that the proportion of the labour force engaged in agriculture must decline and that the proportion of the labour force engaged in industry, construction, transportation and communication, and other services must all increase. The extent of the increase in each and the period over which it should be brought about are subjects appropriate for planning, but inevitably any proposals made in this connection must be provisional and hypothetical and subject to constant review and change, if necessary, in the light of experience. It is noteworthy, however, that in all these countries, with the exception of the U. S. S. R., the pattern is somewhat similar except in respect of industry where U. K. shows a larger proportion and Japan a smaller one and in respect of agriculture where Japan has a very high proportion and U.K. a very small proportion. In the case of construction, transport and communication, and trade, there is a considerable measure of similarity. The U.S. S. R. presents a somewhat different picture in so far as the proportion under agriculture is higher but it must be remembered that the figures relate to 1937 (*i.e.*, at the end of their Second Five Year Plan) and also that in terms of absolute numbers, they had to deal with a much larger population when they started their programme of economic development ; this explains both the high percentage under agriculture and the smaller percentage, as compared to U.S.A. and U. K. under industry in the U. S. S. R. What is of greater interest is the comparative similarity of the pattern in respect of construction, and transport and communications, and the startling differences in the pattern in respect of trade and the services. The experience of the U. S. S. R. has perhaps more relevance to the Indian

problem than that of U. S. A. or U. K., as she also started late, had to deal with a large population and went in for planned economic development; only our pace of change in terms of the occupational pattern may have to be slower in some cases and also a little different partly because of the much larger size of our population and the change in absolute numbers that even a small percentage change in the occupational pattern involves and partly because our State is a parliamentary democracy and has a large place in its economy for the private sector.

In discussing the composition of the employment pattern that we want to see in India, and that is within the bounds of practicability, it is useful to separate the long from the short period. For this purpose, we take the long period to consist of four five year plan periods including the first, which means that the target year would be 1971; we take the short period to cover the Second Five Year Plan which means that the target date would be 1961. We present a picture of the employment pattern visualised for 1971. It is assumed that the population will number 458.5 millions in 1971 (*vide* Census Report, p. 179). It is also assumed that the employment pattern in 1956 or the opening year of the Second Five Year Plan would be the same as that revealed by the 1951 Census tables and that the labour force would continue at 40 per cent of the total population.

TABLE 4.—*Employment Pattern in 1971.*

Category	1956		1971		Difference between 1971 and 1956	
	No. in mil-lions.	Percentage of each to total	No. in mil-lions	Percentage	No. in mil-lions	Percentage
Agriculture	109.0	71.9	112.0	58.0	3.0	-13.9
Industry	14.7	9.7	31.0	16.1	16.3	+6.4
Construction	1.5	1.0	6.0	3.1	4.5	+2.1
Transport & Communication	2.3	1.5	7.0	3.6	4.7	+2.1
Trade	7.7	5.1	12.0	6.2	4.3	+1.1
Services.	16.4	10.8	25.0	13.0	8.6	+2.2
GRAND TOTAL	151.6	100.0	193.0	100.0	41.4	—

This will involve the creation of 41 million additional jobs or employment opportunities within a period of 15 years, truly a colossal task ; and yet, even with this, the employment pattern that will be reached will be comparable only to that reached by the U.S.S.R. in 1937 after two five-year plans and that reached by Japan in 1950 ; it will still fall far short of the pattern reached in the U. S. A. in 1950. In fact, I don't think it will ever be possible for this country to reach the U. S. pattern within any measurable distance of time and India is bound to have agriculture and allied occupations as the most important livelihood class of its labour force. I believe that the pattern I have presented for 1971 is the best that can be achieved in terms of agricultural and non-agricultural occupations, though there may be differences about the exact distribution of the non-agricultural labour force among its component categories.

It may be of some interest to set out the income assumptions of the employment pattern proposed for 1971. It is expected that at the end of 15 years from the commencement of the Second Five Year Plan, national income would increase by about 125 per cent, which gives a flat rate of increase of about 8 per cent a year ; in actual fact, the rate of increase is likely to be highest during the Third Five Year Plan, while it may be a little lower or a little higher in the Fourth Five Year Plan period as compared to the Second Plan period. Part of the increase would be due to the increase in the number of the labour force, part due to increase in productivity per head, and part due to the proposed shifts in the occupational patterns. Broadly speaking, the assumption is made that, as compared to 1956, the position in 1971 would be that income from agriculture and allied occupations would increase by about 70 per cent, that from industry by 300 per cent, that from construction by 500 per cent, that from transport and communications by 300 per cent, that from trade by 200 per cent and that from services by 150 per cent. The *per capita* income in each category will of course rise in different proportions, as the rate of increase in numbers will differ widely from category to category.

The next question is about the employment pattern visualised for the short period, *i.e.*, as it is visualised in 1961 or at the end of the Second Five Year Plan. In making up this pattern as well as the one for 1971 set out previously, I have been influenced by the changes in employment pattern that have accompanied economic development in some countries for which data of some sort is available. Thus, *e.g.*, we find that in the case of the U.S.A. construction and transportation and communication increased faster during the earlier period of development with industry, trade, and services following suit in that order. In the U.S.S.R. construction increased fastest during the earlier stages of development, and so did trade, while industry, transport and communication increased more slowly, and services actually declined in importance during the earlier period. In Japan, industry including construction and commerce including transport and communication rose fastest during the earlier years of development, while services rose at a somewhat slow rate. The trends, hazy as they are, seem to be real and could also be explained in *a priori* terms if one regards construction and transport and communications as the overheads of industrial development especially in a large country, industry itself as the beneficiary of the development of these overheads, and services as both an accompaniment but more an aftermath of industrialisation, urbanisation and rise in consumer demands.

Presented below is the employment pattern I visualise for 1961.

TABLE 5

Category	1956		1961		Difference between 1961 & 1956	
	No. (in mil- lions)	%	No. (in mil- lions)	%	No. (in mil- lions)	%
Agriculture	109.0	71.9	107.8	66.9	-1.2	-5.0
Industry	14.7	9.7	17.3	10.7	+2.6	+1.0
Construction	1.5	1.0	3.7	2.3	+2.2	+1.3
Transport & Communication	2.3	1.5	4.0	2.5	+1.7	+1.0
Trade	7.7	5.1	9.7	6.0	+2.0	+0.9
Services	16.4	10.8	18.7	11.6	+2.3	+0.8
TOTAL	151.6	100.0	161.2	100.0	+9.6	-

It will be seen that greatest emphasis is placed on construction, followed by transport and communication, trade, industry, and services in that order ; a small decline is postulated in the agricultural sector. The importance given to trade is based mainly on the fact that it is the most elastic source of livelihood in the private sector and one that requires a smaller measure of organised effort than is the case with the other livelihood classes.

The pattern postulated above requires the creation of 10.7 million jobs and employment opportunities during the Second Plan period. Assuming that there will be no change in the present pattern of employment as between employees or hired workers, and independent workers, including employers, the proposed pattern will involve the creation of 4.8 million actual jobs in the period and of fresh employment opportunities for 5.9 million persons in the non-agricultural (this does not mean non-rural) sector. The probable distribution of these employees and independent workers over the different non-agricultural categories is given in the following table.

TABLE 6

Category	No. of Employees (in mil- lions)	No. of inde- pendent workers & employers (in millions)	Total workers (in mil- lions)	Ratio of employees to total workers in each category (Percentage)
Industry	1.0	1.5	2.5	40
Construction	1.0	1.2	2.2	45
Transportation & Communication	1.2	0.5	1.7	71
Trade	0.4	1.6	2.0	20
Services: (a) Health, Education and Public Administration	0.6	0.1	0.7	86
(b) Other Services	0.6	1.0	1.6	37
Total Services	1.2	1.1	2.3	52
Total—Non-Agricultural Workers	4.8	5.9	10.7	45

With a view to indicating more clearly the actual path I visualise for bringing about the proposed change in employment pattern at the end of the period, I give below a table giving the break-down by categories of the pattern visualised during each year of the Second Plan.

TABLE 7

(No. of workers in millions)

Category	1956	1957	1958	1959	1960	1961
Agriculture	109.0	108.9	108.7	108.5	108.2	107.9
Industry	14.7	14.9	15.2	15.7	16.4	17.2
Construction	1.5	2.3	3.3	3.5	3.6	3.7
Transport & Communication	2.3	2.5	2.8	3.1	3.5	4.0
Trade	7.7	8.0	8.3	8.7	9.2	9.7
Services	16.4	16.6	16.9	17.3	17.9	18.7
TOTAL	151.6	153.3	155.2	156.8	158.8	161.2

It will be seen that the largest share of the proposed increase in employment is assigned to construction in the first two years, while industry and trade get pride of place in the last three years of the Plan. Trade is assigned a more or less steady rate of annual increase, while employment in the services records a sharp increase in the last two years of the Plan. The pattern proposed here differs sharply from the Soviet pattern in respect of the greater importance that is assigned to trade and services; otherwise it is similar to the Soviet pattern as well as to the patterns of the other developed countries.

Discussion so far has been largely confined to finding employment opportunities for the anticipated natural additions to the labour force during the Second Five Year Plan period, except for the provision that is made for the transfer of 1.2 million persons from agricultural to non-agricultural occupations. It is now necessary to take account of the presence of unemployment, under-employment, and disguised unemployment in the Indian economy. The only unemployment figures that are available are in respect of persons who register themselves with the employment exchanges in the country. Approximately 6 lakhs of persons are so registered, but of this number about one-third are probably already in employment and have registered themselves in search of better jobs. That leaves a figure of 4 lakhs for whom employment has to be found within the Plan period. This figure of 4 lakhs of unemployed does not make any allowance for the urban unemployed who fail to register themselves, nor does it include the rural unemployed. Some light is, however, thrown on the latter by the data collected in the course of the All-India Agricultural Labour Enquiry conducted in 1950-51. According to that Enquiry, about 16 per cent of cultivating labourers were totally unemployed, which gives a figure of 24 lakhs as the number of unemployed among agricultural labourers. No information is available about the unemployed among the non-agricultural workers

in the rural areas who number about 49 lakhs. If we apply to them rate of unemployment that is half of the rate found among agricultural labourers, we get a figure of about 4 lakhs as the number of unemployed among non-agricultural rural workers. If in addition we allow an arbitrary figure of 2 lakhs as the number of unemployed urban workers who fail to register themselves, we get a total of 34 lakhs as the number of unemployed persons in India, which works out at a little more than 11 per cent of the total number of workers who are or have been employed, the census definition of an employee being "a person who ordinarily worked under some other person for a salary or a wage in cash or in kind as a means of earning a livelihood".

Then there are the under-employed and the disguised unemployed. The Agricultural Labour Enquiry Report estimates the extent of under-employment as being, on an average, 82 days of unemployment in a year for 84 per cent of the agricultural labourers who have some employment during the year. This means that about 125 lakhs of agricultural labourers do not have employment for 82 days in a year. On the assumption that 300 days constitute a full working year, this works out at 34 lakhs of unemployment in terms of man years. No information is available about the extent of under-employment among the 487 lakhs of non-agricultural workers in the rural areas nor among the 86.7 lakhs of urban workers, especially of that number who work in small-scale establishments. Any figure that may be given in this connection is bound to be of the nature of pure guess work and cannot claim statistical validity. On the assumption however the under-employment among non-agricultural workers would be at least half of that among agricultural labourers and after taking into account the estimate made above of the wholly unemployed among these workers, we get a figure of 15 lakhs of unemployment in terms of man years. Taking both agricultural and non-agricultural workers and rural and urban areas together, the volume of under-employment could be estimated at 49 lakhs of unemployment in terms of man years.

In addition, there is the problem of disguised unemployment. A person is in a state of disguised unemployment, if his removal from his current economic activity does not result in any diminution of the current output of the field of economic activity in which he is engaged. It is very difficult to give any estimate of the volume of such disguised unemployment. The number of earning dependants who by definition are at work but do not get an income sufficient even for their own sustenance and have to depend on others is perhaps some indication of the extent of disguised unemployment in the community; and the fact that a majority of the earning dependants are following agriculture as their occupation lends support to the view. The number of earning dependants as disclosed by the 1951 Census was 38 million of whom 28 million were in the agricultural livelihood class and 10 million in the non-agricultural livelihood classes. There is also no doubt that even among those who are returned as self-supporting persons either in agricultural or in non-agricultural classes and are not employees, there must be a certain extent of disguised unemployment. This would be particularly true of the agricultural sector where the man-acre ratio is much higher than in most of the developed countries. It is however not possible to make any estimate of the volume of this disguised unemployment as it turns primarily

upon the methods of production followed. All that can be said about disguised unemployment would be that it is large in volume, is numbered in terms of million rather than in millions, and represents a reserve labour force that can be brought into more fruitful activity with the advance of industrial development and the decline expected to take place at some future date in the annual additions to population and therefore to the labour force. Till such time, however, what is likely to happen would be not so much a significant fall in the number of the disguised unemployed as an increase in their turnover, some of them finding opportunities for more productive employment, but getting replaced by others who would be fresh recruits to the labour force resulting from the annual growth of the population.

Leaving out therefore the problem of disguised unemployment at least for the purpose of the Second Five Year Plan, there still remains the problem of 34 lakhs of wholly unemployed, and a volume of under-employment equivalent to 49 lakhs of unemployment in man years. The problem of employment therefore in the Second Plan period is much larger than that of merely finding employment for the additions to the labour force resulting from the growth of population. It must include provision for giving employment to the wholly unemployed, and also make some provision for partial or seasonal employment to those who are subject to a state of under-employment due to the nature of the activity in which they are engaged. The pattern proposed by us for the Second Plan provides for employment opportunities for 10.7 million persons ; whereas the estimated additions to the labour force by growth of population together with the estimated number of the unemployed (leaving out under-employment and disguised unemployment) comes to 13 million persons. The employment pattern proposed in this paper would therefore still leave a certain volume of under-employment at the end of the Second Plan period, *viz.* 23 lakhs. This however would be smaller than the estimated volume of unemployment at the beginning of the Second Plan period by 11 lakhs or nearly 33 per cent. Either we have to rest content with that situation or step up the size of the Second Five Year Plan. The employment pattern proposed must also include additional provision for seasonal and other kinds of partial employment specially designed to deal with the problem of under-employment, particularly among rural workers for whom it is a major problem.

We may now turn to a brief account of the policies involved in the implementation of the employment pattern proposed in this paper for the Second Five Year Plan. The employment pattern involves the creation of employment opportunities for 10.7 million persons, of whom 4.8 million have to be actual jobs ; in the process, it also involves the shift of 1.2 million persons from the agricultural to the non-agricultural sector. It is also presumed that in the process of finding employment opportunities for these 10.7 million persons, there will be capital formation, and growth and practice of technical knowledge so that there will be an increase in productivity on the part of those already in employment. Development does not only mean more jobs ; it also means that existing jobs will result in more output and therefore greater income. In fact, the major objective of policy has to be increased in productivity ; and it is in the process of doing so that additional employment has to be found rather than the other way about. For our economic problem is not so much one of the

unemployment as of low productivity ; and it is against this background that an employment policy has to be formulated for the Second Five Year Plan.

The second thing to note about employment policy is the need for organising the supply of labour for providing the 4·8 million jobs visualised in our pattern. Theoretically, the existence of a large volume of unemployment and the substantial additions that are made to the labour force every year by the growth of population should perhaps make such organisation unnecessary. In actual fact, however, labour in India has a great deal of lack of mobility as between rural and urban areas, and as between different occupations. It also suffers a great deal from lack of training either in skills or even in disciplined or regular hours of work. There is also the further fact, so glaringly revealed by the findings of the Agricultural Labour Enquiry and the National Sample Survey Rounds, that large sections of the working force in rural areas obtain either wages or incomes much below the national average; and social justice demands that this class, which in a way is the most exploited class in the country, is given the first chance to improve its condition when new jobs are being created in the country. Moreover, the incidence of the distribution of this class is unevenly spread over different parts of the country and social justice again demands that special attention is directed to what may be called the distressed areas in the country as distinguished from other areas which are comparatively better off, though in absolute terms their condition is no matter for satisfaction either. In view of these facts, I would suggest the organisation of a National Labour Force, recruited from the classes which at present have either little or no income and particularly from those areas where the incidence of economic distress is comparatively high. The N.L.F. should be recruited and organised on a semi-military basis, provided with food and clothing, and given a certain amount of training in literacy, consciousness of national unity and purpose, and skills. Their primary job should be constructional activity ; and they should be used for building dams, factories, roads, schools, hospitals, public buildings, and townships. I would suggest that preliminary steps for the organisation of such a Force should be taken before the commencement of the Second Plan, and that before the end of its first year, there should be a N.L.F. of half a million persons, and it should reach a total of 1 million well before the end of the Plan period. Supplementing this force would be, as envisaged in the pattern, employment opportunities for another 1·3 million independent workers and employers in the construction trades, whose main task would be to deal with the constructional requirements of the private sector especially with reference to residential housing. For obtaining the 3·8 million workers postulated in the pattern for non-agricultural activities other than construction, it is also necessary that there should be organisation. Labour has to be recruited for the purpose and vast training schemes instituted for enabling them to work with discipline and efficiency. Tentatively I would suggest the creation of National Labour Camps all over the country where people who seek employment should spend a brief but defined period of time ; and I would further suggest the possession of a certificate of such stay in a National Labour Camp as an essential condition for all employment on a wage or salary as from the commencement or at any rate from a fairly early part of the Second Plan period. Regarded superficially, all this may seem to smack of the dreaded phenomenon of regimentation. In fact, however, it would be nothing of the kind. The National Labour Force

and the National Labour Camps are only a way of bringing about fairly rapidly a sense of discipline and a state of skill in the Indian Labour Force without which there can be no real or substantial increase in productivity or in national income. Nor can one regard as irrelevant the effect these will have in promoting a sense of national unity so badly needed in a vast country such as ours with its many languages, races, and creeds and not yet forged into a proper appreciation of unity in diversity by long years of political dependence. It must also be emphasised that the expedients suggested above would function in a democratic set-up and within the framework of a parliamentary system of government. National Labour Force and National Labour Camps may have a bad odour about them by virtue of their historical association. But words derive meaning from their context ; and I suggest that in the form suggested here and in the Indian context, they need not create fears of regimentation.

The third factor that has to be taken into account in regard to employment policy is the need for organising the supply of employment opportunities for the 5.9 million independent workers and employees visualised in the pattern. Incidentally, this organisation would also be useful from the point of view of finding the 4.8 million jobs referred to in the previous paragraph, as a considerable proportion, perhaps the majority, of these jobs will be in the private sector not only in the sense of private employment but also in the sense of catering for the investment and consumption needs of the private sector. It is therefore very important to provide a positive policy for stimulating employment opportunities in the private sector. In this connection, I suggest that due account must be taken of the fact that the bulk of these new employment opportunities and jobs in the private sector should be of a labour-intensive type and not require substantial investments of capital especially of fixed capital. At the same time, ample scope should be provided for the supply of working capital and small amounts of fixed capital to entrepreneurs in the small-scale and cottage sectors of economic activity. Expansion of this type of activity would, in turn, involve the adoption of a policy that would bring about due coordination between large-scale and small-scale units in economic enterprise and the planning of a common production programme. It is also necessary that in stimulating employment opportunities in the small-scale sector, due account is taken of the need for technical progress and improvement in methods of production ; and for this purpose it may become necessary to have a planned locational distribution of at least a part of these employment opportunities by the creation of numerous small industrial townships in different parts of the country. In addition, the creation of new employment opportunities and jobs on the scale set out in the pattern would require a planned but rapid increase in social services and social welfare activities of the Central, State and Local Governments.

Finally, the employment policy should provide ample opportunities for promoting seasonal and other types of partial employment that would make a direct impact on the state of under-employment in the Indian economy, especially in the rural areas. For this purpose, special attention should be paid to local projects and local schemes and local co-operation obtained in both the planning and implementation of these schemes and projects. To some extent, this is already being done under the First Five Year Plan and especially in the National Extension Service Blocks and Community Project Areas. All that is needed is a stepping

up of this programme in the Second Plan and the greater mobilisation of local talents and ideas in both the planning and implementation of these projects.

In conclusion, I would again emphasise that the primary objective of economic development is increase in productivity and increase in output. Additional employment is a by-product of development rather than its essential cause. At the same time, in the peculiar context of Indian economic conditions, with its large measure of unemployment, underemployment and disguised unemployment and the rapid growth of its population, it is essential that the objective of maximising employment should be kept prominently in view in framing the programme for development.] The ideas presented in this paper are intended to co-ordinate the needs of employment with those of development and set out a pattern that will also be within the bounds of a reasonable measure of practicability. For obvious reasons, what is presented here is only a first draft and constitutes a provisional view rather than a fully worked-out and mature scheme of ideas.

THE SECOND FIVE YEAR PLAN—EMPLOYMENT APPROACH

by

SHRI B. N. DATAR

The need for a wider perspective for planning was recognised in the First Five Year Plan, when in discussing the social and economic aspects of planning it was stated, "while there is need for concentrating effort on the more immediate problems, planning implies the readiness on the part of the community to view social process as a whole and to take action designed to shape this process along desired lines over a defined period". Further in presenting a broad outline of investment, income and economic development, certain calculations were given regarding the time required for doubling national income on the basis of (i) a certain proportion of additional income re-invested each year beginning from the current year 1955-56 and (ii) some specified values of capital-output ratio which would be attained in the economy as it progresses. The Plan, however, did not go beyond stating these broad principles, since it was then primarily concerned with relatively short period considerations. Now that the aim of the First Plan, namely, the building of a base for future planning seems more or less to have been achieved, it is necessary that the Second Plan should be viewed from a wider perspective lest the immediate pressures pull an undue weight at the cost of long-term good. In other words we have to define more precisely what is meant by 'desired lines' and 'defined period'.

2. The term 'desired lines' has been sufficiently elaborated in a number of papers which have already been circulated. Broadly by proceeding on these lines we aim to arrive at a specified increase in the national income, fuller employment and social justice. While 'defining' the 'period', it may be stated that shorter the period, the less the scope for subjective decisions for directing the economy on to a new plane. It is so, because in a relatively short period of one or even five years the objective considerations may pull greater weight and the institutional and structural changes required for some desirable pattern may look formidable. But as the time horizon is enlarged, the number of patterns into which the productive resources can be interwoven increases and there is correspondingly greater scope for arriving at appropriate decisions. Thus, if a view is built up over a longer period, it will naturally make the approach bolder. But at the same time while enlarging the time horizon, care is to be taken that it is not so widened as to unmanageably increase the number of imponderables. Again, due regard is to be given to the Government pronouncements from time to time about the period by which achievement of certain objectives is promised. It is stated that over unemployment has to be eradicated in 10 years. If, however, the problem of under-employment is to be simultaneously tackled, it is not unreasonable to expect that the process will take a longer period, say 15 years. Again, if this objective is pursued vigorously, it might be possible to achieve a doubling of per capita income by 1971 or even earlier, instead of by 1977, as was stated in the Plan. In this

paper it is, therefore, proposed to have a broader vision of our economy, particularly employment, with the configuration of demand and production pattern 15 years hence and to conceive the Second Five Year Plan as the first of three links in the chain of our developmental effort.

3. It may be added that by pursuing such an employment approach to the Plan we do not side-track the other objectives like the rise in the standards of living and distributional justice. Fuller employment would naturally mean more per capita income, if the output per worker does not decline ; it also means higher standards of living. This increase in the income per family would, to some extent, reduce over-all income disparities, assuming that our fiscal tools will not allow the persons in higher income brackets to get away with a greater share of increased national income. Again, when we think in terms of fuller employment, we necessarily mean that such employment would provide to the unemployed person a socially desirable return for the effort involved and also there would be sufficient opportunity for him to put in the effort desired of him by the community.

4. Having said this, it is necessary to indicate broadly the method of analysis proposed to be followed in the subsequent Sections :—

- (i) In the beginning we work out the total number of jobs necessary to provide full employment by 1971.
- (ii) The next step is the determination of that level of economic activity which could sustain full employment. It has been estimated that for this purpose the national income will have to be stepped up to slightly more than double in 1971. It is then proposed to build up the production and employment patterns for this level.

II

5. To assess the number of jobs to be created by 1971, it is necessary to discuss briefly our employment problem. In the first place we should distinguish it from that of industrially advanced countries, where 'the number of persons' analysis works adequately because of the existence of organised labour markets. This is, however, not the case in our economy, where the degree of immobility of labour and regional and hereditary occupational preferences, especially in rural areas are quite strong. There is, therefore, a considerable force in the suggestion that in our case "labour-time-disposition"* is more relevant. Then, again, it is not the magnitude of the problem which alone is important ; with it should go the direction also. For instance, if it is intended that seasonal unemployment of agriculturists is to be tackled, creation of employment opportunities in urban non-agricultural sector may not provide an immediate solution.

*In this connection the Central Statistical Organisation is busy drawing up a Manual for employment and unemployment surveys, complete with definitions, sampling procedure, tabulation programmes and the like for the guidance of the agencies desirous of undertaking such surveys. The concept of labour-time-disposition is explained elaborately in this Manual.

6. In the light of these observations, it would be useful to estimate the size and character of the problem of reducing unemployment to its frictional level by 1971 (allowing the usual 3 per cent for friction). The stages in this estimation would be—

- (i) assessment of the magnitude and nature of unemployment in 1951 on the basis of Census data ;
- (ii) estimating the annual increase in the labour force during the period of the Plan;
- (iii) estimating the addition to the employment opportunities during the First Plan period.

These three estimates will give us the starting point for the Second Five Year Plan.

And then (iv) assessing the working force in 1971.

With these data it would be possible to get the magnitude of the problem which requires to be tackled in the next 15 years.

7. As has been stated very often, it is difficult to analyse the situation from the Employment Exchange data alone, though a paper on what those figures have to say has already been circulated. A different approach has, therefore, been adopted for this paper. Assuming that those in the age-group 15 to 60 are taken to constitute the employable block, it is possible to find out the total employable population in the year 1951. It is true that some recent surveys have indicated that a small percentage of persons in the working force are below the age of 15 ; a significant proportion of persons over 60 also contribute to the working force. The preliminary analysis of the results of one of the rounds of the National Sample Survey conducted recently revealed that in the economy as a whole out of the total population of those aged 62 and above, roughly a third were still working. Similarly about 3.2 per cent of the children were also working. It may be stated that with increasing emphasis on the achievement of a Welfare State, there will be a public policy to discourage employment of children on social grounds, but for the upper age, it seems for the purposes of our calculations, it would be appropriate to extend the age-limit to 64 in the absence of any provision regarding old-age pensions. Further all females in the working age-group do not seek employment. In 1951 the number of females in the working force in rural areas constituted about 48 per cent of the number of females in the working age-groups ; in the urban areas this proportion was 22 per cent. For the country as a whole 44 per cent of the employable females were thus actually employed. With increasing urbanization this proportion of working females might be expected to decrease. But an allowance has to be made in respect of those females who are in the employable age at present and who want gainful employment but do not get such employment. Taking the two factors together, we will, perhaps be justified in assuming that for full employment to be reached in 1971, it will be sufficient if the percentage of employment among females is increased to 50 per cent. Taking into account, therefore, at the starting point, *i.e.*, year 1951 all males in the age-group 15 to 64 and 44 per cent of females, the employable population in 1951 comes to about 14.88 crores or 41.7 per cent of the total population. If conditions of full employment existed in 1951, making an allowance of 3 per cent for frictional unemployment, the total working force would have been 40.4 per cent. Looking at these figures from another angle this suggests that the non-earning dependants in the population as a whole should have been

59.6 per cent. A comparison with the actual figures of non-earning dependants from the 1951 Census (analysis in Appendix 'A') shows that in the urban areas about 5.4 per cent of the population, that is about 33 lakhs could be considered unemployed in 1951. It may be mentioned, however, that this includes both (a) persons who seek jobs but are unemployed and (b) persons who do not seek jobs. A number of surveys have been recently undertaken in urban areas by Government and non-Government agencies. While admittedly the definitions of unemployed adopted in these surveys are not strictly comparable, a general impression that one gathers from these surveys is that roughly the unemployment in urban areas is of the order of 10 per cent. On this basis the estimated unemployment in urban areas comes to about 25 lakhs. To be on the safe side, therefore, it would be useful to work on the basis that the unemployment in urban areas was of the order of 3 millions in 1951.

8. For an assessment of under-employment we may examine the earning dependency both in the urban and rural sectors. In the former it will be found that of the non-agricultural population of 53 millions, about 21 lakhs, *i.e.*, 3.8 per cent were earning dependants. The corresponding figure for the urban agricultural sector is 8.7 per cent. This means that the incidence of under-employment is more pronounced in agricultural occupations. The corresponding figures for the rural areas are 8.8 per cent and 12.6 per cent, which shows that the problem of under-employment in rural areas is more acute. The percentages given above are, perhaps, not helpful in drawing up measures for relieving such under-employment, but in the absence of comprehensive data on the subject it is difficult to provide a firm answer. Such data on the subject as exist, however, are reviewed in the next paragraph with a view to indicating the upper limit for the measure of under-employment.

9. The Agricultural Labour Enquiry reveals that there are 17.7 million agricultural labour families. In his report on '*DISPOSAL OF FOOD SURPLUSES TO AID ECONOMIC DEVELOPMENT*' Shri Dandekar has estimated that the level of earnings of these families will have to be increased by 36.5 per cent on the basis of a minimum earning of Rs. 350/- per annum per income unit. This suggests that job opportunities equivalent to 36.5 per cent of the population studied by him would have to be created. The survey of rural employment in U. P. (July 1954) does not distinguish between the agricultural and non-agricultural classes, but treats the problem of under-employment as a whole. It would appear from the survey that under the category 'under-employed' the loss of man-days has been shown as 19 per cent of the total working days. But even on days when work was available, there was loss of man-hours estimated at about a third of the working hours. This means that of the 81 per cent of the days worked a third should be added to the loss of man-days of 19 per cent. Thus the intensity of under-employment is equivalent to an unemployment of 46 per cent, *i.e.*, slightly less than six months. The Faridabad Survey measures the intensity of employment in the case of earning dependant females alone in the non-agricultural sphere. On the basis of these figures the weighted average of the intensity of employment of such females works out at 57 per cent, *i.e.*, about 7 months in a year. In a survey conducted on behalf of the A.I.C.C. in the rural areas of Delhi in 1953 it has been estimated that agricultural labour gets work for about 5 months in a year. The incidence of under-employment in the non-agricultural classes

varied from 3 to 8 months according to profession. The only survey which seems to be more explicit on the issue of under-employment is the one conducted in Travancore-Cochin. This gives the period of unemployment of the irregularly employed in the agricultural and non-agricultural sectors in urban and rural areas. The agriculturist, according to this survey, remains unemployed for about 7 months, while in the non-agricultural occupations the incidence of unemployment is of about 5 months for the irregularly employed. (It is not known whether this class of irregularly employed corresponds to the earning dependants of the Census.) Here, again, the lack of uniformity in the concepts makes it difficult for drawing comparisons between regions and also to build up an over-all estimate for the economy as a whole. But one can fix an upper limit at least for some sections of the labour force on the basis of the evidence described above. The following Table represents broadly the magnitude of unemployment taking into account persons who have less than full-time employment.

TABLE I

(1) Absolute unemployment (largely urban)	.	.	.	30	lakhs	for	12	months
(2) Under-employment								
(i) rural agricultural	.	.	.	303	”	”	7	”
(ii) rural non-agricultural	.	.	.	48	”	”	6	”
(iii) urban agricultural	.	.	.	8	”	”	7	”
(iv) urban non-agricultural	.	.	.	21	”	”	6	”

10. It is true that one must recognise the difference between (1) and (2) in the Table above. (1) represents the number of jobs required to be created, whereas (2) relates to the additional work to be provided during parts of the year or even during the parts of the day. But for getting an idea of the dimensions of the job opportunities to be created the idle man-months can be converted into years and it may be stated that in 1951 about 24 million man-years of employment were required for keeping the economy in good gear from the employment point of view. This again, it must be emphasised, is the upper limit of the job opportunities required in 1951, leaving aside, of course, the self-supporting persons in agriculture.

11. To this load as it existed in 1951 may be added annual accretions to the employable population which is of the order of 1.8 to 2 millions. This means that during the First Plan period there would be an addition of some 10 million persons to the employable population. As against this the estimated increase in employment, as a result of the Plan (details in the Paper already circulated), is of the order of 5 million jobs, excluding the employment generated in the unplanned sector. Now investment in the planned sector roughly accounts for 60 per cent of the total investment in the economy. On this assumption about 3 million jobs would be created outside the sectors which have accounted for 5 million jobs. Thus in the economy as a whole, if the investments of the order indicated in the Plan are achieved by 1956, we should have created about 8 million jobs. (Perhaps, this is an over-estimate and to be

on the safe side we may as well assume this figure to be 6 to 7 million.) The position, therefore, in 1956 would be as follows.

TABLE 2

Unemployed at the beginning of 1951 including under-employed	24 million	
Plus	9 million	Added to the working force in 5 years.
Minus	6 to 7 million	Expected to be provided with jobs during the Plan period.
TOTAL	<u>26 to 27 million</u>	

12. In a paper prepared by the Indian Statistical Institute population estimates by broad age-groups have been given for 1956 and for 5-year intervals thereafter. On the basis of these figures, the estimate of the number of persons between ages 15 and 64, assuming that all males will be counted and about 50 per cent of the females, over 32 million new jobs will be required by 1971 to absorb the increase in the labour force. With the backlog of 26 millions as in 1956, the magnitude of the problem to be solved in the 15 years is of the order of creation of 58 to 59 million jobs. This has to be distributed over three five-year periods. If, as is suggested at present, we propose to create 12 million new jobs by 1961, the employment aim of the third and the fourth Five Year Plans will have to be creation of roughly 18 million new jobs by 1966 and an additional 26 million jobs by 1971. If our expectation of having found about 7 to 8 million jobs during the First Five Year Plan is realised, the effort involved in the successive planning periods does not seem to be beyond our reach, as would be clear from the following Table.

TABLE 3

	1951-56	1956-61	1961-66	1966-71
Five Year Plan	I	II	III	IV
Employment generated (in millions)	7-8	12-13	18-19	26-27
✓ Increase in the tempo of development (employment angle)	4-6	6-7	8-9	

This means that if we maintain the tempo of development as envisaged in the last row of the Table, we would be creating not only the number of jobs required for full employment by 1971 but would also be in a position to encourage rationalisation on a larger scale after that date.

III

13. The level of economic activity that could maintain full employment in 1971 at increased consumption standards will much depend upon the technological facts of production which are likely to change in a period of economic transition. While in the short period, the exigencies of employment situation may dictate the adoption of capital saving methods, from the long run point of view, the employment as defined earlier, indicates that techniques which entail reduction in productivity per person should not be encouraged. The Calcutta Survey on Small-scale Industries reveals that in some industries introduction of machinery does not necessarily increase the output per worker to an appreciable extent. This, however, is not generally applicable to all the industries, where similar studies have shown that small machines can play a considerable part in augmenting the productivity per person. In some cases it may be possible to increase the out-turn per worker even with existing equipment through rationalization of management. In the case of large-scale industries, there will be pressure for rationalisation on the grounds that external markets have to be protected in the face of increasing competition. At the same time, increase in the non-agricultural labour force is likely to give an impetus to the trade union movement, which in periods holding threats of unemployment will resist such rationalisation. For the purposes of the present discussion, therefore, it is difficult to consider alternative techniques. Nevertheless, at some stage we have to make certain broad assumptions regarding the increase in out-put per engaged person in the process of development. A study of the employment pattern in relation to the net out-put from the broad production sectors in the starting year will be useful for making these assumptions. The picture of our economy for the year 1951 is given below from this angle.

1951

1. (i) National Income in 1951	Rs. 9,990 crores
(ii) Working Force	14.32 „
2. (i) Net output from the Agricultural Sector	Rs. 4,990 „
(ii) Agricultural Working Force	10.36 „
(iii) Output per engaged person in Agricultural Sector	Rs. 482
3. (i) Net output in the Non-agricultural Sector	Rs. 5,000 „
(ii) Working Force in the Non-agricultural Sector	3.96 „
(iii) Output per engaged person in the Non-agricultural sector	Rs. 1,263
4. (i) Investment outlay	Rs. 500 „
(ii) Consumption	Rs. 9,490 „
5. Estimated unemployment including under-employment in—	
(i) Agricultural Sector	18 million man-years
(ii) Non-agricultural Sector	6 million man-years

14. In view of the low output per engaged person in agriculture, it may seem desirable that the future additions to employable population should be absorbed in the non-agricultural sector. Alleviation of 18 million man-years of agricultural under-employment (earning dependants) may be given two interpretations. It may imply the provision of non-agricultural employment opportunities to the 31 million agricultural earning dependants (in 1951) in their period of unemployment. Or it may mean a transfer of 18 millions from agricultural to the non-agricultural sector. In fact, it will be partly one and partly the other. While this transfer of some has to be reckoned with, in the First Plan period there would in all probability have been some increase in agricultural employment. Thus it may be possible to assume that the agricultural working force in 1971 will not vary much from the 1951 figure of 10.36 crores. An implication of this assumption will be that the future requirements of increased production from land will have to be met through increase in productivity per engaged person, *i.e.*, the agricultural productivity will almost have to be doubled by 1971. At the same time, the output per worker in the non-agricultural sector will also increase, though not to the same extent because the additions to the labour force will be absorbed here. If it is assumed that the productivity in this sector will increase by 40 per cent during 1951-71, the output per engaged person comes to Rs. 1,768. This, however, does not mean that output per earner in the secondary sector and the services will increase by the same percentage. Now after having made some assumptions about the net output per earner in the agricultural and non-agricultural sector for 1971 and about the break-up of the employable population for that year, the following picture for 1971 emerges if conditions of full employment obtain in that year.

1971

1. Agricultural labour force	10.36	crores.
2. Output per engaged person in Agricultural Sector	Rs. 916	
Output from the Agricultural Sector	Rs. 9,490	crores.
Non-agricultural labour force	9.76	crores.
Output from the Non-agricultural Sector	Rs. 17,256	crores.
Total National Income in 1971	Rs. 26,746	crores.
Percentage increase in National Income over 1951	168	per cent.
Per capita National Income in 1971	Rs. 569	
Percentage increase in per capita National Income over 1951	107	per cent.
Investment outlay in 1971 (on the basis of 20 per cent of National Income)	Rs. 5,349	crores.
Consumption outlay in 1971	Rs. 21,397	crores.
Per capita consumption expenditure	Rs. 450	
Percentage increase over 1951	70.4	per cent.

15. This would suggest that if full employment is to be achieved by 1971, our target of doubling the per capita national income by 1977, as stated in the Plan, will have to be brought nearer to 1971, by which year the National Income would have increased by 168 per cent.

16. The First Plan stipulated an increase of 11 to 12 per cent in the period 1951-56. Now in the Working Paper "The Second Five Year Plan—A Tentative Frame Work" it has been estimated that this increase in the First Plan period would be of the order of 15 per cent. For the Second Plan a 25 per cent increase over 1955-56 is envisaged. This means that in the third and fourth Five Year Plans the National Income will have to be stepped up by 35 per cent (1961-66) and 45 per cent (1966-71).

IV

17. It has not been possible for want of time and want of data to draw up even a broad picture of the employment and population patterns for 1971. A few items have, however, been studied and an illustrative statement with an explanatory note is appended to this note (Appendix 'B'), more as an indication of the type of work that can be pursued. For preparing the illustrative statement, the production and the consumption pattern that is likely to obtain in 1971 has to be made a starting point. This implies that expansion in output in one sector has to be balanced by the corresponding demand and over a large range of production, a rising tempo of development has to be necessarily built up on an expanding home market. If consumption is starved, the generation of money incomes consequent on a bolder investment programme puts a heavy pressure on the price-wage structure and possibly hinders capital formation. It is important to note that at present even a marginal increase in production raises the problem of declining prices. Production of consumption goods, such of them as are considered essential, therefore, should be allowed to expand to the extent that will satisfy the rise in demand due to increasing population and rising income. However, in the matter of luxuries, this need not be the case. The Indian Statistical Institute, in one of its Paper No. 81 RU 6-8 have made some estimates of the demand elasticities for different consumer goods for different levels of increase in consumption expenditure. These can be used for forecasting the 1971 consumption pattern. It may, here, be pointed out that on the basis of 70 per cent increase in per capita consumption expenditure, the per capita consumption of cereals and pulses is likely to increase by 48 per cent. Taking into account the present rate of increase in population, production of foodgrains will have to be raised by 90 to 95 per cent by 1971. This justifies our assumption in Section III about the 90 per cent increase in agricultural productivity in this period. Having thus visualised the level of consumption of different commodities in 1971, it could be possible to work back the requirements of basic materials and other services by using Tables on inter-industry relations. This will give us a view of the whole economy in 1971.

18. One may question the validity of applying these elasticities to the population as a whole in 1971 with an occupational pattern different from the one existing at present. In fact in another Paper from the I.S.I. a doubt has been expressed about the use of those elasticities in a changing occupational pattern on the basis of experience in one State. Further work, of course, is necessary in this direction. Nevertheless we may treat the calculations on the hypothesis assumed by us as only a first approximation and admit that there is considerable scope for refinement in the analysis. Again, since the emphasis in this paper is more on methodology than on indication of definite production targets at this stage, such objections are not of much consequence.

19. It is again possible to criticise the approach advocated above on the ground that it ignores the likely changes in the community's preferences consequent upon the contemplated re-orientation of the distributive pattern. For instance, the flattening of the present curvature of the Lorenz Curve, which the adoption of socialistic pattern as social goal inevitably implies, is likely to alter the various demand elasticities, used to build up the whole structure in the above approach. This cannot be denied. All that is claimed, however, is that the approach is useful only to the extent that it enables the determination of certain co-efficients of relations in the economy, though static. There will be a need to determine such co-efficients periodically and, if the need be, to revise the structure so as to keep it in conformity with the changing elements.

20. Since the paper deals broadly with methodology, only a few items have been studied by way of illustration and the Table appended has been drawn up. The explanatory note attached to the Table indicates the manner in which different estimates in the Table have been worked out. The Table is incomplete both for want of time and want of data. Some of the assumptions in the applicability of this Table are already covered in the earlier discussion. There are others which may now be stated :—

- (i) General level of prices and their inter-relationship will remain more or less constant by 1971. This assumption is necessary for facilitating calculations.
- (ii) The export requirements have been assumed to bear the same proportion to the total internal consumption as in 1951.
- (iii) In regard to imports of commodities of basic importance like foodgrains, the economy will be self-sufficient.
- (iv) The regional differences in demand elasticities which play a considerable part in determining regional demands in this country, as shown in Shri Dandekar's recent paper on '*Disposal of Food Surpluses to aid Economic Development*' have not been taken into account.

21. On certain assumptions indicated in the explanatory note to the Table appended, we could get the employment pattern in 1971. And these employment estimates will be of special significance for a broad assessment of the technical personnel. While no shortage in respect of unskilled persons may be anticipated, the supply of technical personnel is likely to hinder any ambitious programme. For instance, as pointed out in his Presidential address to the Federation of Indian Chambers of Commerce & Industry by Shri B. M. Birla recently, it is expected that we will be increasing our iron and steel production by 4 to 4.5 million tons per year by 1960-61. The absorption of this additional output will necessitate a simultaneous growth of about 250 fabrication units of a reasonable size. He has estimated that a fairly large fabricating factory requires about 100 draughtsmen, engineers, foremen, designers, etc. This means that about 25,000 technical hands will be required in 1961 for the above purpose alone. At present our annual availability is only 4,500. This shows that if proper arrangements are not made for the supply of such trained personnel in time, the implementation of various programmes would become impossible. Such an assessment of technical skill

required over a period of 15 to 20 years will indicate the need of some change in the educational system which may have to be initiated at this stage.

22. Another point, not of immediate relevance, is the change in social attitude towards persons doing manual work. Complaints are often voiced by technicians on a number of projects at present in progress that the clerical staff is rated higher (though not for payment), while providing other amenities of life. This preferential treatment to white-collar work is inconsistent with the development of technical skills.

Illustrative Statement showing the employment that will be generated by 1970-71 in certain productive activities when full employment is assumed to correspond to an increase in per capita consumer expenditure by 70 per cent.

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Sl. No.	Commodity or Service	Production in 1951-52	Employment in 1951-52	Quantity to be produced by 1971	Expected employment in 1971 when no increase in productivity takes place	Expected employment when productivity increases by 40%	Additional employment to be created between 1951 and 1971	Jobs that may be available due to retirement (c) etc. of those employed in 1951-52 -100%	Net number of persons provided with jobs
1	2	3	4	5	6	7	8	9	10
1.	Edible Oils .	10,22,000 tons	196,000	2,319,000 tons	451,511	322,508	126,508	..	126,508
2.	Sugar . .	14.98 lakh tons	183,056(f)	27.19 lakh tons	332,288	237,348	54,292	..	54,292
3.	Coal (b) .	1.00 million tons	122,800	1.867 million tons	230,000	164,270	41,470	..	41,470
4.	Salt . .	27.33 lakh tons	36,800(a)	43.70 lakh tons	58,800	42,900	5,200	..	5,200
5.	Cotton textile (mills).	4200 million yards	714,470	(d)6300 million yards	10,71,718	7,75,513	51,034	..	51,034
6.	Cotton textile Services.	900 million yards	453,000	(h)3000 million yards	15,10,000	10,78,500	6,25,500	..	10,78,500
7.	Medical (graduates and licentiates).	..	64,062	..	188,790	(e)	1,24,728	64,062	1,88,790 (g)
8.	Nurses . .	..	19,080	..	56,228	(e)	37,148	19,080	56,228 (g)

THE SECOND FIVE YEAR PLAN

9. Midwives	65,424	(e)	43,224	22,200	65,424 (g)
10. Health Visitors	2,016	(e)	1,332	684	20,16 (g)
11. Nurse-Dais	2,548	(e)	1,684	864	2,548 (g)
12. Dais	10,904	(e)	7,204	3,700	10,904 (g)
13. TOTAL	325,910	(e)	215,320	110,590	325,910 (g)

Education

14. Primary teachers	537,918	..	1,853,126	(e)	1,315,208	537,91	81,853,126 (g)
15. Secondary teachers	212,000	..	730,340	(e)	518,340	212,000	730,340 (g)
16. Basic teachers	77,319	..	266,263	(e)	189,044	77,319	266,363 (g)
17. University teachers	21,056	..	72,536	(e)	51,480	21,056	72,536 (g)
18. Social Education Workers	40,857	..	139,825	(e)	98,968	40,857	139,825 (g)
19. TOTAL	889,150	..	3,062,190	(e)	2,173,040	889,150	3,062,190 (g)

NOTE.—In the Agricultural sector we assume that there will not take place any addition to the labour force already working in 1951-52.

(a) Computed on the basis that 42,600 persons work per day to produce 860 lakh maunds of salt.

(b) In this table the requirement of coal relates to domestic consumption only based on demand elasticity for 'fuel and lighting'. According to Coal Bulletin for October 1951, to produce 28 lakh tons of coal, 344,000 persons are required. On this basis to produce 1.00 million ton, 122,800 persons are required.

(c) It is assumed that 5% of the persons employed in 1951-52 retire every year. Hence at the end of the 20-year period the entire number of persons vacate their posts.

(d) Out of a total cloth requirement of 9,300 million yards, 6,300 million has been reserved for Mills and the balance for the handloom. This is a rough allocation.

(e) In the case of services allowance for productivity does not arise.

(f) According to the "Fifth Census of Indian manufactures", 125,867 persons are required to produce 10.43 lakh tons of sugar. On this basis 183,056 persons will have to be employed to produce 14.08 lakh tons.

(g) requirements of trained personnel over the period 1951-1971.

(h) in the handloom sector production of cloth is 6 yds. Per man per day. On this basis to produce 3,000 million yds., 500 million man-days will be required in 1971. This is equivalent to 1.51 million men if each man works for 330 days in the year.

Illustrative Statement showing the employment that will be generated by 1970-71 in certain productive activities when full employment is assumed to correspond to an increase in per capita consumer expenditure by 70 per cent.

Sl. No.	Commodity or Service	Production in 1951-52	Employment in 1951-52	Quantity to be produced by 1971	Expected employment in 1971 when no increase in productivity takes place	Expected employment when productivity increases by 40%	Additional employment to be created between 1951 and 1971	Jobs that may be available due to retirement (c) etc. of those employed in 1951-52 -100%	Net number of persons provided with jobs
1	2	3	4	5	6	7	8	9	10
1.	Edible Oils .	10,22,000 tons	196,000	2,319,000 tons	451,511	322,508	126,508	..	126,508
2.	Sugar . .	14.98 lakh tons	183,056(f)	27.19 lakh tons	332,288	237,348	54,292	..	54,292
3.	Coal (b) .	1.00 million tons	122,800	1.867 million tons	230,000	164,270	41,470	..	41,470
4.	Salt . .	27.33 lakh tons	36,800(a)	43.70 lakh tons	58,800	42,900	5,200	..	5,200
5.	Cotton textile (mills).	4200 million yards	714,470	(d)6300 million yards	10,71,718	7,75,513	51,034	..	51,034
6.	Cotton textile Services.	900 million yards	453,000	(h)3000 million yards	15,10,000	10,78,500	6,25,500	..	10,78,500
7.	Medical (graduates and licentiates).	..	64,062	..	188,790	(e)	1,24,728	64,062	1,88,790 (g)
8.	Nurses . .	..	19,080	..	56,228	(e)	37,148	19,080	56,228 (g)

9. Midwives	22,200	..	65,424	(e)	43,224	22,200	65,424 (g)
10. Health Visitors	634	..	2,016	(e)	1,332	684	20,16 (g)
11. Nurse-Dais	864	..	2,548	(e)	1,684	864	2,548 (g)
12. Dais	3,700	..	10,904	(e)	7,204	3,700	10,904 (g)
13. TOTAL	110,590	..	325,910	(e)	215,320	110,590	325,910 (g)

Education

14. Primary teachers	537,918	..	1,853,126	(e)	1,315,208	537,918	81,853,126 (g)
15. Secondary teachers	212,000	..	730,340	(e)	518,340	212,000	730,340 (g)
16. Basic teachers	77,319	..	266,263	(e)	189,044	77,319	266,363 (g)
17. University teachers	21,056	..	72,536	(e)	51,480	21,056	72,536 (g)
18. Social Education Workers	40,857	..	139,825	(e)	98,968	40,857	139,825 (g)
19. TOTAL	889,150	..	3,062,190	(e)	2,173,040	889,150	3,062,190 (g)

NOTE.—In the Agricultural sector we assume that there will not take place any addition to the labour force already working in 1951-52.

(a) Computed on the basis that 42,600 persons work per day to produce 860 lakh maunds of salt.

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(c) It is assumed that 5% of the persons employed in 1951-52 retire every year. Hence at the end of the 20-year period the entire number of persons vacate their posts.

(d) Out of a total cloth requirement of 9,300 million yards, 6,300 million has been reserved for Mills and the balance for the handloom. This is a rough allocation.

(e) In the case of services allowance for productivity does not arise.

(f) According to the "Fifth Census of Indian manufactures", 125,867 persons are required to produce 10.43 lakh tons of sugar. On this basis 183,056 persons will have to be employed to produce 14.08 lakh tons.

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(h) in the handloom sector production of cloth is 6 yds. Per man per day. On this basis to produce 3,000 million yds., 500 million man-days will be required in 1971. This is equivalent to 1.51 million men if each man works for 330 days in the year.

EXPLANATORY NOTE

We have referred to the Table of elasticity of expenditure on various items for an increment of the overall *per capita* expenditure by 70 per cent in Section III. In the case of foodgrains, a 70 per cent increase in overall *per capita* expenditure is accompanied by an increase in *per capita* expenditure on it by 48·9 per cent. Thus the total expenditure *per capita* on foodgrains will be 1·489 times that in 1951 at constant prices. This, when multiplied by the population in 1971 gives the total expenditure on foodgrains in 1971. But to arrive at the quantity of foodgrains required, we require an average price of the different foodgrains. These data are difficult to work out. Further the published prices relate to the wholesale prices, while consumers actually pay the retail prices. To obviate the difficulty of choosing a representative price for these commodities an alternative procedure was followed. We assumed that for any given commodity internal consumption (in physical terms) is approximately equal to total internal production available for consumption *plus* imports *minus* exports. This is fairly justified since we may reasonably expect that the total quantity stocked by retailers and wholesalers is constant from year to year. Dividing this by the population in 1951 we get the *per capita* quantity consumed in 1951. This value was multiplied by 1·489 and the product was again multiplied by the ratio of population in 1971 to 1951 to obtain the total quantity of rice or other foodgrains which will be consumed in 1971. Sugar requirements were similarly worked out. In the case of edible oils and cloth, on a similar basis, the requirement for home use and exports and industrial purposes were worked out. In the case of salt and milk, the N. S. S. first and third Round reports furnish the actual quantity consumed *per capita* in India. These were simply multiplied by the consumption elasticity and population ratios. In the case of certain items like education, medical services, and fuel and light, requirements in physical terms were worked out on the basis that the ratio of commodities or services required will be the same as the ratio of the total expenditure in 1971 to what it was in 1951. In the succeeding paragraphs description of the assessment of the total employment that may be generated and the estimates thereof have been given.

ASSESSMENT OF EMPLOYMENT

Agriculture

We assume that the present labour force engaged in agriculture will continue to remain constant till 1971 and that increased production has to be achieved, by increasing productivity of labour. Hence the question of assessment of labour required does not arise. According to the National Income Committee Report about 103,640(000) persons were engaged in agriculture and allied occupations.

Sugar

Sugar production has to be increased to the extent of about 27 lakhs tons by 1971. Assuming that productivity of labour increased by 40 per cent in industry, we require about 164,270 persons. On the basis that the number of hours worked per day remains the same as in 1950. It may be possible to assess further at a later stage how much of this labour force is represented

by technical, administrative and clerical personnel. Again we take that the entire consumption will be in the form of sugar. Thus by creating a certain amount of additional employment in the Sugar Mills we may be creating a certain amount of unemployment in the gur making industry, except to the extent required as a raw material for sugar production. Secondly, even in regard to sugar only the extent of direct employment generated by the increased quantity of sugar production envisaged has been estimated while the indirect employment resulting from increased demand for lime, limestone, sulphur and gunny bags for packing have been left out.

Salt

The requirement of salt in 1971 has been estimated at 43.7 lakh tons. It is known that to produce 860.9 lakh maunds of salt, the average labour input required per day is 42,604. Here again, the labour input required for the different methods like "evaporation of sea brine", "lake and other inland sources", and "cutting of rock salt" are different for a unit quantity of salt to be manufactured.

We have assumed that the relative share of production by the three methods will be more or less of the same order even in 1971. It is apparent that preparation of salt by the evaporation of sea brine seems to absorb more labour than others. It is quite likely that we may encourage future production to be made only by that method in which case our present estimate of employment will be on the lower side. Here also an increment in labour productivity of the order of 40 per cent has been taken account of. Secondly, it should be emphasised that our estimate of the labour requirement is in relation to direct human consumption. Supplementary estimates of the same for production of salt for use in the preservation of fish and other industrial purposes may have to be made.

Edible Oils

The total quantity of groundnut oil, mustard oil, rapeseed oil and gingelly oil that may be required by 1971 has been estimated at 23,19,000 tons even providing for exports and certain industrial uses on certain assumptions, we have assumed that production of these commodities by the mills will remain the same as it stood in 1950-51 so that the balance had to be made by village *ghanis*, etc. On these assumptions it appears that 3,22,508 persons may have to be engaged in this line of production.

Cotton cloth

It has been estimated that we may have to produce about 9,300 million yards of clothing by 1971. Current production of clothing by the handloom industry is of the order of 1,100 million yards (of Progress Report, 1953-54). Assuming that we allow for a small increase in this sector one might say that handloom should account for 3,000 million yards. In that case textile mills may have to produce the balance of 6,300 million yards. According to the "Fifth Census of Manufacture, 1950", we require about 132 crores of man-hours to produce 3,212 million yards. Assuming that (a) the mills work 8 hours per day, (b) work of 310 days in a

year and (c) the productivity increases by 40 per cent in a 15-year period, the mills may be able to employ about 7.6 lakh men. In 1950 they employed about 6,45,086 men. In the handloom industry the average production is of the order of 6 yards per man per day. Thus for 1,100 million yards labour input will be $3000/6$ million man days = 500 million man days. Assuming that he works for 330 days, the number of men required will be of the order of 66 lakhs. To this may have to be added some estimate of the employment generated by the yarn produced. If, however, a larger role is assigned to the cottage industries then our estimate may have to be revised. We have not tried to estimate the indirect employment arising out of the increased demand for the very large number of commodities which enter into the production of cloth by the mills. For example such chemicals and finishing materials like tallow, china clay, zinc chloride, gums and resins, sodium hydrosulphide, caustic soda, soda ash and bleaching powder, certain products for colours, and packing materials like papers, boards, cloth, etc. are all required. Some rough estimates can be obtained, on a *pro rata* or other basis for the industry producing each of these commodities, of the extent of additional employment that may be generated on account of the demand for these industrial products. Similarly estimates of resultant employment on account of increased demand for coal, coke, charcoal, fuel oils, electricity and lubricants which are required for such production may also have to be made.

Education

We expect that the total expenditure on education will be about 3 times what it was in 1951. This is due to elasticity of consumption (in broad sense) and the increase in population. We have multiplied the current staff strength by that quantity. Total staff requirement in 1971 will be as shown below.

Category	No. of teachers required in 1971	No. of teachers in 1951	Net additions required
Primary Education	18,53,127	5,37,918	13,15,209
Secondary Education	7,30,340	2,12,000	5,18,340
Basic Education	2,68,364	77,319	1,89,045
University Education	72,537	21,056	51,481
Social Education	1,39,822	40,587	99,235

If basic and social education are to get higher priority in the reorientation of education programmes, requirements under different heads may change *inter se* but in total personnel requirements will remain the same.

Medical

In the case of medical services the total expenditure in 1971 will be roughly 3 times what it was in 1951. This change is in terms of household expenditure. This should be something different from the expenditure which the Government contemplates to incur. This ratio may be used as a first approximation to get the medical personnel required in 1971 which is as under.

Category	Number of persons required in 1971
(a) Doctors	
Graduates	75,664
Licentiates	113,126
	188,790
	TOTAL
	188,790
(b) Nurses	56,228
(c) Midwives	65,423
(d) Health Visitors	2,016
(e) Nurse Dais	2,546
(f) Dais	10,903

Here it should be emphasised that in the absence of reliable information concerning items (b) to (f) in 1951, the appropriate figure for 1953-54 was taken and it was proportionately worked out. Thus the requirement of personnel other than doctors will be perhaps on the higher side.

APPENDIX 'A'

Figures in millions.

Rural Population 294.8					
Agricultural 81.5% (=243.4)			Non-agricultural 18.5% (=54.4)		
Self-supporting earners 28.6%* (=68.7)	Earning dependants 12.6%* (=30.3)	Non-earning dependants 58.8%* (=140.4)	Self-supporting earners 31.3%** (=17)	Earning dependants 8.8%** (=4.8)	Non-earning dependants 58.9%** (=32.6)

*Expressed as % of rural agricultural population.

** Expressed as % of rural non-agricultural population.

Urban Population 61.8					
Agricultural 14% (=8.7)			Non-agricultural 86% (=53.1)		
Self-supporting earners 26.7% (=2.3)	Earning dependants 8.7%* (=0.8)	Non-earning dependants 64.6%* (=5.6)	Self-supporting earners 30.8%** (=16.3)	Earning dependants 3.8%** (=2.1)	Non-earning dependants 65.4%** (=34.7)

*Expressed as % of urban agricultural population.

**Expressed as % of urban non-agricultural population.

Source : Census 1951.

ECONOMIC DEVELOPMENT AND OCCUPATIONAL DISTRIBUTION

(Economic Division , Planning Commission and Economic Division, Ministry of Finance)

Section I of this note describes the pattern of long-term change in the occupational distribution of the working force in a number of countries. Section II attempts to use this empirical evidence for projecting the occupational structure of India about 1971 on the assumption that the real national income of the country would be doubled between 1956-71.

I. CHANGES IN OCCUPATIONAL DISTRIBUTION IN SOME SELECTED COUNTRIES

2. Tables I to VI appended to this note describe the changes in the occupational distribution in six countries, namely, the United States (1870-1949), Great Britain (1841-1951), Japan (1872-1947), Germany (1892-1939), Sweden (1870-1945) and the U.S.S.R. (1926-1939) under the impact of economic development.

A number of more or less general features of the process of economic growth are rather distinctly brought out by these tables. For example, it will be noticed that the well-known shift in working population from agriculture and allied occupations to secondary and tertiary activities—the concomitant of growth—usually takes place in two separate phases. In the initial stage of economic development, although the proportion of the economically active population engaged in agriculture declines, *the absolute number* operating on land continues to move upward. That is to say, despite very considerable expansion in the secondary and tertiary activities, some increase in the number of people occupied in agriculture cannot be prevented. Table I would indicate that in the United States, whereas the proportion of the working population engaged in agriculture and related activities came down from 53·5 per cent in 1870 to about 27·6 per cent in 1920, over the same period the absolute number of workers in these activities actually increased from 6·9 million to 11·7 million*. Similarly in Great Britain, despite the proportion of agricultural workers declining progressively from 22·8 per cent in 1841 to about 7·0 per cent in 1921, the absolute number attached to agriculture showed a small rise. In the case of Japan, the proportion came down from 78·0 per cent in 1873 to nearly 42·6 per cent in 1940, but the number engaged increased from about 13·3 million to 14·4 million. In Germany also, a slight net increase took place between 1892-1939 in the number of persons engaged in primary activities.

3. The story is not repeated only in the case of the U.S.S.R., where not only the proportion of the working force but also the actual number engaged in agriculture came down very

*These absolute increases in the agricultural working force over the years can be worked out *via* the estimates of the total working force and the proportion engaged in agriculture.

sharply in the hectic years of development between 1926-39. The reasons for this special development in the Soviet Union are, however, generally well known.

4.. It is remarkable that the countries concerned underwent rapid economic development despite a heavy absolute load in agriculture. What is a more important condition for smooth progress would therefore seem to be a relative shift away in the *proportion* employed in agricultural activities. Table A compares the percentage variation in the proportion engaged in agriculture and the percentage variation in real national income over certain period of development for a number of countries.

TABLE A*

	Percentage change in the proportion of working force engaged in agriculture	Percentage change in real national income
U.S.A. (1870-1910)	47	376
Germany (1869-1914)	37	249
Japan (1889-1912)	21	215
U.S.S.R. (1926-1939)	29	385
U. K. (1870-1913)	46	137

It is thus seen that even in the case of these countries where the absolute number depending on agriculture was increasing somewhat, the relative proportion of the agricultural working force was falling steeply and the rise in national income was uniformly rapid.

5. It is only when national income has risen very substantially and the process of economic expansion advanced quite substantially that the absolute number of persons engaged in primary activities starts declining. The tables would suggest that such absolute declines took place in some of the European countries and also in the United States during the inter-war period.** But this absolute shift did not have any special reaction on the rate of growth of national income of the countries concerned. Of course, the inter-war period was marked by violent cyclical disturbances. Nevertheless Table B below shows that despite

* National income estimates for the U.S.A., U. K., Germany, Japan and U.S.S.R. are respectively from Simon Kuznets, 'Long-term changes in the National Income of the United States of America Since 1870', *Income and Wealth Series II*; Phelps Brown and Hart (deflated), 'The share of Wage in National Income'; *Economic Journal* June 1952; Paul Jostock, 'The Long-term Growth of National Income in Germany (paper read at the Castelgandolfo Conference of the I.A.R.I.W.); S. Tsuru and K. Ohkawa, 'Long-term changes in The National Product of Japan Since 1878, *Income and Wealth Series III*; and Gregory Grossman, 'National Income' in *Soviet Economic Growth* edited by A. Bergson.

**We have already taken note of the development in the U.S.S.R. during this period.

significant increase in manpower outside agriculture, the growth of national income during 1920—38 was considerably damped down. The only exception is the still rapid rate of growth in Japan, but it is worth while to note that the absolute number subsisting on agriculture was continuing to rise in Japan even during the inter-war period.

TABLE B*

	Percentage change in manpower outside agriculture	Percentage change in real na- tional income
United Kingdom	17·0	37·7
Sweden	38·1	74·4
Germany	26·2	59·3
U. S. A.	28·3	32·5
Japan	49·4	144·3

6. Some remarks may here be made about the relative rates of absorption of additional population in secondary and tertiary activities. Table C describes the manner of absorption of the aggregate increase in gainfully employed population in agriculture and other main groups of economic activities in five selected countries during certain periods. It will be noticed that over these historical periods, the rate of absorption in the respective countries in manufacturing industries on the one hand, and commerce and other tertiary activities on the other, was almost equal. The tendency for tertiary industries to expand more rapidly than the manufacturing industries—supposed to be a normal feature of the process of economic growth**—was therefore not so much pronounced at least in the initial stage of development. Some additional data relating to the inter-war period are reproduced below from Ingvar Svennilson's *Growth and Stagnation in European Economy* (p. 76). They compare the percentage increase in urban employment in industry and in services for some European countries between 1920 and 1940.

* Based on Ingvar Svennilson, *Growth and Stagnation in European Economy*, Tables A1 and A6, and S. Tsuru and K. Ohkawa, *op. cit.*

** Colin Clark, *Conditions of Economic Progress*.

TABLE C—Changes in Gainfully Employed Population

	Period	Increase (+) or Decrease (—) in Gainfully Employed Population		Increase (+) or Decrease (—) absorbed by					
				Agriculture, Forestry & Fishing		Manufacture, mining and construction		Commerce and other services	
		No. 000's	P. C.	No. 000's	P.C.	No. 000's	P.C.	No. 000's	P.C.
1. United States	1870—1920	+29500	100.00	+4,810	16.30	+11,120	+37.70	+13,570	+46.00
2. Great Britain	1841—1891	+8,910	100.00	+274	3.08	+4,624*	+51.90	+4,012	+45.02
3. Japan	1872—1920	+10,190	100.00	+210	2.05	+4,846	+47.56	+5,136	+50.40
4. Germany	1907—1939	+12,400	100.00	+3,692	29.77	+3,137	+25.30	+5,571	+44.93
5. Sweden	1900—1945	+10,180	100.00	—2,510	—24.66	+7,190	+70.63	+5,506	+54.03

*Including electricity, gas and water supply.

TABLE D—*Percentage Increase in Urban Occupied Population, 1920—1940*

	U.K. & Ireland	Germany	France	Belgium, Switzerland and Austria	Netherlands	Scandinavian countries
Industry	14	13	-6	6	31	43
Services	24	40	10	18	44	52

It will be seen from Table D that for countries like the U. K., the Netherlands and the Scandinavian group, the difference between the rates of growth of employment in manufactures and in services was not very large, whereas in the case of some others like France and Germany the difference was much wider. For the West European countries considered as a group, the proportion in which the male occupied population was distributed in the inter-war period between primary, secondary and tertiary sectors is shown in Table E.*

TABLE E—*European Male Population by Occupation Groups, 1920—1940***

	Percentage of total number employed		
	1920	1930	1940
Agriculture	27	24	22
Industry	44	44	44
Services	29	32	34
TOTAL	100	100	100

For Europe as a whole, then, whereas the proportion of occupied population engaged in industry remained more or less stable during the inter-war period, a shift was taking place away from agriculture to services. By and large, it would be a safe conclusion to state that in periods of development, tertiary services may expand somewhat more than the manufacturing industries, but the order of magnitude of the difference, in the rates of expansion, is unlikely to be very large.

*From Sventnilson, loc. cit. p. 75; includes U. K. and Ireland, Germany, France, Belgium, Netherlands, Switzerland, Sweden, Norway, Denmark, Finland and Austria.

** It can, however, be argued that the picture might be different if the occupational distribution of the female population were also considered, since a high proportion of women employees usually belong to the service sector.

7. Three broad points would seem to emerge from the preceding discussion :
- (a) In the initial phase of economic development, while the proportion of the total working force occupied in primary activities declines appreciably, the absolute numbers engaged in agriculture vary nonetheless, still continue to increase.
 - (b) It is only when an economy has advanced sufficiently that it becomes feasible to try to reduce the absolute load on agriculture.
 - (c) Although it is the general impression that in the expanding phase of an economy the services sector expands more rapidly than the secondary sector, historical evidence suggests that the difference between the rates of expansion of these two sectors is not very wide.

II. THE OCCUPATIONAL PATTERN IN INDIA

8. The Final Report of the National Income Committee has given the occupational distribution of the country during 1950-51. It is generally thought that this pattern has not been significantly altered in course of the last four or five years. If that be the case the following breakdown of the industrial distribution of the working force in the country can be extrapolated for 1955-56.

TABLE F—*Occupational Pattern in India, 1955-56.*

	Number (In million)	Percentage
1. Agriculture and allied pursuits	110.0	72.4
2. Mining and Factory Establishments	4.0	2.6
3. Small Enterprises	12.0	8.0
4. Communications, Railways, Banks and Insurance.	1.6	1.0
5. Other Commerce and Transport.	10.0	6.7
6. Government Administration, Professions and Liberal Arts and the rest	14.8	9.3
TOTAL	153.4	100.0

9. How will this pattern be affected over the years as the tempo of development activity in the economy increases? Empirical evidence in Section I would suggest that it is not really a necessary condition for rapid economic development that the absolute number of persons engaged in agriculture should immediately decline. It is of course true that the proportion of net output originating in agriculture has to go down with economic progress; the proportion of occupied population attached to agriculture can also be expected to come down. But as the instance of Japan so effectively shows, a country carrying an excessive burden of population may succeed in raising significantly its national income and living standards, and yet be unable to reduce the absolute number of workers subsisting on agricultural occupations. Similarly, in the case of India when account is taken of the insufficiency of capital resources

and other such factors one has to concede that it may not be possible to bring down the absolute number of the agricultural working force within the next 10 or 15 years. Moreover, there are institutional rigidities, and improvements in rural conditions consequent to agricultural development may induce some of the new entrants to the working force to stay back on land.

10. At this point, it is perhaps reasonable to state that a minimum programme of economic development would be to try to double the national income of the country between 1956 and 1971. Let it be supposed that over the same period an increase of only 5 million persons would be allowed in agriculture and ancillary activities. Since the strength of the agricultural working force in 1956 would be about 110 million, we can thus set ourselves a goal that the number of persons engaged in agriculture must not exceed 115 million in 1971. Total population of the country in that year on the assumption of a rate of growth of 1.25 per cent per annum, would be in the neighbourhood of 463 million. If about 40 per cent of the aggregate population would constitute the working force, the latter would hence comprise of about 185 million in 1971. Of this, therefore, nearly 70 million would have to be absorbed outside agriculture. Table G gives some idea of the pattern of occupational distribution as would then obtain in the country.

TABLE G.—Occupational Distribution of Working Force, 1971

	NUMBER		PERCENTAGE	
	Million	increase over 1956 (p.c.)	Actual	Increase over 1956 (p.c.)
1. Agriculture and allied pursuits	115.0	3.6	62.7	-13.4
2. Mining and Factory Establishments	15.0	275.0	8.0	207.0
3. Small Enterprises	16.0	33.3	8.6	7.5
4. Total of 2 and 3	31.0	93.7	16.6	57.5
5. Communications, Railways, Banks and Insurances	3.0	87.5	1.6	60.0
6. Other Commerce and Transport	16.0	60.0	8.6	14.4
7. Government Administration, Professions and Liberal Arts and the rest	20.0	35.1	10.8	16.1
8. Total of 5, 6 and 7	39.0	47.7	21.0	23.5
TOTAL	185.0	17.7	100.0	..

Thus while the absolute number dependent on agriculture goes up by 5 million, the relative intensity of agricultural occupations in the over-all distribution of working force would decline by about 13 per cent. Employment in mining and factory establishments would go up almost four-fold, whereas the relative intensity of the occupation will increase about three-fold. On the whole, employment in secondary industries (including mining) would rise by nearly 90 per cent and in the tertiary sector new employment generated would be of the

order of about 50 per cent. Thus the rate of expansion in manufacturing industries would be greater than that in the services sector, but this can be explained in terms of the special needs of the country and the fact that, relatively speaking, we have some excess capacity of manpower in the tertiary sector. As will be seen from the table, despite the rather lower rate of growth, the tertiary sector would still provide employment to 21 per cent of the total occupied population.

11. A reference to Table A in Section I would indicate that a relative decline of the proportion employed in agriculture by about 13 per cent while national income goes up by 100 per cent is in keeping with historical experience in other countries. A much higher rate of decline obtained in the U.S.S.R. during 1926-1939. But even apart from the special set of social and institutional circumstances there, the growth of national income was also almost five-fold over that period. The point here to make, therefore, is that a target for a certain alteration in the pattern of occupational distribution cannot be visualised in isolation from the target of national income.

12. The change in the pattern of distribution of the working force illustrated above will, it has been here assumed, be spread over a period of 15 years. If, however, the process of growth is accelerated and the doubling of national income achieved within a shorter space of time, the rate of alteration of the occupational structure would also then be correspondingly quickened.

TABLE I
United States—Industrial Composition of the

	1870		1880		1890		1900
	Number (million)	Percent	Number (million)	Percent	Number (million)	Percent	Number (million)
1. Agriculture, Forestry and Fishing	6.91	53.5	8.68	50.0	10.12	43.4	11.12
2. Extraction of Minerals	0.19	1.4	0.30	1.7	0.45	1.9	0.69
3. Manufacturing Industries and Construction	2.64	20.5	3.84	22.1	5.53	23.7	7.20
4. Transportation, Communications and other public utilities	0.54	4.2	0.83	4.8	1.39	6.0	1.95
5. Professional and related services	0.34	2.6	0.55	3.2	0.88	3.8	1.18
6. All other services	2.30	17.8	3.19	18.4	4.95	21.3	6.93
TOTAL	12.92	100.0	17.39	100.0	23.32	100.0	29.07

ECONOMIC DEVELOPMENT AND OCCUPATIONAL DISTRIBUTION

Working Population, 1870—1949

Percent	1910		1920		1930		1940		1949	
	Number (million)	Percent	Number (million)	Percent	Number (million)	Percent	Number (million)	Percent	Number (million)	Percent
38.2	11.83	31.6	11.72	27.6	10.72	21.9	8.87	18.4	7.93	13.7
2.4	0.97	2.6	1.09	2.6	0.98	2.0	1.04	2.2	0.86	1.5
24.8	10.66	28.5	12.86	30.3	14.11	28.9	14.24	29.6	18.31	31.7
6.7	2.66	7.1	3.10	7.3	3.84	7.9	3.34	6.9	4.66	8.1
4.1	1.71	4.6	2.17	5.1	3.26	6.7	3.42	7.1	4.33	7.5
23.8	9.54	25.6	11.49	27.0	15.9	32.6	17.25	35.8	21.73	37.6
100.0	37.37	100.0	42.43	100.0	48.83	100.0	48.16	100.0	57.82	100.0

SOURCE : Jaffe and Stewart, *Manpower Resources and Utilization*, page 192.

THE SECOND FIVE YEAR PLAN

TABLE II
Great Britain : Occupational Distribution,

	1841	1851	1861	1871
	Percent	Percent	Percent	Percent
1. Agriculture, Forestry and Fishing	22·8	21·9	18·7	14·8
2. Mining and Quarrying	3·0	3·2	3·6	3·7
3. Manufacturing Industries including Gas, Electricity and Water Supply	35·4	38·9	38·6	38·6
4. Building and Construction	6·1	5·7	5·8	6·5
5. Transport and Communications	2·9	4·3	4·7	5·1
6. Commerce	5·7	6·3	7·1	8·3
7. Forces	0·8	1·1	1·4	1·3
8. Public Administration	0·6	0·8	1·0	1·0
9. Professional Services and Entertainment	2·8	3·0	3·1	3·3
10. Domestic Services	18·7	13·8	15·0	16·4
11. Other Services	1·2	1·0	1·0	1·0
TOTAL	100·0	100·0	100·0	100·0
Total Working Population	5·74	8·12	9·21	10·28

TABLE II
1841—1951

1881	1891	1901	1921	1931	1941	1951
Percent	Percent	Percent	Percent	Percent	Percent	Percent
12.3	10.8	9.0	7.0	6.0	4.6	5.0
4.0	4.4	5.8	7.3	6.1	3.8	3.7
38.3	38.2	32.6	38.7	35.6	34.7	37.5
7.1	6.4	8.1	4.1	5.3	5.9	7.8
5.8	7.5	9.3	8.1	6.9	5.6	7.4
9.2	10.3	11.0	13.2	15.8	1.7	2.0
1.1	0.9	1.1	1.6	7.7	15.8	3.5
1.1	1.1	1.4	4.8		9.5	5.8
3.7	5.0	4.4	3.7	4.0		7.0
16.4	14.4	14.3	7.0	13.5	18.4	20.1
1.0	1.0	2.0	4.5			
100.0	100.0	100.0	100.0	100.0	100.0	100.0
11.19	14.65	15.39	19.37	21.07	21.33	23.33

SOURCE : (i) 1841-1921, Colin Clark : *Conditions of Economic Progress* (Second Edition), p. 408.

(ii) 1931, U. N. *Demographic Year Book*, 1949-50.

(iii) 1941-1951, U.K. *Annual Abstract of Statistics*, 1952. Tables 120-121.

TABLE III

Japan—Changes in Industrial Classification of Gainfully Employed Population.

Year	Agriculture (Percentage)	Manufacturing (Percentage)	Commerce and Trade (Percentage)	Services and other Business (Percentage)	Total Working Population (millions)
1873	78.0	3.6	6.6	11.8	17.07
1920	52.4	18.9	13.4	15.3	27.26
1930	47.7	19.8	16.6	15.9	29.62
1940	42.6	25.0	15.0	17.4	33.80

SOURCE :—*Japanese Agricultural Land Statistics*, General Headquarters, Supreme Commander for the Allied Powers, Natural Resources Section, p. 5. Colin Clark, *Conditions of Economic Progress*, p. 425; and G. C. Allen, *A Short Economic History of Japan*, p. 164. The population of 17.07 millions is the actual for 1872; the population figure for 1940 is an estimate.

TABLE IV

Germany—Occupational Distribution, 1892—1939

	1892	1895	1907	1925	1933	1939
	Percent	Percent	Percent	Percent	Percent	Percent
1. Agriculture and Horticulture	41.9	35.7	23.1	17.2	16.3	26.0
2. Forestry, Hunting and Fishing			0.7	0.6	0.6	
3. Mining	38.9	42.8	4.3	3.1	2.7	2.1
4. Manufacture			37.7	39.5	37.5	32.6
5. Building and construction.			8.6	6.3	7.2	6.9
6. Commerce and Finance.	10.1	11.8	8.1	11.4	13.0	9.7
7. Transport and Communications			3.6	5.6	5.6	5.5
8. Forces	5.3	6.1	2.9	0.5	0.5	10.1
9. Other Government Service			2.4	3.5		
10. Professions and Entertainment			5.2	4.2	4.2	
11. Personal Services	3.8	3.6	5.8	3.1	4.3	7.0
12. Private Domestic Services			5.8	6.1	4.6	
13. Others	..	..	..	..	..	0.1
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
Total Working Force (Million)	21.3	22.1	28.1	32.0	32.0	34.6

SOURCE : Colin Clark, *Conditions of Economic Progress*, p. 413 ; Paul Jostock, *The Long-term growth of National Income in Germany*. (Read before third conference of the International Association for Research in Income and Health, and U. N. Statistical Year Book.

TABLE V
Sweden : Occupational Distribution, 1870-1945

	1870	1880	1890	1900	1910	1920	1930	1940	1945
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
1. Agriculture.	69.5	66.4	61.5	49.7	40.8	39.4	26.0	23.0	24.4
2. Forestry and Fishing.							3.9	3.5	
3. Mining	12.8	15.4	20.1	20.9	26.7	29.7	0.7	1.3	1.1
4. Manufactures.							27.5	29.3	29.6
5. Building and Construction.							6.5	0.6	7.1
6. Commerce and Finance	4.0	5.7	7.1	7.5	5.7	6.5	10.0	11.9	14.6
7. Transport and Communications					5.3	6.6	7.3	7.1	7.5
8. Forces	7.5	6.8	6.3	21.8	1.3	0.8	1.0	1.2	10.3
9. Public Administration.					0.9	1.2	0.9	1.3	
10. Professions.					2.8	4.2	5.0	6.5	
11. Personal and Domestic Service	6.2	5.7	5.0		9.3	7.9	10.0	8.4	4.1
12. Others									1.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Total Working Force .. 1974 1941 2351 2630 2900 2992

SOURCE : Colin Clark : *Conditions of Economic Progress* pages 417 and U. N. *Demographic Year Book 1949-50*, Table 13.

TABLE VI

U.S.S.R. : Labour Force by Economic Sectors, 1926-39.

	1926		1939	
	(Thousands)	(Percent)	(Thousands)	(Percent)
Agricultural	70,533	81.8	47,846	52.8
Non-Agricultural	15,687	18.2	30,318	33.4
Residual	..	..	12,495	13.8
TOTAL	86,220	100.0	90,659	100.0

SOURCE : W.W. Eason, 'Population and Labour Force' in *Soviet Economic Growth*, edited by A. Bergson, p. 115.

MINIMUM WAGES AND EMPLOYMENT

by

PROF. V. R. PILLAI

I. THE PROBLEM POSED

Socialistic Pattern and the Working Classes

Our declared objective of a 'Socialistic Pattern of Society' awaits definition. It will be primarily the task of the Planning Commission to give meaning and significance to that 'Pattern' by defining it, not in so many words, but in terms of the concrete programmes and policies comprised in the Second Five Year Plan. To the working classes which form the bulwark of society, the appeal of Socialism like that of Communism—though in a much smaller measure—is the prospect of a better distribution of income. They will judge our socialistic pattern, not so much by the ends set forth, or even the means adopted, but by the acid test of how it affects their incomes. Nationalisation or no nationalisation is of little concern to them; what matters is work and wages. It is, therefore, imperative that the Plan, if it should win the wholehearted co-operation of working classes and enthruse them to greater effort, must keep their interests in the forefront.

The Long-term Programme

The level of wages in India is admittedly low compared to the more advanced industrial countries; it is also low compared to the minimum needs of the workers. But we have here the vicious circle of low wages and low productivity. A lasting solution for the problem of low wages must therefore be found in measures to increase productivity.

The transference of wealth from the rich to the poor through the machinery of distribution, though a popular solution for the problem of poverty, has serious limitations in an under-developed economy where the total product is not sufficient to meet the needs of all. Such transferences in a mixed economy may affect production adversely, through its effects on the incentives to work and save. The main emphasis of our Plan has, therefore, been on increasing the national product by a better utilisation of our resources, both human and material. This is essentially a long-term programme, but what the working classes are most concerned with are the problems of the immediate present, which also must receive adequate attention in the Plan.

The Immediate Problem

The right to a job and the right to a living wage are now-a-days considered more fundamental than the political 'rights' which loomed large in the nineteenth century. This entails on the State a corresponding duty to secure these fundamental rights to the citizens. Our Constitution itself lays down as one of its directive principles: "The State shall endeavour

to secure by suitable legislation or economic organization or in any other way to all workers, agricultural, industrial or otherwise, work, a living wage, conditions of work ensuring a decent standard of life and full enjoyment of leisure and social and cultural opportunities". (Article 43)

From this point of view the State's function in the present context resolves itself into:

- (i) providing employment for those who have none, and additional employment to those who are under-employed.
- (ii) securing a minimum income for the employed population who are at present receiving less than a subsistence wage.

But these two aspects cannot be considered in isolation; they are interconnected. Just as demand can have no meaning unless it is related to a price stated or assumed, employment cannot be dissociated from wages. What people require is not employment as such, but employment at a certain wage. The higher the wage, the greater is the cost of employing labour and the more difficult it becomes to provide employment and *vice versa*. This is true not only of private employers but also of the State. Therefore, when the State steps in to fix a minimum wage which it considers just and reasonable, the tendency will be for employment to diminish and the State will have to bear part of the incidence of the higher wage by being charged with the responsibility for the additional unemployed population. It is important to consider under what circumstances and to what extent minimum wages will diminish employment

II. EFFECTS OF MINIMUM WAGES ON EMPLOYMENT (THEORETICAL)

Minimum wages may be imposed in particular industries only, or throughout the economy. The effects tend to be different under these circumstances. We shall, therefore, first take up the case of industries where labour is exploited; second, low-wage industries and third, the economy as a whole.

1. Sweated Industries.

The term 'sweating' may be defined as the payment of unduly low wages. The problem of sweating in a developed economy is essentially a matter of exploitation of labour. But in the context of an under-developed economy sweating may take place even without exploitation when the productivity of labour in any industry is unduly low. It will hardly be disputed that a properly designed minimum wage can remove exploitation and secure to the worker his legitimate reward without producing any adverse effects on employment. But where sweating is due to low productivity, the minimum wage by itself is sure to reduce employment and improvements in the technique of production can alone remedy the situation.

2. Low-Wage Industries.

As the main object of the minimum wage is to ensure to each worker a minimum standard of living, all low-wage industries must come under its purview. The impact of the minimum wage is to raise the wage level and thus to increase the cost of production to the firms. Therefore, the natural consequence of raising wages is to reduce employment. But this effect may

not occur when the incidence of the higher wage can be shifted to the consumers. The possibility of such shifting depends on the elasticity of demand for the commodity. If the demand is fairly inelastic, shifting can take place and labour will be benefited at the expense of the consumers, though labourers would suffer a reduction of real wages if the commodity is one which is generally consumed by them.

The effect of a higher wage on employment will depend also on the elasticity of demand for the particular type of labour concerned. This is conditioned by several factors. When the commodity which labour helps to produce has an elastic demand, the demand for that labour also will be elastic. Another important factor affecting demand is the ease with which labour can be substituted for other factors and *vice versa*. The greater the elasticity of substitution, the greater will also be the elasticity of demand. If, for example, capital can be easily substituted for labour, a small rise in wages induce employers to substitute the relatively cheaper factor capital, and the demand for labour will fall off. Whether labour will be able to maintain the level of employment will depend upon whether the other factors are competitive for labour or co-operant. It also depends on the availability of the other factors. In an under-developed economy, for example, the scarcity of capital may set limits to its substitution for labour. But to the extent that such substitution takes place employment would fall off, if not immediately, at least in the long run. It is also true that it will induce inventions which have a strong labour-saving bias and thus tend to increase unemployment.

But during the short period it is difficult for an employer to close down even if higher wages would cut into his own profits, because the loss from employing labour at a higher rate would be preferable to the loss from closing down. Further, the thesis that employers' actions are always actuated by the pursuit of maximum profits is open to question. Many employers are content to get a normal return for capital invested and for entrepreneurship and would be loath to alienate their labour force by dismissing workers. It is also likely that they may suffer a present loss in the hope that they can recoup the loss by a possible rise in prices or an increase in labour efficiency in the future. To this must be added a new factor, *viz.*, the union resistance to dismissal. Where the trade union is strong, it is often found that the employer, much against his will, is compelled to retain all his labourers and seek economies elsewhere to cover up the gap created by higher wages.

It is sometimes argued that the higher wage would 'shock' the employers out of their lethargy and force them to seek ways and means of reducing costs by labour-saving devices. Behind this "Shock Theory" is the presumption that low-wage industries are those which are run less efficiently and where there is room for improvement. But this is not always true. Further, it is often the dearth of capital resources which compels firms to content themselves with less capitalistic though less efficient methods of production and the minimum wage does not alter the position. All that can be reasonably expected is that the employer would do away with some types of labourers who just paid him at the lower wage, or stop some minor processes which are not paying at the new wage. But the curtailment of the demand for labour on this account would be negligible. On the other hand, the Shock Theory may accrue to the advantage of labour if the employer is able to economise in other directions by eliminating waste.

When considering the effects on an industry with firms of different standards of efficiency, it is also quite possible that some of the marginal firms would fade out of the picture. This would create temporary unemployment for workers engaged in those trades and the occasion of a rise in wages in low-wage industries generally, would be a time when the displaced labourers could not easily get new employment. But such an elimination of inefficient firms would have favourable effects on the efficiency of surviving firms and induce them to expand while the general income effects of a rise in wage may cause expansion in certain consumption industries which may eventually absorb this displaced labour force.

The reaction of higher wages on efficiency of labour are by no means unimportant. An increase in efficiency would reduce the unit cost of labour and can be expected either to increase the demand for labour or check a fall in employment consequent on a wage increase. Sydney Webb was definitely of the view that minimum wages by raising the incomes of low-wage workers tend to increase their physical productivity. This will have further sympathetic reactions on wages, because higher earnings not only increase the physical and mental health of the workers but will also increase their capacity to earn more by improving their bargaining strength. While this "Steam Engine Theory" can be discounted in advanced countries where the general standard of living is fairly high, the scope for increasing the physical productivity of labour by the payment of at least a subsistence wage is great in under-developed countries. A minimum wage can be expected to produce favourable effects not only on physical capacity but also on the willingness to work. Whereas the effects on the willingness may show themselves immediately, it necessarily takes time for the higher wage to build up the health and efficiency of underfed workers.

3. The Economy as a Whole

A minimum wage in some industries is bound to have repercussions on others. It not only affects wage rates below the minimum but also engineers a sympathetic rise in wages in the upper grades of labour as well. In the more advanced countries to-day the tendency is to fix a basic wage applicable to all industries. Even if this is not done minimum wages may produce economy-wide effects.

The effects of minimum wages on the economy as a whole are more complex and therefore, more difficult to trace than those in a particular industry. For the sake of simplicity, we will assume a closed community in a stationary condition, and real wages instead of money wages. In such a case, a rise in wages will produce two tendencies: (i) As labour is getting a larger share of the real income fund (*i.e.*, the flow of consumption goods) profits will be reduced. But it will not affect the total spending power, because what is taken out of profits of transferred to wages. The effect is a re-distribution of demand. (ii) The demand for goods consumed by the relatively poorer classes will increase and probably that for goods used by the relatively rich diminish. But as the wage earners from a numerically larger section than the capitalistic class and as they are likely to spend the bulk of their increased earnings, the community's propensity to consume can be expected to increase. Industrial activity will tend to shift to the production of consumption goods.

But the effect on profits will not be the same in all industries. Consumption goods industries may earn more profits than before while those industries where the wage level was already higher than the minimum will not be affected. Among industries whose unit cost is raised by the minimum wage, the fall in profits will be less in those which use more capital and less labour and *vice versa*. Consequently, there may be a breakdown of some firms in which the proportion of labour cost to total cost is great. New capital will tend to flow to those industries which use more capitalistic methods and there will be a strong tendency for capital to replace labour by the invention of labour-saving machinery. But the rate of profit will tend to be lower than in a free market, because much of it will be driven from the more profitable to the less profitable trades. The lower marginal efficiency of capital may discourage new investment.

The assumption of static conditions which we made implies that the stock of capital is maintained without rise or decline. This must now be called in question. For, as profits diminish, there will be less saving on the part of the rich unless they curtail their consumption. The wage earners who receive an addition to their income are more likely to spend it than save. The volume of increased savings from that quarter will not be sufficient to compensate the fall in savings of the entrepreneurial class. Thus total savings will diminish in the balance. Other forces making for a reduction of capital are the loss of capital itself by the bankruptcy of the weaker firms and its general consumption through dividends encroaching on replacement funds. (But this is likely to happen only when there is an abnormal rise in wages.) To this must be added the check to savings through unemployment benefit in countries which have social security measures. The fund for this must come either from contributions by employers and wage earners, or sums raised by taxation and loans. The greater the unemployment, the greater will therefore be the demand on savings. Thus, in so far as the total available capital is reduced the extension of capitalistic methods is also rendered difficult. This tendency may in the long run reduce the marginal productivity of labour itself.

The minimum wage, we have seen, affects a redistribution of income, which increases the total money income devoted to consumption. This increase in the propensity to consume will have favourable reactions on employment by expanding the consumption goods industries. In its turn, it may also stimulate the capital goods industries according to the Principle of Acceleration, for the demand for capital goods is derived from the demand for consumption goods and the general shift to labour-savings methods would act as a further stimulus. This will also help to create more employment in the long run. How far the tendency to an increase in employment due to this factor would counteract the tendency to a fall in employment due to rising costs will depend upon the circumstances of each case.

The effects of raising wages in an advancing community where accumulation of capital is taking place at an increasing rate are in most respects similar to those outlined above. The same transformation in production would take place with the important difference that the rate of savings will keep up the volume of capital. The impact of higher wages would

merely retard the growth of capital to the level it would otherwise have reached. The actual effect depends on whether the richer classes are induced to curtail their consumption and keep up the rate of savings. If the rate of capital consumption consequent upon a rise in wages exceeds the rate of savings, then the same effects which were observed in our previous analysis would follow. If it does not do this, the effect may be temporary and as the accumulation of capital proceeds the marginal product of labour will rise and abnormal unemployment will be prevented.

The net effect of the minimum wage on employment is thus difficult to gauge. It will depend upon several factors such as the extent of the rise in wages, the state of business activity, the response of investors to a fall in incomes and the response of inventions and improvements in technique to a change in the relative prices of the factors of production.

III. THE WORKING OF MINIMUM WAGES IN INDIA

The Minimum Wages Act of 1948

The Minimum Wages Act of 1948 provided for the fixing of minimum wages only in certain employments specified in the Schedule to the Act. The first part of the Schedule includes employments in twelve occupations, *viz.* (1) Woollen Carpet Making or Shawl Weaving, (2) Rice Mill, Flour Mill, or Dal Mill, (3) Tobacco Manufactory (including bidi making) (4) Plantations, (5) Oil Mill, (6) Local Authority, (7) Road Construction or Building Operations, (8) Stone Breaking or Stone Crushing, (9) Lac Manufactory, (10) Mica Works, (11) Public Motor Transport and (12) Tanneries and Leather Manufactory. The second part of the Schedule deals with employments in agriculture including all kinds of farming such as livestock rearing dairy, bee or poultry farming and other ancillary operations. It is clear from the above list that the present Act has only the limited objective of preventing sweating.

Implementation of the Act

By the end of 1954, Minimum Wages have been fixed in most of the industries mentioned in Part A of the Schedule besides other industries included in the Schedule by State Governments, such as Salt Pans in Bombay, Cement, Glass and Potteries in Madhya Pradesh, Cashew and Coir in Travancore Cochin, and Printing Presses, Automobile Engineering and Foundries in the Delhi State. But in the field of agriculture progress has been limited; Punjab alone has fixed minimum wages in agriculture for the whole State while 8 other States have fixed wages in selected districts only.

Comparative Wage Rates

We have at present, a heterogenous group of minimum wage rates fixed by different States and for different employments. Inter-State comparisons are rendered extremely difficult by a variety of factors. Even in the same State, there is hardly any uniformity in the wages fixed for different employments, or in the principles on which the wages are based. Further, money wages by themselves give no indication of the real wages of workers because of the wide disparities in the cost of living. While some States like Madras have chosen to fix

uniform rates for the whole State, others like Bombay have fixed wages on a zonal basis. Above all, there is the question of earnings as distinct from wage rates. The welfare of the workers is to be determined by their earnings and not merely by the rates of wages. This hinges on the question of how much employment they get, on which there is so little reliable data.

The comparative tables given in the Appendix show clearly the wide range in the money wages fixed for the same occupations in different States. In the Plantation Industry, the rates vary from 11 as. for adult men in Punjab to Rs. 1-9-6 in Travancore-Cochin. For women also, it ranges from 8 as. 6 ps. in Punjab to Rs. 1-3-0 in Travancore-Cochin. In Public Motor Transport, the pay of drivers varies from Rs. 60/- p.m. in Mysore to Rs. 95/- p.m. in West Bengal and Bombay city and Rs. 110/- in Calcutta. For conductors, it ranges from Rs. 45/- p.m. in Mysore and Bihar to Rs. 78/- p.m. in Calcutta. The daily wage of a Mazdoor employed in Road Construction varies from Re. 1 in Madhya Pradesh and Mysore to Rs. 1-14-0 in Bihar. This kind of disparity is noticeable in piece rates also. The rate for rolling 1,000 bidis ranges from 10 as. in the rural areas of Madhya Pradesh to Rs. 2-8-0 in Bombay city. In most cases, the minimum wages for unskilled workers are below the subsistence level. The Central Advisory Board has recommended that the minimum daily wage of an adult worker should not be less than Rs. 2/- for Class A, Rs. 1-10-0 for Class B, Rs. 1-6-0 for Class C and Rs. 1-2-0 for Class D. It will be evident how most of the wage rates, at present fixed, fall short of the standard.

Results of Minimum Wages

A study of the working of minimum wages during the First Plan period leads to the following conclusions:

- (i) In the majority of cases, wages have been fixed by Notification without the appointment of Committees to enquire into the conditions prevailing in the industries. The result has been that the minima fixed have tended to legalise the prevailing low levels of wages in the different areas and have not materially benefited the workers.
- (ii) Where the Committee method has been adopted, most Committees, after a calculation of the minimum needs of the workers have concluded that the industries are not able to pay even a subsistence wage and the wages recommended by them have been mostly below the subsistence level. Typical of the conclusions of these Committees is that of the Committee for Tanneries, Bombay (of which Prof. D. G. Karve was Chairman). After computing the minimum cost of bare subsistence in Bombay city for a family of 3 consumption units and one wage earner at Rs. 90/- p.m. the Committee recommended only Rs. 60/- as it felt that a higher wage would 'seriously dislocate the whole structure of industry and employment'.
- (iii) Experience has shown that it would be extremely difficult to fix minimum wages in agriculture, and still more to enforce them. The Planning Commission's directive to confine the operation of the Act in the first instance to organized farms and low-wage pockets where there is considerable exploitation has been amply justified.

(iv) No intensive study of the employment effects of minimum wages in India has so far been undertaken. But from a general study of the situation, it is found that it has not produced any serious adverse effects on employment except in certain industries. This is due to a number of factors: (a) The industries selected are mostly those where labour was exploited. (b) In the case of several industries, minimum wages have only legalised prevailing rates. (c) In others the wages fixed though higher than before have taken full account of the capacity of the industry to pay and workers continue to get less than a subsistence wage.

The Coir Industry in Travancore-Cochin provides an instance in which the fixation of minimum wages representing about 20 per cent rise in wages was followed by the stoppage of work in a number of units and widespread unemployment. The industry gives employment to about 6 lakhs of people and the labour-cost comes to about 60 per cent of the total cost. The Government of Travancore-Cochin immediately appointed an Advisory Committee to enquire into the matter. It was found that the unemployment was largely engineered by the vested interests in the industry, particularly the raw material dealers who were exploiting the labourers and who resisted the fall in raw material prices to reasonable levels. The Committee found that the remedy lay in the strict enforcement of minimum wages, which would eventually force down raw material prices and thus transfer part of the excess profits to labour. But the situation would be different if coir prices were to fall, for in that case unemployment would become inevitable at the higher wage.

IV. A PLAN OF ACTION

The policy decisions in respect of the employment pattern for the Second Five Year Plan should be related to the wage levels that are considered desirable. Our Finance Minister has set a target of 12 million new jobs; but at what wage? If we proceed on the assumption that every employed person should receive a basic wage sufficient for an average family to subsist, we will also have to take into account the jobs which will cease to exist when we insist on this minimum.

A. The Abolition of Sweating

The emphasis in the First Plan period was on the abolition of sweating. But as the foregoing brief survey has shown, even this limited objective has not been fully realized. Confronted with the choice between employment at sweated wages or no employment, State Governments have been constrained in several cases to opt for the former. But sweating is anywhere a blot on the nation's honour and must be abolished at all cost.

'Sweating' in a disguised form is also widely prevalent in the *cottage industries*. Many of these give the workers an income which is miserably low compared to the work involved. The excuse that the work is done in the homes during spare time does not warrant such low earnings. To cite an instance, my personal investigations in the homes of workers engaged in the hand-spinning of coir in Travancore-Cochin showed that on an average a

woman working with the help of two children (in the age group of 8 to 12) and occupying the whole of the spare time day and night is able to earn 3½ to 4 as. a day. Such cottage industries which make life a drudgery for the family and seriously undermine the health of the mother as well as the children without a corresponding return will be more a source of degeneration than a support to our economy. It was also found that with the fixing of minimum wages in the industry, the clever producers engineered a shift of production from production units to the homes of workers by supplying the raw material and buying the finished product at a price so that the question of 'payment of wages' does not arise. This kind of expansion of cottage industries would defeat the very purpose of minimum wages as well as of planning for plenty. It is therefore suggested that (i) the Cottage Industries Boards should undertake surveys with a view to assess the earning potentialities of the cottage industries, (ii) steps should be taken to improve the technique of these industries in order to increase productivity and (iii) only such industries which can give reasonable earnings should be encouraged through co-operative or other agencies.

B. Low-Wage Industries

If our Socialistic Pattern should convey any meaning to the working classes we cannot countenance wage rates which do not come up even to the subsistence level. The present employment situation in the country prevents us from fixing a higher standard. But the employment pattern for the Second Plan should be based on a national minimum wage which should on no account be less than the subsistence level. This involves the fixing of minimum wages in all low-wage industries and the gradual raising of wages in industries which have been promoted to this cadre from the sweated group. The effects of such a policy on employment have to be reckoned with.

The fact is that low wages are most rampant in the group of small-scale industries. These provide considerable employment but many of them owe their existence to and are able to survive only because of cheap labour. It is idle to pretend that these employments generally supplement the income of the agricultural classes and therefore may be allowed to continue at the low levels of wages. Most of the workers engaged in them depend for their subsistence solely on these occupations and they often work for more than the normal working day. The influence of habit and custom bind these underpaid employees to these jobs without the incentive to look out for better paid jobs or move to better paid areas. The enforcement of a minimum subsistence wage in all industries would, by the compulsion of circumstances, help to increase the mobility of labour, because it is inevitable that all the existing labour force would not be able to find employment in the same occupations. The elimination of the uneconomic units of production and encouragement to the more efficient units can be expected to 'shock' them out of their lethargy and place them on a new footing. But this should be accompanied by constructive steps to improve the technique of the existing industries and to start new industries suited to each area for providing alternative employment. Some unemployment would be inevitable in the transition period and Government will have to provide either work or relief to the unemployed during this period.

C. Minimum Income Security

What is important for the worker is a minimum income and not merely the satisfaction of being paid at a fair rate for his work. This again hinges on the quantum of employment that he gets. Apart from the cyclical fluctuations which affect all industry there are seasonal variations of employment in some industries. The worker is thrown out of employment during these lay-off periods and suffers a loss of income. In the medium and large-scale industries where labour is generally well organised and the machinery of collective bargaining operates successfully the problem is not one of wage rates but of minimum income security.

The problem of securing a minimum income to the workers has to be tackled by three methods; (i) monthly or yearly basis for minimum wages, (ii) guaranteed wage plans, and (iii) employment insurance.

- (i) Even in industries subjected to minimum wage regulation, the fixing of a daily or weekly rate does not secure a minimum income to the worker. For this they must also get a guarantee of a minimum period of employment. Our experience with minimum wages in several industries tends to show that when wages are raised, work becomes more intermittent and the earnings of the workers do not rise proportionately. In industries which are somewhat seasonal the problem is often very acute. One solution for this is to fix minimum wages for comparatively long periods, for example on a monthly basis so that part of the responsibility for providing employment is transferred to the employers. In the case of piece-rated workers, however, minimum wage notifications will have to provide also for a minimum guarantee of employment for the workers.
- (ii) Guaranteed wage plans are becoming increasingly prevalent in modern industry in the advanced countries of the West. Four important types may be distinguished. One is the guarantee of a fixed wage for a definite period which may be upto a year whether there is work or not. Another is guarantee of a certain amount of employment over a period, lean days being made up by over-time. A third method is the lay-off notice by which the employer will notify the workers of the coming lay-off a certain number of days in advance and will provide employment or wages during the notice period. A fourth method is the dismissal wage plan, *i. e.*, the payment of a specified amount on permanent dismissal. The first two methods assure a certain minimum income, while the latter two are intended to help the worker to bridge the gulf between one employment and a possible alternative employment.
- (iii) The progress of Social Security in India has been slow compared to other countries. The Employees State Insurance Act, 1948 is limited in scope as well as in the area of its application. Unemployment is a field so far untouched by our schemes of social insurance. It is imperative that steps should be taken during the Second Plan period to launch a scheme of compulsory contributory unemployment insurance especially for the workers in organised industries.

APPENDIX
COMPARATIVE WAGE RATES*

1. Minimum daily wage rates in Plantations.

	Adult Men			Adult Women			Adult Children			
	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.	
1. Assam	1	1	0	1	0	0	0	8	6	
2. Bengal—Tea Plantations (Doars and Terai)	1	3	0	1	1	0	0	10	0	
3. „ —Darjeeling	1	10	6	0	15	6	0	8	9	
4. „ —Cinchona Plantations	1	8	9	1	2	0	0	12	0	
5. Bihar—Ranchi Tea Plantations	1	6	0	(Piece rate of 1 anna per seer.)						
6. „ —Purnia	1	3	0	1	1	0	..			
(Piece rate 6 Ps. a seer excluding C.L.A.).										
7. Coorg—Cardamom malais		1	5	0	0	15	9	0	10	6
8. „ —Cardamom Gardens in towns and valleys.		1	2	9	0	14	0	0	9	3
9. Madras		1	5	0	1	0	0	0	10	6
10. Mysore		1	0	0	0	13	0	0	9	0
11. Punjab		0	11	0	0	8	6	0	6	0
12. Travancore-Cochin—Tea and Rubber Plantations (Field Workers)		1	9	6	1	3	3	0	12	9
13. „ „ —Factory Workers.		1	13	0	1	6	0	..		
14. „ „ —Guaranteed time-rate for Piece rate workers		0	12	6	0	9	6	0	6	3

2. Piece Rate for Rolling 1,000 Bidis.

	Rs.	As.	Ps.
1. Bengal, Rural	1	12	0
2. Do.—City	2	4	0
3. Bihar, Rural	1	4	0 to 1 12 0
4. Do.—Urban	2	3	0 to 2 8 0
5. Bombay Zone I	2	8	0
6. Do.—Zone IV	1	14	0
7. Madhya Pradesh, Rural	0	10	0 to 1 0 0
8. Madhya Pradesh, Urban	1	1	0 to 1 6 0
9. Madras.	1	2	0 plus C.L.A. 300 points.
10. Mysore.	1	6	0
11. Travancore-Cochin	1	14	0

* Reproduced from *Minimum Wages in India* by the same author (published by the Mysore University).

3. *Minimum daily wages of Mazdoors employed in road construction.*

State	Adult Men	Rs. As. Ps.		
1. Bengal		1 4 0	to 2 0 0	according to places.
2. Bihar		1 14 0		
3. Do.—Damodar Valley		1 4 0		
4. Bombay		1 12 0	to 2 6 0	according to places.
5. Madras		1 4 0		
6. Mysore		1 0 0		
7. Madhya Pradesh		0 14 0		in suburbs.
8. Do.		1 0 0		in Nagpur.
9. Punjab		1 12 0		
10. Saurashtra		1 2 0	to 1 12 0	according to places.
11. Travancore-Cochin		1 6 0		

4. *Minimum monthly wage rates for employment in Oil Mills.*

State	Skilled			Semi-Skilled			Un-Skilled		
	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.
1. Bengal,—Calcutta & Howrah	76	0	0	56	0	0	50	0	0
2. Do.—Outline Areas	74	0	0	54	0	0	48	0	0
3. Bombay, Zone I	75	0	0	65	0	0	60	0	0
4. Bombay, Zone V	50	0	0	43	0	0	40	0	0
5. Bihar (according to occupations)	70	0	0	60	0	0	40	0	0
			to			to			to
	90	0	0	65	0	0	45	0	0
6. Madras	45	8	0	32	8	0	26	0	0
7. Mysore	50	0	0	32	8	0	26	0	0
8. Saurashtra, Zone I	63	8	0	55	8	0	47	8	0
9. Do.—Zone III	52	0	0	45	8	0	39	0	0

5. Minimum monthly wage rates for employments in Tanneries and Leather Manufactories.

State	Skilled			Semi-skilled			Unskilled		
	Rs.	As.	Ps.	Rs.	As.	Ps.	Rs.	As.	Ps.
1. Bengal	70	0	0	56	0	0	51	0	0
2. Bombay, Zone I	75	0	0	65	0	0	60	0	0
3. Bombay, Zone V	50	0	0	43	0	0	40	0	0
4. Madras	48	0	0	37	8	0	34	8	0
5. Mysore	40	12	0	37	8	0	34	4	0
6. Punjab	80	0	0	55	0	0	45	0	0

6. Minimum monthly wage rates in Public Motor Transport

Class of Employees	Assam	Bengal		Bi-har	Bombay		Delhi	Madras	My-sore	Oris-sa	Pun-jab	Saurash-tra	Travancore-Cochin.				
	Rs.	ZV Rs.	ZI Rs.	Rs.	ZV Rs.	ZI Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	ZI Rs.	ZII Rs.				
1. Drivers.	60	95	110	65	76	95	75	61	60	60	80	91	86	65			
2. Conductors	60	75	78	45	55	75	67	49	45	45	50	65	60	52			
3. Mechanics	75	95	75	99	80	..	75	91	86	60			
4. Assistant Mechanics	55	75	67	72	..	..	..	65	60	52			
5. Fitters	75	95	75	61	55	100	75	91	86	60			
6. Assistant fitters	55	75	67	49	..	60	..	..	..	52			
7. Inspectors	75	95	75	54	60	50	..	65	60	60			
8. Electricians	75	95	75	61	..	..	65	105	105	65			
9. Blacksmiths	75	95	75	49	80	..	75	91	86	60			
10. Tinkers	75	95	75	49	65	..	75	91	86	60			
11. Turners	75	95	75	49	..	..	75	110	105	60			
12. Welders	75	95	75	58	80	..	75	91	86	65			
13. Moulders	75	95	75	58	..	..	75	91	86	65			
14. Spray Painters.	75	95	75	58	65	..	75	91	86	60			
15. Unskilled	47	55	55	..	40	60	60	38	40	30	20+ D.A.	52	47	42			

1. In Assam, a trip allowance has been fixed for Drivers and Conductors, at the rates of 2 as. and 1½ as. respectively for every 10 miles.

2. In Travancore-Cochin a daily *batta* of Re. 1/- has been fixed for Drivers, Conductors and Inspectors.

EMPLOYMENT REVIEW, 1949-54

by

SHRI B. N. DATAR

This note reviews briefly the employment trends over a period of the last six years for the country as a whole and its different regions. The data examined for this purpose are those provided in the publications of the D.G.R. & E. The limitations of these data are well known but in spite of these limitations an attempt at analysis is worth while for providing a proper perspective to the present employment situation. The note seeks to answer the following questions : (a) Are the present unemployment trends the results of factors which have been uniformly operative in the past or have some new factors entered the situation recently ? (b) Is the intensity of unemployment uniform throughout the country or are there major regional disparities ? In the Progress Report for 1953-54 a view was expressed : "The situation seems to be that while employment in the aggregate has been increasing in many fields there is at the same time an increase in the total number of unemployed. In other words new jobs are not being created at a rate fast enough to absorb the additions to the labour force of about 1.5 millions a year that accompany the increase in population." Again, since it is accepted that a study of both the employment and unemployment trends is necessary to complete the picture, some further questions require to be answered. (c) What is the size of employment generated by the Plan and how is it distributed ? (d) Why has it not made an impression on figures compiled by the Employment Exchanges ? While providing replies to these questions, it is also intended to examine the difficulties involved in estimating the employment potential of the Plan.

I

2. The analysis of unemployment trends over a period of years is difficult in view of insufficiency of data. The non-existence of statistics emanating from Trade Unions, Organisations managing Unemployment Insurance and Assistance Funds and other similar agencies add to our difficulties in supplementing the official statistics or in providing a cross-check on them. Moreover, in analysing the unemployment trends over years an allowance has to be made for the fact that not only the number of Exchanges working in the country has been varying but their jurisdiction has also been subject to a change. In the first four years, the Exchanges were open only to ex-servicemen and displaced persons. It was only in 1948 that the scope of the organisation was extended to cover all categories of employment seekers.

It is, therefore, relevant to restrict our analysis to the period from 1949 onwards. The salient statistics for this period are presented in the following Table.

Year	Total no. on Live Register (monthly average)	Vacancies Notified (monthly average)	No. on Live Register per vacancy notified	Index of unemployment (1949-100)	Placements effected
(1)	(2)	(3)	(4)	(5)	(6)
1949 . . .	2,95,640	30,168	9.8	100	21,400
1950 . . .	3,16,902	34,952	9.1	90.9	27,599
1951 . . .	3,37,579	40,544	8.3	80.7	34,738
1952 . . .	3,83,991	35,795	10.7	110.2	29,818
1953 . . .	4,77,575	21,392	22.3	242.0	15,353
1954 . . .	5,62,320	19,990	28.1	308.0	13,537

3. Some of the points which stand out in the above Table are that if the period 1949 to 1952 could be considered as normal, so far as employment market was concerned, there has been a distinct deterioration in the situation in the last two years, i.e. 1953 and 1954. This coincides with the tapering off of demand as a result of Korean boom. In so far as the placements effected by the Employment Exchanges and the vacancies notified to them are concerned, there seems to have been very little change in the ratio of columns (6) and (3) in 1953 and 1954, as compared to 1949, though in the period 1950 to 1952 the percentage of placements effected against the vacancies notified was significantly higher. The year 1952 was the turning point in the employment market with number of vacancies going down, the number of placements following them and the number of persons on the Live Registers going up. So far it is only the public sector that has to notify its vacancies compulsorily to the D.G.R. & E. and a large number of effective placements of the D.G.R. & E. are also in Government jobs. The reports of the D.G.R. & E. have referred specifically to the vacancies notified to it by the private sector in 1950-51 being almost the highest since the inception of the Exchanges. Since then the number of vacancies have dropped down by 75 per cent. It is significant to note that in 1952 the Shiva Rao Committee was appointed to examine the future of the Employment Exchange Organisation. It is difficult to say to what extent the appointment of this Committee led to the loss of faith in the Exchanges by private employers and to what extent the lack of demand on the Exchanges was due to the real shrinkage in the employment opportunities in that sector. An evidence to show that the second factor was more dominant is provided in the Employment Report from West Bengal which states that as a result of rationalisation in textile industry fresh recruitment was completely stopped. The Employment Exchanges also report that in the last two years as a result of the removal of controls and the absorption of the staff retrenched on this account in the normal vacancies that arise in that sector, fresh recruitment by Government has also gone down. Thus over a period it can be said that the worsening of the situation as reflected by the increase in the number on the Live Registers is due to the stabilisation of employment in the public and private sectors.

4. A further analysis of the Exchange registers shows that the increase has been considerable in the two groups—(i) clerical and education and (ii) the unskilled. The following Table compares the relative position of different groups for three dates—September '52, September '54 and December '54.

(1)	Percentage on the Live Register			No. of registrants per vacancy notified		
	Sept. 1952	Sept. 1954	Dec. 1954	Sept. 1952	Sept. 1954	Dec. 1954
	(2)	(3)	(4)	(5)	(6)	(7)
Industrial and Supervisory	1.1	0.9	0.9	12.1	9.7	10.9
Skilled and Semi-skilled	11.2	9.2	9.1	8.2	15.1	17.1
Clerical and Educational	31.5	32.4	31.3	35.1	39.6	36.0
Domestic	3.2	3.6	3.5	9.2	17.6	13.4
Unskilled	46.4	47.6	49.0	7.9	33.6	36.8
Others	6.6	6.3	6.2	10.7	19.3	16.0
	100	100	100	10.9	28.8	28.9
TOTAL	(4,07,872)	(5,90,538)	(6,09,700)			

Columns 2, 3 and 4 show that there has been very little change in the distribution *inter se* of the unemployed by occupational categories so far as the registrations are concerned. But if the incidence of unemployment has to be judged in terms of the number on Live Registers per vacancy notified, columns 5, 6 and 7 show that the categories which have suffered most are skilled, semi-skilled, domestic and unskilled. The clerical and educational category had relatively large number on the Live Registers in all the periods.

5. The Statewise analysis of the Employment Exchange data reveals some interesting features. Again, judging the number from the Live Registers in relation to the vacancies notified, the States which have shown the largest increase since 1949 are the industrial States like Bombay, Madras, U. P. and West Bengal. Bihar fortunately has so far maintained its 1949 position. If these figures are an indication of the deterioration in the situation, West Bengal seems to be the worst sufferer. Also in the predominantly agricultural States like Assam and Orissa, the situation does not seem to be so acute.

States	Numbers on the Live Registers per vacancy notified	
	1949	1954
	(2)	(3)
(1)		
A. Bombay	15.3	33.7
Madras	13.8	33.5
U.P.	5.5	17.1
West Bengal	16.2	53.8
B. Madhya Pradesh	12.3	23.2
Punjab	5.6	10.4
C. Assam	23.6	14.9
Bihar	14.1	15.3
Orissa	6.6	4.6
Delhi, Ajmer and Rajasthan	15.2	17.9

6. In the midst of a generally deteriorating employment situation, the Employment Exchanges also reveal the existence of shortages of certain skilled categories ; categories for which it has not been possible for them to meet the demands of the employers. Some of the trades in which they have been reporting persistent shortages over the period of the last six years are skilled technicians, accountants, stenographers, draughtsmen, overseers, trained teachers, nurses and compounders. The occupations in which the situation has changed from shortages to surpluses are domestic servants, typists, motor car drivers and the unskilled workers. A significant addition to the ranks of surplus categories in 1952 was retrenched Government servants, a reference to whom has already been made earlier.

II

7. Employment data available in the country are limited in their scope and are of doubtful reliability. They suffer from another serious handicap : the time lag in their publication. For instance, the average daily number of workers employed in factories covered by the Factories Act, 1948 rose from 24,33,966 in 1949 to 25,08,321 during the first half of 1953, an increase of 74,355. Since October 1952 the Licencing Committee, set up by the Commerce and Industries Ministry, has issued licences to 346 prospective employers for setting up new plants and/or for expanding the existing units. The total whole-time employment generated or to be generated in the establishments licensed since October, 1952 is of the order of 30,000 in new plants and 32,000 in expansions to the existing plants. This indicates that in two years licenced establishments have generated direct employment of the order of 60,000, *i.e.*, 30,000 per year. The employment in mines stood at 55,91,196 in 1952 as compared with 395,865 in 1948. The total number of workers employed in railways increased by about 11,500 in 1951-52 and by about 3,000 in 1952-53. The employment data regarding public works indicate that the total number of persons employed rose from 111,904 in 1949 to 349,000 in 1952. The number of non-gazetted staff in the Posts and Telegraphs Department showed an increase of nearly 11.2 per cent in the year 1952-53 as compared with the previous year. In cotton textile industry, the average daily number of workers employed which stood at 7,34,602 in 1949 rose to 7,45,559 in September, 1954. The employment in Central Government establishments has also been showing steady upward trend. The total number of persons employed in these establishments which stood at 5,77,386 in December 1950, rose to 6,28,381 in August 1954. According to National Income Committee Report employment has been increasing in 1948-49, 1949-50 and 1950-51, *i.e.*, at the rate of 27 lakh persons per year. The difficulty, therefore, has been the inability of our economy to maintain the pace set in 1950-51.

8. It has been accepted that the First Five Year Plan as drawn up in 1952 was not intended to provide adequate employment opportunities to cater to the back-log of the unemployed as at the beginning of the Plan period and fresh entrants every year to the employment market. Even so, it might not be correct to say, as is being said very often, that the Plan had made no impression on the employment situation in the country. In order to estimate employment potential of the Plan data are being collected both from the Central Ministries and State Governments. Those supplied so far are defective. Due to these difficulties a separate approach is at present being tried. It is intended to draw up a representative list of development schemes in consultation with the authorities concerned, study their employment potential and then try to

correlate them to the overall development expenditure incurred for the country as a whole under that particular "Head". However, in certain fields such as road construction, irrigation and power projects and certain enterprises in public sector, firm data exist. In the field of road construction it has been estimated that the additional employment generated on the basis of programmes so far completed is roughly of the order of 2.2 million man-years. Apart from these, studies in regard to employment aspect of the River Valley Projects have been made in the Planning Commission on the basis of spot enquiries. The total number of man-days required for completing each project has been calculated. The results of these studies indicate the following :—

Kakrapara	96.6 lakh man-days
Gangapur	32.7 " "
Hirakud Dam 1st Stage	600.0 " "
Malampuzha	104.0 " "
Manimuthar	165.0 " "
Ghataprabha	157.0 " "

As regards the employment potential of some other important enterprises in the public sector, the following instances may be quoted: Hindustan Shipyard 3371 persons, Sindri Fertilizer Factory 6180, Indian Telephone Industry 2382.

9. In the preceding paragraph, a few selected instances relating to the employment potential of certain specific projects have been given. We now propose to attempt to give an overall picture of the labour-employment potential of the labour-intensive projects in the First Five Year Plan. On the basis of the data collected in Commission, it has been estimated that out of the total of about Rs. 935.0 crores earmarked for labour-intensive projects (as it stood in terms of the original Plan) its labour component comes to Rs. 360.92 crores. In other words 38.7 per cent of the expenditure is likely to be distributed in the form of wages and salaries. The details of how this has been worked out are given in the Appendix "A" attached to this note. Assuming that out of the remaining outlay of about Rs. 1,134 crores only 15 per cent (which has been estimated to be a labour component in the case of power projects and which is the minimum as compared to other schemes) goes to labour, in money terms, the labour component of this sector comes to Rs. 170 crores. On the additional outlay of 210 crores earmarked under adjustments under the Plan, the labour component comes to nearly Rs. 115 crores. The details as to how this figure has been arrived at are given in Appendix 'B' attached. Thus we see that the total labour component of the Plan comes to Rs. 646.02 crores. As majority of these projects are in rural areas, assuming that a worker works for 250 days in a year at a wage of Rs. 1/8/- per day, the total additional employment generated could not possibly exceed 4.4* million jobs at the end of the First Five Year Plan. This will hold good only if the entire outlay earmarked in the Plan period were actually incurred. Indications, however, are that the total expenditure earmarked under the Plan may not be actually incurred with the result that our estimate of employment potential will have to be adjusted downwards. It may, however, be stated that these estimates do not include employment potential of cottage industries and employment generated in the tertiary sector outside the Plan.

* Please See Appendix 'C'.

10. An alternative approach in estimating the labour content of the Plan can also be indicated. The basis for this is the information furnished in the assessment of State Governments regarding the employment generated by different development schemes till March 1954 and the expenditure incurred up to that date. The following Table shows various heads of development, plan expenditure and estimates of employment generated in respect of each of them.

Head of Development	Plan expenditure (Rs. lakhs)	Employment generated
(1)	(2)	(3)
1. Agriculture	19918.0	1.89
2. Animal Husbandry	2067.6	0.43
3. Forests	1116.8	1.04
4. Cooperation	638.4	0.23
5. Fisheries	483.1	0.09
6. Road Transport	1023.4	1.24
7. Health	10773.8	1.15
8. Labour & Labour Welfare	708.9	0.51
9. Welfare of Backward Classes	3088.6	0.11
TOTAL	39818.6	6.69

11. It will be seen that against a development expenditure of Rs. 398 crores, estimated additional employment generated amounts to about 6.7 lakh jobs. Assuming that this expenditure-employment ratio is equally applicable in the case of the remaining heads of development for which employment data are not available, roughly the additional employment generated comes to 3.8 million. The figure is roughly comparable with the estimates made in the preceding para.

12. In the light of what has been stated above, it would perhaps not be incorrect to say that of late both employment and unemployment have been increasing justifying what was stated in the last Progress Report. The only question that now remains to be answered is as to why the additional employment opportunities generated by the Plan have failed to make their impress on the figures compiled by the Exchanges. The answer is two-fold. Firstly the Plan, with its bias in favour of agriculture, has resulted in the creation of additional employment opportunities mostly in the rural sector, whereas the Exchange data relate to urban areas. In the circumstances it is natural that the additional employment created under the Plan will not have a significant effect on the unemployment situation as revealed by the Exchanges. Secondly, the additional employment opportunities created in the urban sector are not sufficient to absorb the annual rise in the urban employment seekers. The solution, therefore, lies in increasing the pace of development in the country. Again, given the necessary pace, securing a pattern of investment which would be oriented in favour of employment is also equally important.

APPENDIX 'A'

Estimates of labour employment potential in the labour-intensive projects of the First Five Year Plan.

Head of Development	Plan Provision (Rupees crores)	Labour cost as percent to total cost	Estimated labour cost (Rs. crores)
<i>Central Plan</i>			
Local works	15.00	50	7.50
Programmes for scarcity affected areas	15.00	70	10.50
Multipurpose projects	255.90	20	51.18
Roads	41.24	70	28.87
Ports and Harbours	40.04	20	8.01
Housing	38.50	50	19.25
Works and Buildings	13.52	50	6.76
CENTRAL PLAN TOTAL	419.20		132.07
<i>States' Plan</i>			
Land Improvement	11.54	70	8.08
Minor Irrigation	19.55	70	13.68
Afforestation	2.60	90	2.34
Communication (forests)	1.50	70	1.05
Water supply, drainage, etc.	20.34	35	7.12
Irrigation Projects	212.38	50	106.19
Power Projects	147.34	15	22.10
Roads	90.05	70	63.03
Housing	10.51	50	5.26
STATE'S PLAN TOTAL	515.81		228.85
GRAND TOTAL	935.01		360.92

SOURCE—Professor V. M. Dandekar's Report on 'Disposal of Food Surpluses to aid Economic Development'.

APPENDIX "B"

Table showing the labour component of labour-intensive projects included under Adjustments in the first Five Year Plan.

Sl. No.	Head of development	Amount sanctioned (Rs. crores)	Labour component in terms of percentage to the total cost	Labour component in absolute money terms
(1)	(2)	(3)	(4)	(5)
1.	Agriculture and Rural Development	14.53	70	10.17
2.	Permanent improvement in Scarcity Areas	37.68	70	26.38
3.	Irrigation and Power	42.27	40	16.91
4.	Industry	9.53	40	3.81
5.	Roads and Road Transport	26.43	70	18.50
6.	Education	7.98	70	5.59
7.	Health including water supply	19.51	75	6.83
8.	Housing and miscellaneous	59.29	50	29.64
	TOTAL	217.22		117.83

SOURCE—Labour component in terms of percentages used above have been taken from Prof. V. M. Dandekar's Report on "Disposal of Food Surplus to aid Economic Development".

APPENDIX "C"

The total labour component of the Plan comes to Rs. 646.02 crores comprising Rs. 530.92 crores divided over a period of five years and the remaining Rs. 115.10 crores under adjustments for a period of two years. Assuming that this expenditure is evenly distributed over the period of the Plan, it will be seen that the annual labour component comes to Rs. 106.18 crores (as the Plan originally stood) and additional Rs. 57 crores for the last two years of the Plan. Against these two different sets of expenditure, the annual employment created at the rate of Rs. 375 per worker per annum comes to 2.8 millions and 1.6 millions, respectively. In other words the estimated total employment generated comes to 4.4 millions at the end of the Plan period.

But as the expenditure instead of being evenly distributed has been rising year after year, the actual increase in employment at the end of the Plan might be expected to be higher than the estimates given above. While the above estimate may give a fair idea of the average addition in employment as a result of the Plan, an alternative estimate can also be possible for the eve of the Second Five Year Plan by comparing the developmental expenditure of the last year of the present Plan—1955-56—with that in the base year 1950-51. The developmental expenditure incurred by the Centre and the States in 1950-51 was of the order of Rs. 224 crores. The corresponding estimates in respect of Central expenditure for 1955-56 is put at about Rs. 470 crores. To this may be added a tentative figure of Rs. 230 crores in respect of States, thus raising the total expenditure to Rs. 700 crores both for the Centre and the States. This means that in 1955-56 the developmental expenditure will have been stepped up by about Rs. 476 crores over the base year. Of this about Rs. 57 crores may be assumed to be under adjustments in the Plan, giving an additional employment of about 1.6 million. For the rest of current developmental expenditure the labour component may be put at about Rs. 125 crores, meaning a further addition in employment of 3.4 millions. Thus the overall increase in primary employment comes to about 5 millions. This will hold good in case the target of expenditure set for 1955-56 is actually realised.

CONCEPTS AND DEFINITIONS OF EMPLOYMENT AND UNEMPLOYMENT

(Central Statistical Organisation)

GENESIS AND OBJECTIVES

Genesis

1.1 The implementation of the first Five Year Plan during the last four years and the unemployment position in the recent past have brought to the forefront the importance of providing more employment to the labour force of the country. On December 20, 1954, the Minister of Finance stated in the Lok Sabha that "the central objective of our economic policy from now on must be to create full employment within a measurable period, say 10 years from now". More employment would thus be one of the main objectives in the formulation of the Second Five Year Plan. At the meeting in November 1954, the National Development Council, while considering the surveys conducted recently for securing data on employment and unemployment, observed that there were serious limitations in comparability due to differences in the concepts and definitions adopted. They, therefore, decided that all schemes of employment surveys undertaken by official agencies in the different parts of the country should be referred to the C.S.O. to ensure that common standards and concepts are employed and that the C.S.O. should work out a scheme for a comprehensive survey of the employment situation in the country. The question was considered at the Third Joint Conference of Central and State Statisticians in December 1954. The Conference discussed the various aspects of the subject, the experience of the N. S. S. and the State Bureaux in the conduct of such surveys ; and recommended that the C.S.O. should, besides undertaking the immediate task set by the National Development Council, in consultation with the N.S.S. and other agencies, develop a manual laying down standard concepts, definitions and procedures so that future surveys whether at the national level by the N. S. S. or at the State levels by the State Statistical Bureaux might be conducted on uniform lines recommended in the Manual. The Conference set up a Working Group consisting of representatives of the C. S. O., Planning Commission, National Sample Survey, Indian Statistical Institute, Ministry of Labour and the Economic Division of the Ministry of Finance to help the C. S. O. in this task. The Working Group prepared draft sections on objectives, concepts and definitions, and questionnaires and instructions. They were considered at an *ad hoc* Conference of State Statisticians held in Calcutta from 17th to 19th February 1955. The Conference approved in the main the objectives, concepts and definitions, and the questionnaire and instructions, but made certain detailed suggestions towards their improvement. They have been incorporated by the Working Group in these chapters.

Objectives

1.2 It is essential to formulate in the first instance, as clearly as possible the objectives of such employment and unemployment surveys. Broadly, such surveys should—

- (1) give an adequate picture of the employment, under-employment and unemployment situation in the country,
- (2) provide basic data for formulating policy in order to achieve fuller employment, and
- (3) enable a periodic assessment of the progress made in the implementation of such a policy.

1.3 The first calls for a photostat picture for the country as a whole at a point of time. In a country of the size of India with all its regional variations, the achievement of an overall target of employment may not be enough. It may be necessary to secure a distribution of the same to meet regional requirements. The formulation of a policy on a regional basis would require basic data not only at the national level but also at the State level and even at lower levels.

1.4 In any scheme for additional employment, separate consideration would have to be given to the rural and urban sectors, as in the former, the question is more of under-employment than of unemployment.

1.5 Further, it would be necessary to know not only the extent of employment but also the extent of spare time available for gainful work, so that steps might be taken for effective utilisation of the same.

1.6 The surveys should also bring out the causes of unemployment and under-employment and the types of gainful work sought by the unemployed and the under-employed in the different areas.

1.7 If the third objective is to be secured, it is necessary that such surveys should be conducted periodically, say, every quarter, so as to provide continuous data on employment, under-employment and unemployment. In view of the wide seasonal variations in the rural economy, data have to be built up for the rural sector from the several rounds covering the full period of a year. Further, such data should be collected on a uniform and comparable basis so as to facilitate the study of trends and enable assessment of achievement in the implementation of any employment policy.

1.8 While the Manual should be developed in accordance with the internal requirements of the country, attempts should be made to secure, as far as possible, international comparability.

CONCEPTS AND DEFINITIONS

Basic Approach

2.1 A review of the definitions in the field of 'labour force' statistics existing at present in the different countries shows that the underlying concepts have been based on the conditions prevailing in advanced countries. In such countries production is primarily for market and labour market is well organised. The concept of labour force has been tagged on, to the idea of labour market*. Consequently the labour force consists of all persons who had claims to jobs or who were competing for jobs in the Labour Market. **

2.2 But in a developing economy like India, or for that matter, any country in similar stage of economic evolution, particularly in rural areas where considerable part of the production is for home consumption and never reaches a market, where labour market is not so well organised, the underlying idea behind the 'labour force' concept should be "current availability for gainful work" rather than current attachment to the labour market. Judged from this point of view workers in India, though working for comparatively short period, have to be included in the labour force, if, as is expected in a majority of cases, they prefer to take more work when it is made available to them.

Definition of Gainful Work

2.3 The basic approach of availability for gainful work requires a precise definition of what constitutes 'gainful work'. It may be defined as one for which the person engaged is remunerated directly or indirectly in cash or in kind. † House work done by members of a family in their own homes is not included under that description. But work done by members of a family in the family occupation is so included, even though indirectly remunerated. If a person lives exclusively on income from property, or on pensions, remittances, etc. or on doles and receipts from begging, he is not performing any 'gainful work', and as such will be excluded from the 'Labour Force'.

2.4 The 'labour force' concept defined above needs to be distinguished from the 'gainfully occupied' concept, usually adopted in the population censuses. The latter implies the 'gainful worker' approach to the measurement of the economically active population. This approach is based on the usual or customary activities of persons of working age and is independent of activity at a given time. Of course, if there is no break in the gainful activity of an individual it makes no difference which approach is adopted, but in an economy where spells of gainful activity occur at different periods in the year and people take to gainful activity at certain points of time and give up at others the two approaches will give different results. In population censuses where it may not be possible to have more penetrating set of questions and where emphasis is only on the predominant gainful activity during the year, the 'gainfully occupied' approach may serve well, but in an employment and unemployment survey where more precise and objective results are desired, this approach will not only be

* Jaffee, *Manpower utilisation*.

** *Labour Force Statistics—Sample Survey Methods*, 1954, O. E. E. C., page 18.

† The U. N. O. publication, *Population, Census Methods, No. IV* 1949.

rather vague but will have the great disadvantage of being relatively insensitive to temporary changes at different points of time. The 'labour force' concept has to be brought in.

2.5 The definition of the 'labour force' given above automatically brings in time element. The reference period may be a day or a week,* which is usually adopted in the existing Labour Force surveys in other countries, or a fortnight as adopted by State of Uttar Pradesh in the recent survey conducted in the State or it may be a comparatively longer period, a month as adopted by the National Sample Survey in its previous rounds.

Reference period—Basic definition.

In reaching a decision on this point, the basic definition may be distinguished from the working definition. For the basic definition the time reference should be one day. The reason for this is not only that it is common practice in most countries but also that, so far as employment and unemployment are concerned, it yields more definite result—more definite because the magnitude of error involved is small when the condition is imposed that the status of employment or unemployment for an individual must last throughout the period, or that the status employment and unemployment must be counted if it appears at any time during the period. The magnitude of the error increases as the length of the reference period is increased. As such, a clear definition of the numbers employed or unemployed requires the time reference to be a given day.** Thus labour force consists of all those available for gainful work on a given day.

Labour Force Activity Categories

2.6 Those constituting labour force can be broadly classified under the following categories by the nature of activity.

1. Employed—

- 1.1 At gainful work (either on job or own enterprise).
- 1.2 Not at gainful work but with job or own enterprise.

2. Others in the labour force—

- 2.1 seeking gainful work but—
 - 2.1.1 with job (or own enterprise) to start at future date.
 - 2.1.2 without job or own enterprise to start at future date.
- 2.2 Not seeking gainful work but available for work, and
 - 2.2.1 with job (or own enterprise) to start at future date.
 - 2.2.2 without job (or own enterprise) at future date.

In the category 1.2, the classification of persons who are with job, *i.e.* paid employment in the usual sense, but not at work is simple, but that of those who have their own enterprise but are not at work needs careful attention. A cultivator or shopkeeper, who is working on his own account may not be at work because of such reasons as illness, injury, vacation, weather condition, etc. which really prevented him from attending to work, though work was

* Ducoff & Hagood, 'Labour Force, Definition and measurement'.

** I.L.O., *Employment and Unemployment Statistics—1948*.

there. On the other hand, he may not be at work because actually there was no work on his farm or in his shop because of slack season or because of fall in demand. These two types are to be distinguished—the former is to be put in the category of with job or own enterprise but not at work but not the latter. The latter comes in the category of ‘not seeking gainful work but available for work’. Of course, their own enterprise already exists, as such they can be only considered as ‘with job or own enterprise, to start at future date.’

2.7 In the categorization of labour force presented in paragraph 2.6 the explicit use of ‘unemployed’ has been deliberately avoided. The definition of ‘unemployed’ has been so varied, depending upon the purpose for which the desired statistics were needed. It can describe a ‘condition’—that of being not at work—an ‘activity’—that of seeking work; and an ‘attitude’—that of desiring a job under certain conditions or that of being available for gainful work. While no one has any doubt as regards inclusion of the category 2.1 under the unemployed, opinions may differ as regards the category 2.2. The crux of the matter is the distinction between ‘attitude’ and ‘behaviour’. No doubt, the usual concept of unemployment in vogue in the Western countries leads to a measurement of those without jobs, and in search for the same. But, looked at from a wider point of view, the measurement of unemployment should be a measurement of unused human resources, that is, all persons who would like to work at jobs or own enterprise consistent with their training and experience and are prevented from doing so because of lack of adequate opportunities. In this sense, naturally, both the categories 2.1 and 2.2 come under ‘unemployed’. For this reason it is suggested that statistics should be collected for each one of the categories 2.1 and 2.2.

2.8 Labour force can further be classified by status according to the following categories :—

- (1) employees ;
- (2) apprentices ;
- (3) employers ;
- (4) workers on own account ;
- (5) unpaid family enterprise workers.

In case of rural surveys, some further categories like ‘exchange labour’, ‘Balutedars’, etc. may be added.

Outside the Labour Force

2.9 ‘Outside the labour force’ consists of those in the population who are not available for gainful work. They can be classified as :—

- (1) Family members engaged in domestic work ;
- (2) students ;
- (3) permanently disabled persons ;
- (4) rentiers, pensioners and persons living on investment incomes ;
- (5) beggars, vagrants, etc.
- (6) inmates of medical, mental, penal and charitable institutions ;
- (7) others able but not available for work ;
- (8) others not available for gainful work.

2.10 Usually the international practice is to regard 15 years as the lower age limit but in India it is not unusual to find children at work. Hence, all those who are available for gainful work irrespective of their age should be included. At the same time with a view to facilitate compilation of internationally comparable data it is essential to present labour force statistics by suitable sized age groups.

2.11 It is necessary to have labour force data by sex, particularly as in India the female population is more often engaged in household duties, and social customs and institutions act as a check in their participation in gainful work. A considerable number of them might not actively seek work outside the family but might be available for work, if work is provided to them at their homes.

2.12 A detailed list of industrial status codes for the entire labour force can now be drawn as follows :—

1. *Employed :*

1.1 At gainful work :

- 1.11 Employee ;
- 1.12 Apprentice ;
- 1.13 Employer ;
- 1.14 Own account worker ;
- 1.15 Unpaid family enterprise worker.

1.2 Not at gainful work but with job (or own enterprise) :

- 1.21 Employee ;
- 1.22 Apprentice ;
- 1.23 Employer ;
- 1.24 Own account worker ;
- 1.25 Unpaid family enterprise worker.

[Each of the above statuses under 1.2 can be further divided according to reasons into (1) Because of illness or injury ; (2) Other reasons.]

2. *Others in the labour force :*

2.1 Seeking gainful work—

2.11 waiting to start work (job or own enterprise) at future date.

- 2.111 Seeking paid employment for the first time ;
- 2.112 seeking paid employment not for the first time ;
- 2.113 seeking gainful work other than paid employment for the first time ;
- 2.114 seeking gainful work other than paid employment not for the first time.

2.12 Not waiting to start work (job or own enterprise) at some future date.

- 2.121 seeking paid employment for the first time ;
- 2.122 seeking paid employment not for the first time ;
- 2.123 seeking gainful work other than paid employment for the first time ;
- 2.124 seeking gainful work other than paid employment not for the first time.

2.2 Not seeking gainful work but available for work—

- 2.21 waiting to start work (job or own enterprise) at future date;
- 2.22 not waiting to start work (job or own enterprise) at future date;
 - 2.221 those available only for family gainful work ;
 - 2.222 others available for all gainful work.

The above codes could be further amplified, if necessary. For example, the Industrial Status Code not seeking gainful work but available for work (2.2) could be further split by taking into account the groups—

- (a) available for paid employment ;
- (b) available for other than paid employment ;
- (c) available for the first time ;
- (d) available not for the first time.

But these sub-divisions are not made here as the cells so formed are unlikely to have significant frequencies. The Industrial Status code "seeking gainful work though waiting to start work" (2.11) has not been sub-divided into "those available for only family work" and others available for gainful work, on similar grounds. The codes 2.113 and 2.114 can be further split up by apprentices, employer, and own account worker. It has not been done so in the Manual which purports to give only the basic minimum. However, if certain States so desire they may increase the Industrial Status codes accordingly. Also, there is the alternative of doing so only for filling up the schedule, while at the tabulation stage these refined break-downs need not be utilized for presentation purposes.

2.13 Further, it may be noted that the industrial status codes are exclusive categories and being detailed in character, would permit presentation of data in broader groups on any desired lines.

With job but not at work and waiting to start work at future date

2.14 The industrial status codes adopted in the different surveys conducted by official agencies so far vary considerably both in regard to classification and the extent of detail. It is not proposed to enter into their merits or demerits. However, it may be observed that the codes for "with job but not at work" and "waiting to start work at future date" do not appear to have been specifically included. The latter can serve as an important indicator of the level of 'frictional unemployment' which has got to be allowed for in the determination of what constitutes the optimum level of employment. It should, also be noted that consistent with the recommendation of the Eighth International Conference of Labour Statisticians, persons who are not at work but have arranged to start work at some future date are not considered as employed. If they are also not currently available for work, they should be considered outside the labour force.

Willing to and available for but not actively seeking work

2.15 In an economy like ours, it is also essential to have a separate category of those willing to and available for work but not actively seeking work.

Temporary lay off

2.16 Only those on lay off with pay are placed in the category of with job but not at work. People who are on indefinite lay off and temporary lay off without pay are considered as unemployed. The distinction is thus made not on the basis of time but on the basis of pay, a more objective and realistic criterion. In practice the definiteness of the instruction to return is sometimes hard to establish and the distinction between temporary lay off and indefinite lay off may become rather artificial. At the same time, however, while recording reasons for not being at work, separate codes should be assigned to temporary lay off with pay and without pay as well as for indefinite lay off with pay and without pay.

Reference Period—Working Definition

2.17 So far, the problems of concepts in the labour force statistics have been analysed, taking the basic definition of reference period in the labour force survey as only one day. One day as a period of reference is, however, likely to be influenced considerably by chance factors. Holidays and periodic day-to-day fluctuations* in the employment behaviour of persons, will distort the picture. The sample estimates of labour force based on one day reference period will therefore have a large variance and as such the change in the labour force could be detected only if it is of relatively considerable magnitude. Thus, in order to smoothen out the preponderance of chance factors and to reduce the variance of sample estimates of the labour force, the reference period should be increased from one day to say a week. The longer duration will serve better the purpose of estimating time effects, *i.e.*, changes in the labour force brought about not by purely chance factors. The U. S. A. adopted a week as the reference period. "It is short enough to reflect the current status of the population to be classified and to obtain accurate reporting without taxing the memory of those questioned. At the same time, it is long enough to avoid erratic fluctuations due to covering only one phase of known short-time fluctuations".** In India too, fortnight or a week may be adopted. It can be argued in favour of fortnight that in case of urban surveys, it is more consistent with the wage payments and employment practices. The standing orders prescribe a fortnight's notice for discharge of the workers. Besides, in the urban areas, where people follow a more systematic pattern of employment behaviour, a fortnight may not entail too much additional burden on the memory of the respondents.

On the other hand, a week may be better if the schedule aims to go into details of the time disposition for each activity. The Baranagore Pilot Survey experience where different reference periods have been tried out indicates that the choice of the week as reference period is likely to yield the best results.

**Labour Force, Definition & Measurement*, by Ducoff and Hagood, Page 17.

***Labour Force Statistics, Sample Survey Methods*, O.E.E.C. 1954, Page 17.

Multiple Activity Status

2.18 But the extension of the reference period from one day to a week brings in complications arising out of the fact that an individual is more likely to have more than one activity status during the period. He may, for example, be at work on a job for two days, seeking job for two days and not available for work during the rest of the week. The question arises how to classify him under one unique status. A similar problem also arises if an individual like a student or a housewife takes up some gainful work for a part of the reference period. The usual international practice here is to assign a priority scale and to put a person of dual or multiple activity status in the status group of higher priority, for the numbers analysis. In such a scale, 'In the Labour Force' takes priority over 'non-worker'; 'At work' takes priority over "unemployed"; "seeking gainful work" takes priority over "with job but not at work" as in case of the U. S. A., Canada and O. E. E. C. Surveys. Difference of opinion may arise about the justifiability of the priority of 'seeking gainful work' over 'with job but not at work'. Consistent with the international practice of using priority scale for the 'numbers analysis', for our purposes activities may be ranked as follows in order of priority for deciding the activity status in which a person is to be classed :—

(1) at work ; (2) with job but not at work ; (3) seeking gainful work; (4) available for work ; (5) not available. It must be admitted that such a priority scale is loaded in favour of employment.

2.19 The implication is that if an individual during the reference period is at work for some time, he would be put under the code relevant for him in the category of 'at work.' Similarly, if he is with job but not at work for a part of the reference period and seeking gainful work for the remaining part, he will be put in the code relevant for him under the category of 'with job but not at work'. It should be noted that while the priority scale, as here described, assigns priorities between certain types of activity of persons ; it does not assign priorities between different statuses of a person, like employer, employees, own account worker, etc. For illustration, if a particular person has been for some time in the reference period an 'own account worker' at gainful work and for the remaining part of the reference period 'an employee' at gainful work the priority scale does not say that he would be given only one industrial status code. However, if he has been during the latter part 'an employee with job but not at work' the priority scale implies higher priority to the activity status of 'at work' and as such this person should be considered for the whole reference period to be in the relevant industrial status code, belonging to 'at work' activity status, *i.e.*, in the industrial status code 'own account worker' at gainful work.

2.20. Those persons who have for only a part of the reference period been engaged in or seeking gainful work should be classified in the numbers analysis as 'in the labour force', even though they might have spent a greater part of the reference period in some non-gainful activity. The only exception to this rule may be students or housewives where gainful work is more or less incidental.

Importance of the Disposition of Labour Time

2.21 While the adoption of the priority scale is necessitated by the compilation requirements in order to avoid double counting in the analysis of employment situation by the 'number of persons' approach, its use at the investigator's stage results in substantial loss of information as recorded in the schedule. The dominant pattern of disposition of labour time so relevant to Indian conditions is missed. In developed economies where labour market is rather well organised, and an individual is either fully employed or not employed at all, the labour time put in by him can be more or less precisely ascertained from just the knowledge of whether he is employed or unemployed. This is, however, not so in the case of economies like India, where labour time disposition is unknown and may vary greatly from person to person. What is essentially needed from an employment survey in a predominantly rural economy is to get complete and accurate picture of the full labour time disposition a mere 'number of persons' analysis would not suffice. For the labour time disposition analysis it is necessary to get a record of all the industrial status codes, relevant for the gainful activities performed by the individual during the reference period along with their duration. The Baranagore Pilot Survey in its schedule recorded only two industrial statuses: 'principal' and 'subsidiary'. Considering the fact that the basis for classification should be the duration, the statuses may be more appropriately called 'major' and 'minor' in order to avoid confusion with the usual connotation of the words 'principal' and 'subsidiary' and criterion may be uniformly duration in all cases irrespective of—whether the status came from the 'labour force' or 'outside the labour force' category. It is desirable to have complete recording of all the industrial status codes so as to have full picture of the labour time disposition.

2.22 The ideal procedure would have been to maintain such a record of time disposition for all persons in the country, and in respect of each for the full year if seasonal variations are to be thrown up. The busy and slack seasons of agriculture react on the movement of labour from the rural sector to the urban sector. Needless to add that seasonal variations are pronounced in the rural areas of our country and even urban areas cannot be considered completely free from the effect. But considerations of costs, personnel, etc. come in. Besides, respondents may not like to be interviewed too often. At the same time, it would be useful to have some sample families for the purpose of studying the trends. It would reduce the sampling error for the estimates of the amount of change from the previous round. The feasible solution seems to be sampling—sampling both over persons or house-holds and over time, with of course, complete record of all industrial statuses held by an individual during the reference period day by day.

2.23 The idea of sampling over time leads to the desirability of having periodic surveys for the collection of continuous data on employment. It will be advisable to have periodic surveys, repeated say every quarter in the urban areas, the reference period being a week preceding the date of enquiry, and the enquiry staggered uniformly over the sample families in each quarter. In this way, for each quarter, we will have complete records for at least one week. The rotational system can be worked out in such a way that a major proportion of the

sample families are identical in consecutive quarters and a smaller proportion of the sample families are identical to that of the corresponding quarter of the previous year. For example, sample families for urban areas may be split up in six equal parts and one part may be dropped each quarter to be replaced by new sample families.

2.24 Symbolically, the rotational pattern in the urban areas may be as follows :—

Year	Quarter	Rotational pattern
I	I	A B C D E F
	2	B C D E F G
	3	C D E F G H
	4	D E F G H I
II	I	E F G H I J

(Each symbol represents one-sixth of the total sample families.)

2.25 It will be seen that in the above scheme, all the sample families are not kept constant from quarter to quarter. The rotational pattern adopted would reduce the refusal rates and complaints and requests to be dropped off from the panel from what they would be if all the sample families were selected afresh in the new rounds. Moreover, introduction of new sample of families on staggered basis has strong administrative advantages.

2.26 In the rural areas where seasonal changes in agricultural employment are substantial, it would be desirable, if resources permit to repeat the survey at least once a month and have it staggered over the sample families. For illustration, rotational plan can be worked out in such a way that one family is interviewed for four successive months and then not interviewed for 8 months and again interviewed for two successive months.

2.27 In the early stages such repetitive surveys should also be used for the study of the behaviour of the cost functions, repetitive interview reactions on the part of the respondents and the psychological effect of different reference periods and of a given time interval between two interviews of the same family.

Available Labour Time Disposition Analysis

2.28 Thus, using appropriate techniques of sampling over the population as well as over time, complete data on labour time disposition should be obtained and utilised for detailed analysis of the employment and under-employment. The emphasis shifts from 'the numbers' analysis to the analysis of 'available labour time disposition'. Such an analysis may be in terms of man-days or even man-hours.

2.29 In order to be more penetrating and useful, the labour time disposition analysis must not restrict itself to just global aggregates. It must give significant breakdowns by the nature and period of labour force participation, by industry and by area for each sex.

Nature of labour force participation will imply a differentiation, based on the degree of permanence in the individuals attachment to the labour force. At one extreme will be the person who never enters the labour force and at the other, one who never exits from the labour force and in between, a number of graduations can be envisaged in the continuum. But it would not only be more practical but also more meaningful to limit these graduations to a few categories more relevant to our economy like 'enters labour force casually but only in the busy season'; 'casually but throughout the year'; "regularly but only in the busy season"; and 'regularly but throughout the year'. It would be definitely helpful for planning and development purposes to know separately the amount of additional labour time available from regular workers, who remain in the labour force throughout, and from casual workers, who enter only in busy season (along with the busy months). These detailed breakdowns will provide more information for interpreting the availability of labour under changing demand conditions. When employment increases the data give clearer picture of the source of additional manpower. If employment declines they will indicate who actually bear the brunt of the decline. Further, analysis by area and industry, is necessary in order to spot out the 'surplus labour' pockets which may exist in certain areas even though the country as a whole may be in the grip of unemployment.

Extent of Intensity of Employment

2.30 For indicating the distribution of labour force by labour time worked, class intervals of labour time have to be fixed and corresponding frequency distribution presented in a tabular form. This will give the picture of the actual extent of employment of the labour force. In addition, the relevant data need also be presented in frequency distribution form in order to give an idea of the total time available for work. The ratio of labour time worked to total labour time available for work may be regarded as indicator of the intensity of employment and frequency distribution of such ratios will show the variations in the intensity of employment.

Normal Concept

2.31 The total labour time an individual would be available for gainful work is, of course, a subjective measure and the interviewer can only ascertain from the respondent. The total labour time available indicated by the respondents may not be justified after going into details. It may be necessary to make them as objective as possible. One step would be to take labour time as the most current 'labour time worked' in that group of individuals irrespective of what an individual might have to say on the time available for work. This concept is a model one. The draw-back there is that in case of slack seasons, the length of the model or normal working day itself will be very low and if this is used for measuring the extent of employment in the slack season, there is the danger of getting a high percentage of employment. This deserves consideration, particularly in the case of rural employment because of the fact that slack seasons are quite pronounced there. However, the inherent approach based on this concept is defective in the sense that the norm or the measuring rod itself is not exogenous. Again, it will change with time and as such comparison over time will be distorted, even for the same type of persons.

2·32 Ideally, it would be desirable to establish a norm, “ which could be worked without damage to health and with due observance of local customs and socially accepted habits relating to breaks for meals, recreation, days of rest, festivals and so forth ”.* It may be that if the above approach is adopted, the norm may not have as much variation as it will have if the other usual approach is adopted. But the difficulty would be in establishing such a norm which could be universally accepted.

2·33 The number of normal working days in the reference period is determined usually with the observance of local customs, festivals and other accepted habits. Days on which no work is generally done either because it is a festival or an important bath or prayer day or a *mela* or bazar day or even because of unworkable weather conditions would be excluded from the category of normal working days.

2·34 When once the normal day and normal hours of work are defined, the intensity of employment can be measured against the normal time as calculated for the reference period, the ideal case being that of full employment when work is done for the normal time or above. All other cases come under under-employment and may be quantitatively expressed by the intensity of employment as measured by the ratio of the time worked to the normal time.

2·35 The full employment as described here can be indicator of only the maximum ‘desired employment’ and not the maximum available man-time. Also, a person having full employment in this sense, may not necessarily have employment suited for the level of his skill, or experience nor may have remuneration commensurate with his desire, earning capacity or level of living requirements. The intensity of employment also takes into account only the duration of labour time put in, it does not link the labour input to its remuneration in cash or kind. Of course, in a wider sense, ‘fully employed’ implies that employment is consistent with the desire and ability of the individual not only in terms of labour time but also in terms of technical skill, earning capacity and decent level of living requirements. But this would need rather detailed income and family budget survey ; it is not proposed to take these up in this manual. The conceptual problems involved in introducing the idea of availability in the labour force concept ‘extension of numbers’ analysis to detailed labour time disposition analysis and differentiation by nature of labour force participation would themselves need further research and experimentation in the actual field.

2·36 Apart from the measures of intensity of employment over a period, it would be necessary to study the period of work—seeking per accession (or to put it differently the average intervening period between the present and previous job of the now employed, who have been seeking work before), and the percentage of the now employed with previous ‘non-labour force’ status. A relatively smaller period of work seeking per accession and similarly a higher percentage of employment participation of the normally ‘non-labour force’ may themselves seem to indicate fuller employment.

* ‘Under-employment in Asia, Nature and Extent’ by Chian Hsieh, International Labour Review, June 1952.

2.37 In an economy like that of India, a labour force survey would serve its purpose better if it presents data on labour time disposition on the lines indicated in paras. 2.28 to 2.30 than when it attempts a classification of the numbers in the labour force by fully employed, under-employed and unemployed. In any case a report giving only the latter would fail to fulfil our objectives.

2.38 Lastly, it should be pointed out that the question of concepts and definitions in this difficult field had engaged the attention of technicians for years in advanced countries and still no finality seems to have been reached, and from that point of view all that is claimed is to have made a beginning in standardisation in this important field. Further progress would largely depend on the field experience that would be gathered in the course of the next survey by the National Sample Survey and the State Statistical Bureaux.

V. SMALL AND LARGE-SCALE INDUSTRIES

COMMON PRODUCTION PLANS FOR HAND AND MACHINE SECTORS IN AN INDUSTRY

(Gokhale Institute of Politics and Economics)

A large number of problems are involved in a consideration of the common production plan in any activity where different types of techniques are in use side by side. No elaborate common production plan seems to have been worked out so far by the Planning Commission or any other similar organization. The recent report of the Textile Enquiry Committee (Kanungo Committee) contains a number of recommendations which together may be considered to constitute the rudiments of a common production plan. Because of this and because the Kanungo Committee devoted its attention to the production of cotton textiles, which is the single largest field over which a common production plan will have to be elaborated, it appears advisable to centre consideration of the subject round the recommendations of the Kanungo Committee. The initial step in evolving a common production plan may be considered to be the determination of the immediate and future volume of demand and the composition of the demand. The Kanungo Committee has, for example, estimated that the demand for cloth would increase from about 15 yards per capita in 1952-54 to 18 yards per capita in 1960. The total increase in consumption within the country will be the result of increase in per capita demand by 20 per cent (from 15 yards to 18 yards) and the growth in the population during the same period. As all the important statistical data on which the Kanungo Committee bases its recommendations are yet unpublished, it is not possible to examine the reasonableness of the forecast of increase in consumption made by the Kanungo Committee. It is also unnecessary, for the purpose in hand, to discuss in detail either the statistical data or the general reasons given by the Committee for the estimate of increase in consumption. It may, however, be noted that figures of average consumption per capita since 1948-49 show wide fluctuations which do not appear to be closely related to fluctuations in income. Secondly, a factor which the Kanungo Committee does not take into consideration but which may become important in consideration of the production plan, is possible effects on volume and composition of demand of the changes in the distribution of income during the plan period. If any real concern is exhibited in the plan regarding the well-being of the poorest tenth or fifth in the community this may bring about a considerable change, in particular, in the composition of demand for cloth. Account will have to be taken of this in framing a common production plan. The Kanungo Committee also confines itself to estimation of the overall demand for cloth in general. Any common production plan which attempts allocation in some detail will have to break down this estimate of demand, at least, into broad types of classes for large regional groupings.

The second problem faced in framing a common production plan is the allocation of definite parts and percentages of total production to the different sectors for whose common

production the plan is being prepared. The Kanungo Committee divides the total production target, including exports, amongst the three sectors, *viz.*, mill industry, powerloom and handloom. In this context, initial consideration is given by the Committee to the technical superiority of particular sectors in specific types of production. However, as the technical superiority of handlooms over machine industry was limited to very narrow ranges of production, the Kanungo Committee adopted as the basis of distribution largely the existing reservation arrangements. Obviously, the proper theoretical approach in this regard is the approach of comparative costs. So that when it is determined that for a given period a particular sector is to be allotted a given share of the total production the composition of the allotted production to any agency by regions and sorts would be determined by its relative (not absolute) advantage in particular production fields. That the basis of comparative costs is the appropriate theoretical basis for allotting the desired shares would be generally agreed upon. However, the allotment of the shares to different sectors itself raises a problem of great difficulty. Once determination of the division of a market by price competition is given up, the allocation of a field of production between different agencies or sectors has to be related to some external objective or criterion.

The whole scheme of the Kanungo Committee, for example, is based on the assumption of a steadily increasing demand for cloth of which a continuously decreasing share falls to the handloom industry. The present and future allotments made to different sectors are governed by the major consideration of not allowing a significant fall in total employment in cotton textile production. Even so the Committee's scheme of gradual replacement of handlooms by improved looms involves a displacement of the order of 20,000 persons a year. The Committee feels that this would not "create any great social or economic disturbance, considering that the current and the next five-year plan would ensure the development of agriculture, industries and a number of resources which would provide a certain modicum of extra employment". The main objective of the Kanungo Committee may thus be stated to be technical improvement in production of cotton textiles at as fast a pace as is compatible with maintaining the total employment in the industry at only a slightly reduced level. Obviously, if the objective of the plan was to obtain some increase of employment in the cotton textile industry during the plan period, the plan of transition recommended by the Kanungo Committee would, other things being equal, have to be substantially altered.

The reference to plan of transition made above indicates that a common production plan has to allocate production as between different sectors or agencies at different stages or different periods and that the allotted quantities and/or percentages may change substantially, during the period of a plan, according to the directions in which the economy is moving. A common production plan requires, in this context, at a minimum, the estimation of demand for total production at two points of time, the beginning and the end of the plan period, and the allocation of total production between different sectors or agencies at the two points of time; the transition from the allocation indicated at the earlier point of time to that indicated for the latter point of time giving the general measure and direction of change.

The sharing of total production between different agencies and the determination of the rate of change are both important decisions which will, obviously, be related to the total purposes and objectives of the Plan. To these no special attention may be paid in this note. It is necessary, however, to draw attention here to one important aspect of the common production plan. This is the method and mechanism by which it is seen that the allotment made in the plan of production is, in fact, effective and that the transitional stages incorporated in the plan are successfully achieved. The Kanungo Committee does not seem to have paid detailed attention to this problem. It seems to have taken for granted that the existing measures will suffice for the present. These measures include reservation of certain lines of production for handloom and specified types of powerlooms and cesses or excises levied on certain types of cloth produced by the mill industry. While the Committee is not sure of the effects of existing reservations on the total demand for handloom products and is not sure whether the fact of reservation may not be nullified at least partly by a change in dress habits, etc., it recommends continuance of the present reservations but no extension of them. The Committee also recommends continuance of the "principle of assisted sale with some flexibility" wherever the small sector is in genuine need of such assistance. It may be that as the allocation which the Kanungo Committee takes as the starting point is the existing allocation achieved as a result of market operations and Government policy, no radical change in policy or methods was considered necessary by the Committee. However, whenever the initial allocation differs materially from existing conditions such measures may not be sufficient. Moreover, the division of the cloth market by reservation is at least partially possible today only because of some special features of the market. The reservation of coloured sarees or dhoties is effective because these are distinctly differentiated products with a comparatively separate market. But even in such cases indirect substitutions and other factors may upset calculations in the future and reservations which are immediately useful may be undermined by a number of adjustments over a period. Therefore, when measures such as reservation are in force over a long period it is likely that their efficacy in allocation of markets will be lessened as time passes.

Other difficulties in this regard are brought out by the programme of change recommended by the Kanungo Committee. The Committee has not elaborated the concrete steps and instruments or agencies through which the transition will be brought about. While the Committee appears to be aware of the large problems of finance, of cooperative organization and of conversion of capital equipment and techniques, the concrete institutional recommendations made by it appear confined to setting up an Advisory Committee and an expansion of the All-India Handloom Board. How in fact the picture that the Committee envisages of the continuance in the decentralised form of a weaving industry which adopts power and modern tools and which is organized mainly on the cooperative pattern, is to be actually brought about is not clear from the report of the Committee. Very considerable positive steps appear necessary, if this is to be achieved. Apart from making available technical assistance or even finance the programme of actively bringing about the transition must become the responsibility of some authority and the work of such authority has to be closely related with other activities which directly or indirectly bear on the transition. Little attention has been paid by the Kanungo Committee to the complex problem raised by this.

The Committee also says very little regarding a related price structure. It is obvious that the industry will not proceed smoothly through transitional stages contemplated by the Committee unless the prices of various types of products maintain some relative consistency. All the calculations of days of employment, of production, total receipts and income of various classes of producers especially in the hand and powerloom industry, made by the Committee depend essentially on a measure of stability in cost and prices, absolute and relative. Experience in the post-war period has shown how variation in the demand for and prices of products of different sections of industry may come about quickly. The Committee dismisses somewhat summarily the demand for price equalization. However, it gives no attention to the problem of maintaining a related level of prices in the light of recent experience of price control and seems to assume automatic maintenance of a stable situation throughout the period of transition.

An extremely important aspect of the whole problem is the total cost of any measures adopted to the consumer and the community. What are the possible effects of the whole of the Kanungo Committee Scheme on prices of cloth and the profits for cloth production? The decision not to allow any further installation of looms in spinning and weaving mills will naturally create a quasi-monopolistic position for the present constituents of the cotton mill industry. As price competition through imports may be disregarded, the only possible check on price charged by mills is the competition of powerlooms and handlooms. Obviously, this will not be an effective check at all. In the major part of the field open to the cotton mill industry the handloom and the powerloom work under such handicaps that very large price margins can safely be received by mills without endangering what is essentially a closed market for them. That they will be able to do this with special ease when the export market is favourable is fully illustrated by existing conditions. However, even if the export market does not remain favourable, the position of the mill industry will become progressively more entrenched as the expected increase in cloth demand materialises. Indeed, the possible development for the future may be presented in the form of a dilemma. If there is a large increase in demand for cloth in the country, the mill industry—even without export outlets—would be so favourably situated as to be able to charge high relative prices for its products and exploit the consumer fully. If, however, there is not the expected increase in demand, the mill industry by a proper price policy would be able to market all its products with reasonable margin but this will make it impossible for the handloom and powerloom sectors to offer the expected employment and earnings to workers within these sectors.

If, as might well happen, it is desired to modify the production pattern in the industry the positive steps taken will have to be further elaborated. Modification of the pattern of production might be desired for a number of reasons. For example, the case for a large reduction in the varieties of cloth produced by the mill industry and their standardization has been long discussed and some concrete schemes were prepared for the purpose during the war. Such action might reduce costs of production and may make control of pricing, etc. easier. Moreover, if, as indicated previously, the production of consumer goods is oriented definitely towards meeting the needs of the poorer strata in society a change in production pattern with an emphasis on standardization may become inevitable.

If the basic approach of the Kanungo Committee proves acceptable its recommendations would have to be very greatly elaborated and an appropriate series of measures devised for putting them into effect. This will provide a common production plan for the cotton textile industry. It is understood that the Khadi Board has a number of modifications to suggest in the approach of the Kanungo Committee. An important suggested modification is the use of improved charkhas for the supply of increased yarn required by handlooms. Another possible modification of the model of the Kanungo Committee is to introduce a category of production by members of a household or a cooperative for direct consumption within the household or the cooperative. It may be possible by this device to utilise some types of equipment and fragmented labour time—such as in handspinning and domestic weaving—for some increase of the standard of living, which may be impossible to utilise or to organise for production for the market. Whatever the model of the approach finally adopted in the cotton textile field as a result of the activities of the Kanungo Committee, the Khadi Board, etc. the basic materials for formulating of a common production plan are, at least, available. This is far from being the case in the other fields where common production plans have to be attempted. Such fields are numerous and extensive. They embrace the whole sphere of traditional cottage industry such as tanning and leather work particularly footwear, milling, husking, pounding, etc. of cereals and pulses, the pressing of vegetable oil, making of rope of all kinds, working in coir, making of carts, pottery production, etc. Common production plans may also be necessary for a number of non-traditional activities as, for example, manufacture of soap and matches.

In many of the fields mentioned above not only are basic materials lacking but also present thinking and action are taking various, apparently mutually conflicting, directions. The recommendations of the Ford Foundation Team, for example, follow an approach very different from that of the Kanungo Committee or the Khadi Board. Yet these evidently form the basis of some active programmes of Government. Further there appears an unnecessary multiplication of Boards and other authorities in the field of small industry. The operation of uniformly conceived plans, of provision of adequate employment and graded transition in technique in these fields will necessitate avoidance of duplication in controlling organisations in the sphere of small industry as a whole.

Finally, if the pattern of dispersed cooperative production is uniformly adopted for small scale industry the manifold problems involved will have to be worked out in detail. While for finance the organisation may not have to be on different lines from that in agriculture, both in production technique and in marketing, the problems of each industry are distinct and are usually more complicated than those in agriculture.

COMMON PRODUCTION PROGRAMMES FOR SMALL-SCALE AND LARGE-SCALE INDUSTRIES

by

DR. R. BALAKRISHNA

In the industrial structure of almost all countries, there are establishments both of the large-scale and small-scale variety. Perhaps among the industrially advanced countries the proportion of small-scale industries may be small and in under-developed countries which generally retain vestiges of an ancient civilization, the proportion of small and medium-scale industries may be large. There are, significant examples among industrially advanced countries where the small-scale establishments have survived and continued to play an important part in the organisation of the economy. Switzerland, for example, is one of the countries where small-scale industries play an important part. Their industrial products are unique for the amount of labour incorporated in them. In the Swiss machinery industry, the labour factor represents 70 to 80 per cent of the final cost. Switzerland has maintained her position in foreign markets by her specialities and high grade articles. She places a high premium on the artistic talent of her labour. In watch making and allied branches, namely jewellery and the manufacture of musical boxes, machinery has failed to replace skilled workmanship.

France was the pioneer in the act of artistic creation in industry and the conception is even now kept alive by some of its small-scale enterprises. The French cutlery, worsted and silk ribbon industries reveal the grace and beauty of skilful manipulation. In the worsted industry the handloom has survived on account of the specialities in women's fabrics that are produced for exportation.

In Germany the small-scale industries have played an important part. The toy industry of Nuremberg and the clock-making in the Black Forest made a significant contribution to the industrial vitality of Germany. The small-scale industries of Germany are concentrated in Prussia, Saxony and Bavaria.

Even in Great Britain the small industries occupy an important place. Handloom weaving is flourishing in the Lake District and in Sussex. Lace making survives in England as a cottage industry. Birmingham has been the home of an innumerable variety of small industries, such as the manufacture of guns, locks and jewellery.

In the United States of America the small-scale enterprises are of some importance in industries engaged in printing and publishing, textiles and the manufacture of food and forest products.

In the East, Japan is a country that has advanced industrially to a considerable extent. Still the structure of her industry is not all of the large-scale variety. A large part of her manufacturing has always been of the quasi-handicraft system of small-scale enterprise. Chief among the industries that are run on a small scale are the food, lumber, furniture, bicycles and rayon textile industries.

There are some technical reasons for the survival of the small-scale units in spite of industrial development in general in a country. The distinctive features of the small-scale industries are their small capital equipment, their operation with only a few mechanical appliances and the high degree of personal supervision. The processes of production among them entail a large proportion of labour cost and high premium is placed on efficiency in skill and craftsmanship.

The factors that determine the scale of production are the nature of the product, the methods of manufacture and the conditions of demand. The products of small-scale enterprises are not amenable to mass production because among them there is a large variety in design and the quantity of output in any one pattern is relatively small. They claim an individuality for themselves so that a mere replica of it cannot satisfy a specific demand. Being specialities, they are not amenable to standardization. As the proportion of labour incorporated in them is high, the scope for mechanical operation is limited. In other words, what emerges from them is not a composite product but a small and simple article, which cannot yield much economy by being subjected to a complicated process of production.

The methods of manufacture are such that they could be most economically operated only under small-scale operation. Since skilled labour plays an important part, the scope for machinery is limited. As integration of processes is absent, there is no advantage in employing a large labour force to operate co-operatively. A prompt adaptation to changes in taste and a quick adjustment to output are essential qualities of its manufacturing method. Such a flexible mechanism is easily conceivable under a small rather than a large-scale organization. Even from the standpoint of raw materials and power there is no need to enlarge the scale of their operations. The raw materials are neither bulky in nature nor do they vary much in quality. Gold, for instance, in the jewellery industry, can be purchased in convenient units. Hence there are no economies in the large-scale purchase of raw materials. At present the electric motor has obviated the difficulties in the matter of motive power. Thus there are no compelling factors to increase the size of their operations.

There is a fluctuating and a limited demand for their products so that the output has to be small and capable of variation. In the case of all specialities, the demand for any one variety of products is limited even though in the aggregate there may be a considerable consumption of such products. Thus in the absence of a large and steady demand, large-scale production is not possible.

For purposes of economic analysis, the small-scale industries may be classified into three broad categories. To the first category belong those industries whose products compete with products of other industries. The textile industry provides a good example of this

category. To the second category belong those industries whose products cater to a purely local demand and such products are not generally available from other sources. The rural industries of India, such as basket making, bee-keeping, etc. belong to this category. There can be a third category of small-scale industries where the product that emanates could be obtained through a different process generally mechanical in nature. For example, the modern oil expeller and rice hullers are only mechanical processes which yield more or less the same product as those that are available by the indigenous process. In fact it will be more appropriate to consider these as particular forms of occupation than as industries.

Among these three categories, the second and third do not really come within our purview. The industries that belong to the second category have to be resuscitated in a general programme of community development. No common programme of development with large-scale industries is necessary in their case. Similar is the case of the third category. If the old occupation is no longer considered necessary, other occupations have to be found. This would not be difficult, as there is no loss of skill among them. However, such occupations would continue in certain remote parts until such time that the modern equipments are able to invade these areas.

In the case of the first category, however, we are presented with a problem of conflict between the small and the large-scale varieties of organization warranting a solution. Even among industries belonging to this category, there are two types. In the first place, there are certain products that merely converge on the market, as in the case of hand-made paper and machine-made paper. So far as their production is concerned, they are absolutely independent of each other. But only in capturing a market do they compete with each other. The second type of products are those which depend in their preparation on the rival sectors of the same industry. When, for example, the small-scale sector has necessarily to depend on the large-scale sector for its raw material, the products of the two sectors diverge from a common source and ultimately converge on the same market. A unique example of this is the handloom cloth in India. The handloom industry has to depend on the mills for their yarn. In fact this part of the small-scale industry presents the most difficult problem and the purpose of a common production programme is most appropriate in this context.

The problem would not have been serious if the products emerging out of the two sectors, namely, the handloom and the mill, represent exclusive types and thus compartmentalizing the market for them. It would then have partaken the character of monopolistic competition with an off chance of a passage of buyers from one isolated market to another. But such individuality is rare and near substitutes render the isolation of markets rather slender. The absence of exclusive tastes among consumers, destroyed to some extent by price differences, prevents the existence of such a market structure. The position of the hand-loom has become particularly vulnerable as the consumer is getting less discerning about quality and very indifferent in taste due to the price differentials.

The principle of reservation cannot be a long-run solution for the type of conflict that has arisen between these sectors. It would not only stereotype the existing structural pattern of the industry but it could also be rendered ineffective by the rival sector. Legal evasions as possible by the offer of close substitutes at a lesser price.

A long-range solution has therefore to be devised and it could be only through the enunciation of a common production programme. Such a common production programme would consist in making the different sectors of the industry, namely, large and small, operate automatically in their spheres mutually beneficial to each other. This would involve a process of dovetailing technically the operations of two or more sectors. The cotton mills, for instance, should be made to do a little more spinning and the powerlooms and handlooms have to be treated as outworkers for the mills. The handlooms should receive yarn of appropriate counts on beams after the preparatory processes have been gone through and they should in turn hand over to the mills the fabrics woven for finishing and sale. When two or more sectors combine in this manner, the products would not belong exclusive to any one sector. This would neutralize the existing prejudice either for or against any one sector.

This is just a solitary example of the manner in which the operation of the small-scale and large-scale industry could be technically dovetailed, and a common production programme for them should have this technical aspect as its main objective. Otherwise there cannot be a satisfactory solution, even through planning, of the perpetual conflict between the rival sectors of an industry. By a common production programme is not meant merely the allocation of specific targets to the different sectors. Employment opportunity would be provided on a more stable basis through a process of technical dovetailing rather than through a reservation of spheres of production.

DEVELOPMENT OF SMALL-SCALE INDUSTRIES DURING THE SECOND FIVE YEAR PLAN

*(Office of the Development Commissioner, Small-Scale Industries,
Ministry of Commerce and Industry)*

Information available on small-scale industries is scrappy. It appears from the 1954 Census figures that 11.5 million workers are, perhaps, employed by units that are not registered as factories. The National Income Committee has estimated a net output of Rs. 910 crores from the small-scale sector during 1950-51. While surveys have been made by some States from time to time, and special studies conducted by some agencies, on the whole reliable statistics on this sector are not available. Some States have been assisted to conduct surveys in some industries. A suggestion has recently been made, in consultation with the C. S. O., that State Statistical Bureaux may make systematic attempts to collect data relating to employment and production in this sector. It is also proposed to set up a Statistical and Evaluation Section in the office of the Development Commissioner.

2. An economic survey of small industries of Calcutta conducted by the State Statistical Bureau during 1952-53 showed that there were 30,577 small establishments in Calcutta with total assets at Rs. 15.73 crores employing 1.21 lakh workers, paying Rs. 556 lakhs as wages, producing Rs. 53.94 crores worth of goods. A survey of cottage industries in Aligarh town and surrounding areas conducted during 1949 by the Director of Industrial Statistics showed that there were 2,425 small units that were not covered by the term "Factory" and 1,557 in surrounding rural areas. Productive capital employed in these units was Rs. 46.74 lakhs and 8.32 lakhs respectively, number of persons employed 10,000 and 7,200 respectively, wages paid Rs. 33.97 lakhs and 1.72 lakhs and products manufactured Rs. 2.34 crores and 0.25 crores. According to the report on a survey conducted by the Director of Industries and Labour in Delhi State during 1950-51, there were 4,634 units, that were not covered by the definition of factories, representing 86 industrial pursuits, giving employment to 19,700 workers and producing goods worth Rs. 18 crores per year.

3. As development of small-scale industries is a State subject under the Constitution, the activities of the Central Government during the First Five Year Plan mainly related to assisting State Governments, financially and technically in introducing developmental schemes. As a result, a number of schemes were introduced by the State Governments aimed at providing common facility services to small units, loans and grants, training facilities, introduction of improved tools and technique, organisation of co-operatives, provision of raw materials, etc. ; a portion of the funds over these schemes was provided by the Central Government.

4. An International Team of Experts was invited by the Central Government in collaboration with the Ford Foundation to study the problems of the small-scale industries.

Following up the recommendations of that team, the Government appointed a Development Commissioner for Small-Scale Industries and established a Small-Scale Industries Board, a National Small Industries Corporation and four Regional Institutes.

5. It is proposed that the main programme for development of small-scale industries will be concentrated in those towns and villages where electricity is easily available. Attempts will be made during the Second Five Year Plan to introduce small power driven machines in artisans' workshops and to some extent also amongst workers who may be working at home. Model schemes detailing the machines and equipment that could be introduced in Carpentry, Blacksmithy and Sports Goods manufacturing workshops have been prepared. Similar schemes for tanning, leather goods, pottery, metal pressedware items, small hand-tools, tricycles, surgical instruments and mathematical instruments are under preparation. Schemes in other industries will also be prepared in due course. An attempt will be made to collect information on machinery, available in the country and abroad, for the use of small units. A few sets of each type of machinery available abroad will be imported and experiments carried out to find out the machines that are most suitable to local conditions. Attempts will then be made to get these manufactured with or without modifications in the country. These will be sold to the units that can purchase them and supplied on hire purchase or credit systems to those who cannot afford to purchase them outright. The Agency of the Regional Institutes, the National Small Industries Corporation and the State Directors of Industries will be utilised for this purpose.

6. The small industries require technical assistance of various types. Apart from information on the improved tools and equipment that they could utilise, they want to know the improvements in technique of production. They require assistance in utilisation of the local raw materials available to them. They are working with inadequately trained personnel and need technical counselling in their productive activities from time to time. It is proposed that the Regional Institutes that are being set up at Bombay, Calcutta, Madurai and Faridabad with their branches in U. P., Bihar, Hyderabad and Travancore-Cochin will provide such technical service to the units and by the end of the Second Five Year Plan, it is expected that about 30 such Institutes may be established with technical service units in about 200 small towns.

7. While small-scale units can undertake certain processes economically, there are certain other processes that have to be carried on by centralised units. There are also certain other common facilities that the small units require. Attention is being paid to the introduction of such common facility service stations at different centres for the existing industries as well as for new units that may be set up in other towns and villages. These common facility service stations may provide facilities such as Central Workshop for heat-treatment, processing, finishing, etc., supply of raw materials according to required specifications, promotion of sales, provision of funds, workshop facilities, provision of gas, electricity, telephone services, compressed air, etc. These stations may be organised on co-operative lines or they may be managed by Government department or by private organisations. It is estimated that 500 such centres may be set up during the Second Five Year Plan.

8. The small-scale units are finding it difficult to get land and construct workshops in some of the bigger towns. They also find it difficult to get these workshops equipped with electricity, gas, telephone connections, etc. Moreover, a large number of units are not in a position to invest funds in constructing their own workshops. It is, therefore, proposed to set up Industrial Estates at such centres where there is a demand from a sufficiently large number of units for workshop accommodation and where wholesale marketing facilities are easily available. To start with, such Estates will be set up at Bombay, Calcutta, Madras, Delhi, Agra, Ludhiana, Rajkot, etc. These Estates will be managed by Corporations specially established for the purpose. There will be no objection to a Corporation owning more than one Estate. The funds for establishing such Estates may be provided partially from private concerns, but the bulk of the funds may have to be found by the Government. Rented accommodation will be provided in the Estates according to the unit's requirements. The workshop will be fitted with power, gas, steam, compressed air, telephone connections, etc. required by the unit. Attempts will be made to get railway sidings and, if possible, railway stations inside or very near the Estate. Attempts will be made to establish 30 Estates by the end of the Second Five Year Plan.

9. Small industrial units have found it extremely difficult to raise funds, whether short-term or long-term, required by them through the normal banking channels. State Industrial Finance Corporations have been set up in 9 States. Some others are considering the possibilities of setting up such corporations. Attempts will be made during the Second Five Year Plan to persuade a larger number of States to set up such Corporations. Directors of Industries in different States are granting loans under State Aid to Industries Acts and Rules. It has been noticed that small-scale units have not materially benefited from the facilities provided due to the strictness of the rules and regulations. The State Governments have, therefore, been requested to liberalise their rules by —

- (i) accepting any or all of the following securities:
 - (a) mortgage of borrowers' land and/or buildings,
 - (b) mortgage of borrowers' machinery, plant, etc.,
 - (c) mortgage of land or building or both to be purchased with money loaned by Government,
 - (d) mortgage of machinery, plant, etc. to be purchased with money loaned by Government, and
 - (e) adequate securities furnished by persons other than borrowers;
- (ii) shortening the procedure for verification and empowering Directors of Industries and other officers to grant loans up to higher ceilings;
- (iii) reducing the rate of interest to 5 per cent in cases where it is higher than this percentage and
- (iv) prescribing a maximum ceiling for the grant of loans for the purchase of capital equipment at Rs. 1,00,000.

Larger funds are being advanced to the State Governments for this purpose. The Ministry of Commerce and Industry have already agreed to meet a portion of the losses that may be incurred by the State Governments due to such liberalisation. Funds will continue to be placed at the disposal of the State Governments to allow them to sanction larger funds as loans to small units. Attention of the State Governments has been drawn to the necessity of getting commercial and co-operative banks interested in advancing funds to small units and, for this purpose, it has been recommended that they may consider to guarantee losses up to 75 per cent of the amount advanced, that may be incurred by the banks. It is under the consideration of the Ministry of Commerce and Industry if a 50 per cent of such losses could be underwritten by the Central Government. Attention of the State Governments has also been drawn to the necessity of introducing a system of supply of machinery on hire purchase. In certain States, funds may be required by small units for putting up workshops on lands that they purchase in industrial areas. It is proposed that during the Second Five Year Plan, easy credit facilities may be allowed to the small-scale units. When the State Bank is established, a large portion of this work may perhaps be taken over by that Bank.

10. Small units very often find it difficult to get raw materials of the required specifications in sufficient quantities and at competitive prices. Co-operative societies will be encouraged to stock and supply such raw materials. For this purpose, it may be necessary to provide adequate working capital to such societies. Stockists are being encouraged to import such raw materials as steel cuttings etc. specially required for small units. It is noted that the price schedule fixed for steel is detrimental to the interests of the small units as they have to pay much higher for the categories of steel that are supplied to them than the large manufacturers. It will be necessary to modify these price schedules in such a way that small the units do not have to pay much more than 5 per cent over the prices paid by larger units.

11. Another great difficulty experienced by small industrial units is in marketing. They do not know what the market requires. It is also not possible for them to reach their goods to the consumers excepting through a long chain of middlemen. There are a number of items that are not yet being manufactured by the small-scale units, that are either being imported or being manufactured only by larger units. If the small units could be assured of selling such articles, they could easily undertake to manufacture them. A National Small Industries Corporation has, therefore, been set up to assist units in selling their products to the Government Departments for their use to start with and later to extend the field to goods required by large-scale units and then, if possible, to consumers. This Corporation will enter into contracts with the Government Departments, and large-scale industrial units and other consumers and pass on such orders to smaller units. It will also assist units to get direct orders from all these different sources and assist them to manufacture goods according to the required specifications. It is under consideration that the Corporation or a subsidiary concern organised by the Corporation may set up 200 or more chain stores at different centres where goods of approved quality produced by small-scale units may be stocked and sold to wholesalers, retailers and consumers. The Corporation may also undertake to export goods manufactured by small-scale units. Attempts will be made to reach a target of an annual sales of Rs. 50 crores by the Corporation, its chain stores and Export Section. Facilities

will also be provided to the small-scale units by supplying information on the demand for their goods. Market studies will be conducted through the Regional Institutes and their results conveyed to the small units from time to time. Co-operative Societies of small manufacturers that undertake to sell their products will be encouraged. It is also proposed to introduce mobile sales depots. Vans will be stocked with goods manufactured by small-scale units and will be sent to towns and villages in different areas. They will specially visit weekly markets and fairs held in towns and villages. The agency of these mobile depots will also be used to ascertain the demand for different items of small-scale units. It is proposed to introduce 60 vans during 1955-56 and 2,000 vans by the end of the Second Five Year Plan.

12. It is noted that small-scale units have been working with mostly unqualified technical personnel. It is also noted that the Directorates of Industries and other agencies undertaking promotion of small-scale industries have also been working with inadequate technical staff. While on the one side sufficient number of technical men with experience in the working of small industries are not available, adequate funds are also not provided at different levels for employing such staff. If a bold programme for development of small-scale industries is introduced, it will be necessary to have one technical officer at an average for each district and one technical officer at an average for each town where a large enough number of small industrial units is concentrated. There are 300 districts in the country. There are about 200 big enough towns where small industrial units are concentrated in sufficient numbers to require the attention of at least one technically qualified officer. Another 2,500 persons may be required by the different schemes enumerated above and by industrial co-operative societies and such small-scale units as may be interested to have technically trained persons on their staff. It is, therefore, proposed to introduce a programme of employing 600 fresh graduates from technical colleges and institutions every year, train them up first in the field at centres of small industries and later at industrial institutes, etc. The services of these officers could then be placed at the disposal of the State Governments, Industrial Co-operative Societies and other agencies and units.

13. Training of artisans and workers will be left to the Ministry of Labour. Funds may, however, be provided to State Governments and approved promotional bodies for training-*cum*-production centres or demonstration centres. Arrangements will be made at the Regional Institutes for demonstration of improved tools, machines, technique, etc. Mobile vans will also be introduced in the field for demonstrating such tools, equipment and technique to artisans in the villages at their doors. In collaboration with the technical institutes and adult literacy classes, arrangements will be made to train artisans in reading drawings. Assistance will be given to State Governments for schemes in plant training and training of workers by sending them on observation tours abroad.

14. The progress of this programme will depend, to a large extent, on the supply of electricity to small-scale units in towns and villages. It should be noted that in many areas, small units find it extremely difficult to get power connections as preference is given to other

consumers by the distributing authorities. It should also be noted that the average rates paid by small-scale units for power consumption are very much higher than those paid by large-scale units, very often more than double and in some cases over three times. This places small units at a great disadvantage in competition with large scale units. Higher rates are charged for power consumed by small units for lights and fans which adds to the cost of the small-scale unit. It will be necessary that the electricity tariff policy is drastically revised during the Second Five Year Plan. It is suggested that modified tariffs may be so fixed that small-scale units may not have to pay more than 0.1 anna per unit over the minimum rates paid by large units at lowest slabs. The total income of the Electricity Companies may be balanced by revising tariff rates on this principle to meet their expenses. It is also suggested that small units may be charged the same rates for lights and fans used in the workshops as they pay for industrial purposes. In areas where there is a shortage of power supply, a special preference may be given for supply to the small-scale units and, if necessary, special quotas may be fixed for small industrial purposes. In areas where the consumers are expected to meet the transmission expenses, subsidies may be given to electricity companies to meet the extra cost of transmission lines on condition that no charges for fixing transmission lines are charged of the small units.

15. The small-scale units usually transport their products in small quantities. Under the present Railway tariff, a higher rate is charged on smalls which becomes a heavy burden on the small-scale industrial products. The Railway Tariff Policy will, therefore, have to be revised so that the incidence of tariff on smalls is not higher than that paid by large-scale units on bulk transport. It is noted that there are many centres of small-scale industrial units that are not directly served by the railways. Goods have to be transported from these centres by roadways. As State transport has been introduced in many States, it will help small units if the roadways tariff rates are examined and so modified as to bring the cost of transport within reasonable limits.

16. It is reported that the incidence of certain taxes falls heavily on small-scale industrial units. The multiple point sales tax, wherever it is levied, increases the cost of production of the small-scale units pretty high because the raw materials purchased by such units pass through a number of middlemen. Similarly, the products of the small units also pass through a number of middlemen before they reach the consumer. There are certain excise duties like those levied on matches and mechanical lighters that require re-examination. It is suggested that the taxation policy should be so framed that the incidence of taxation on small-scale units is not very high.

17. There is a complaint that even though small industrial units can manufacture goods of a good quality, they are, for various reasons, producing sub-standard goods which are presented to the market in a way that the customer is cheated. It will be the attempt of the Regional Institutes and the National Small Industries Corporation to build up the production of goods of good quality and break up the tendency to claim superior quality for an inferior quality stuff. In addition, schemes for quality marking of goods may be introduced in collaboration with the State Governments and the Indian Standards Institution.

18. Improvement is necessary in the tools and technique used by small-scale units in many spheres. The Regional Institutes will attempt to advise units to use such improved equipment as is available and to improve their technique. They may also carry out some experiments to improve tools and technique, where necessary. In addition, the different Institutes that are already working in this field will be assisted in their work.

19. The development of production by small industrial units will mainly depend on the demand for their goods. As far as the consumers items are concerned, the increase in demand will depend on the raising of the general economic level of the people. In the case of goods where the large-scale and small-scale sectors are producing similar items side by side, it will be necessary to consider how the small-scale units could be supported to stand the competition of large-scale units. Amongst the ways by which this could be achieved would be :

- (a) to subsidise the sales of the products of small-scale units so that they compete with the products of the larger sector favourably by direct subsidies on sales, electricity charges, transport charges, raw materials cost, establishment subsidies, supply of equipment, technical services, tax concessions, etc.;
- (b) to improve the efficiency of production by small-scale units so that they reduce their cost and improve their quality by introduction of improved equipment and technique, cheap credit, bulk purchases of raw materials through cooperatives or associations, organised sales by co-operative or other marketing organisations ; and revision of electricity rates, transport charges, raw materials prices, taxes, etc. to remove unjust disparities of incidence ;
- (c) to reserve the items for production by each sector and make the two complementary to each other, to control the expansion and establishment of larger units and to modify the present policy of centralised production by larger units to decentralised operations.

While subsidies as indicated at (a) above may become necessary for short periods, till other methods are introduced and become operative, on the whole it may not be a very sound policy to build up the small sector as a subsidised sector. It is the steps indicated at (b) and (c) above that will give real strength to the small-scale sector and stabilise national economy. This will require favourable policy decisions by the Government. The number of industries, establishment or expansion of large units which should be controlled by issue of licences, may have to be revised. The licensing policy should be so modified as to lay a larger emphasis on production by small units. When goods can be produced economically by the small sector, no expansion or establishment of larger units may be allowed.

20. Considerable work could be provided to small-scale units by a bolder programme of construction of houses, village water supply services, roads, etc. As indicated in the programme, even though one per cent of the rural houses were converted into houses built with bricks, lime and tiles, etc., additional employment to one million persons could be provided by this activity. Construction of wells for irrigation as well as drinking water supply and introduction of filtered water supply by laying water pipelines in the villages could similarly

give additional employment to a large number of people. It has been suggested that an experiment may be tried of using bricks for road building, specially in the case of approach roads from villages to main roads. This item is also labour intensive and could give employment to a large number of people. It is suggested that the departments concerned with the programme for such activities may be asked to put up bolder proposals for the Second Five Year Plan.

21. To sum up, the Second Five Year Plan for development of small-scale industries may include the following :—

- (a) establishment of a proper system of collection of statistics on small scale industries ;
- (b) introduction of improved tools and equipment amongst artisans on hire purchase ;
- (c) establishment of 30 Small Industries Services Institutes and 200 Technical Service Units ;
- (d) establishment of 500 Common Facility Services Stations ;
- (e) establishment of 30 Industrial Estates ;
- (f) arrangements for easy credit facilities by State Industrial Finance Corporations, State Departments of Industries, Commercial and Co-operative Banks and other agencies ;
- (g) organisation of co-operatives for supply of raw materials ;
- (h) revision of raw materials price schedules ;
- (i) organisation of supply of products manufactured by small-scale industries to Government Departments and large-scale concerns by the National Small Industries Corporation ;
- (j) organisation of Chain Stores, Co-operative Marketing Bodies, Marketing Surveys and Marketing Studies by the National Small Industries Corporation and its subsidiary concerns, if any. Introduction of 2,000 mobile vans ;
- (k) employment of a sufficient number of technically trained persons in the Central Government Organisation, State Government Organisations and Co-operative Societies and Associations of small units and, for this purpose, training up 3,000 technical men ;
- (l) organisation of demonstration centres, training-cum-production centres, mobile vans, etc. ;
- (m) revision of electricity tariff ;
- (n) revision of railway tariff and roadways tariffs ;
- (o) introduction of a policy of taxation that is favourable to small industrial units ;
- (p) introduction of quality marking schemes ;
- (q) organisation of experiments to improve tools and technique ;

- (r) as far as possible, subsidising of small-scale industries to be avoided except where absolutely necessary ;
- (s) a programme of reserving items for production by small-scale units may be introduced ; larger number of items may be brought under the licensing legislation, the licensing policy may be geared in favour of the small sector so that where goods can be manufactured by the small sector economically, no expansion or establishment of large units is allowed ; and
- (t) a bolder programme of construction of rural houses, rural water supply and roads, etc. be introduced.

22. It is estimated that the following funds would be required for the above programme :

	(Rs. crores)
(i) Supply of machines on hire purchase	20
(ii) 30 Regional Institutes and 200 Technical Services Units	25
(iii) Common Facility Services Stations	50
(iv) Industrial Estates	25
(v) Loans to small units	75
(vi) National Small Industries Corporation and Marketing Service Organisation	50
vii) Training technical personnel	2
(viii) Demonstrations, survey, etc. and other schemes of State Governments	10
ix) Subsidy over cost of transmission lines, and on power rates	25
x) Development Commissioner's Office and State Directorates of Industries	15
(xi) Other items	3
TOTAL	300

VI—PROBLEMS OF RESOURCE MOBILISATION

THE SECOND FIVE YEAR PLAN
AN APPRAISAL OF FINANCIAL RESOURCES LIKELY TO BE AVAILABLE IN
THE PUBLIC SECTOR

(Economic Division, Planning Commission)

In this note an attempt is made to estimate roughly the order of internal resources likely to be available in the public sector for financing the Second Five Year Plan. As a working hypothesis, it has been assumed that over the period of the Second Plan national income would go up by about 25 per cent. For 1955-56, national income at 1952-53 prices may be taken at approximately Rs. 10,800 crores. In 1960-61, it is expected to rise to about Rs. 13,500 crores. It is also assumed that there would be no major fluctuations in economic activity abroad during this period.

I. REVENUE RECEIPTS

2. An increase in national income would not automatically lead to a corresponding increase in Government revenues. While over the last 15 or 16 years, according to the Report of the Taxation Enquiry Commission published recently, "National income and public revenues have kept pace with each other in money terms", this has been made possible largely by the substantial measures of additional taxation adopted during this period. The trend of receipts under individual heads of revenue reveals wide variations. The total yield from income-taxes is now nearly nine and a half times the 1938-39 level ; the yield of export duties rose to about twenty-two times the pre-war level in 1951-52 and is at present a little more than nine times that level ; the yield of Union excise duties has risen to nearly twelve times the pre-war level. On the other hand, the yield of import duties has increased to only three and a half times the pre-war level. The increase in the yields of other taxes has been much smaller. It is, therefore, necessary to assess each item of Government revenue, on the basis of existing taxation, for the period of the Second Five Year Plan in the light of past trends, the increase in national income postulated above, its distribution (as far as one could guess it) between the various sectors, and such other specific factors as may be expected to operate under various individual heads. This assessment is shown in Statements I and II attached.

A. Revenue Receipts of the Central Government

Income Tax

3.1 The yield of personal income-tax was exceptionally large in 1951-52 and 1952-53—over Rs. 140 crores due mainly to the expansion of incomes resulting from the Korean boom, special drive for collection of arrears, the operation of the scheme of voluntary disclosure

of hidden incomes and the levy of a 5 per cent surcharge.* The subsequent disappearance of boom conditions and the elimination of receipts under the special tax collection drive brought down the yield to Rs. 122.8 crores** in 1953-54, representing a decrease of Rs. 23.4 crores as compared to the 1951-52 level. In 1954-55, the receipts picked up somewhat and the increase in tax rates proposed for 1955-56 is expected to raise them further to about Rs. 134 crores. In the next five years, the higher rate of development in the industrial sector and the connected expansion in ancillary activities may be expected to expand incomes assessable to income-tax more than in proportion to the rise in national income. This increase may, however, be partially offset by a more equitable distribution of incomes. We may, therefore, assume that collections under income-tax (including surcharge) will increase each year a little more than proportionately to the increase in national income. On this basis, the total yield of income-tax over the five-year period of the Second Plan may be taken at about Rs. 770 crores, representing an increase of Rs. 100 crores as compared to 1955-56 Budget Estimates multiplied by five. The increase in the Centre's share over this period is, however, estimated at only Rs. 30 crores. This is largely explained by the fact that the 1955-56 Budget Estimates of the Centre's share include all advance collections of the tax as no payments in respect of these collections will become due to States till next year. The distribution from 1960-61 onwards to Travancore-Cochin, Mysore and Saurashtra of their shares in income-tax following cessation of Revenue Gap Grants is likely to reduce further the Centre's share.

Corporation Tax

3.2 The yield of corporation tax also increased from Rs. 39.5 crores in 1949-50 to Rs. 43.8 crores in 1952-53, due in part to the Korean boom and partly as a result of the raising of the tax rate by $\frac{1}{2}$ anna in the rupee in 1951-52.† Later, it decreased to Rs. 41.5 crores in 1953-54, and further to Rs. 38.4 crores in 1954-55. The Budget for 1955-56 envisages some increase. In view of the greater emphasis on industrial development in the next five years, corporate incomes in 1960-61 may be expected to be about one-third higher than in 1955-56. On this basis, total receipts from corporation tax over the period of the Second Plan may be taken at about Rs. 234 crores or about Rs. 35 crores, more than five times the estimated receipts for 1955-56.

Export Duties

3.3 In the Korean boom period, export duties were used to counter inflation and to obtain for the Exchequer the benefit of any large disparities between the internal and external prices of the country's principal exports. New duties were accordingly levied and existing duties, particularly those on jute and cotton, were raised. As a result, the yield of export duties reached as high a level as Rs. 90.7 crores in 1951-52, compared to Rs. 26.5 crores in

* An additional revenue of about Rs. 5.65 crores a year was expected from this surcharge on income-tax.

** The raising of the exemption limit for income-tax also involved a loss in revenue of about Rs. 82 lakhs per annum as from 1953-54. The Centre's share in this loss was Rs. 40 lakhs a year.

† The additional yield from this increase in corporation tax was estimated at Rs. 2.25 crores a year.

1948-49 and Rs. 25.7 crores in 1949-50. With the disappearance of boom conditions, export duties were reduced or abolished in several cases and their yield fell to Rs. 56 crores in 1952-53 and to Rs. 38.5 crores in 1953-54. Despite the recent enhancement of the export duty on tea, which is expected to bring in an additional revenue of about Rs. 6.6 crores in the current year, and of Rs. 17.6 crores in a full year, receipts from export duties are estimated at Rs. 38.1 crores for 1954-55 and at Rs. 47.7 crores for 1955-56. A commodity-wise breakdown of these receipts is shown in Statement VIII. It will be seen that a little less than two-thirds of the total yield in 1955-56 is expected from tea exports. The level of export duty on tea in future will, therefore, have a sizeable effect on the total yield of export duties. However, at the existing rates of export duties the yield over the period of the Second Plan may be estimated to average at a somewhat higher level than in 1955-56, say, about Rs. 50 crores a year, as a result of some expansion in exports.

Import and Excise Duties

3.4 With the progress of industrialisation, revenue from import duties may be expected to decline, to or even disappear, in the case of certain commodities. Receipts from Central excise would, on the other hand, go up. The Budget for 1955-56 already reflects this trend. It is, therefore, convenient to treat the revenues from both import and excise duties together for the purpose of making estimates for the future.

3.5 Receipts from *import duties* since 1948-49, commodity-wise, are shown in Statement IX. They reached a record level of Rs. 141.6 crores in 1951-52, due principally to larger imports and the rise in import prices which yielded greater revenue in case of *ad valorem* duty. This was followed by a decrease in receipts to Rs. 118.1 crores in 1952-53. In 1953-54, the collections improved somewhat, due mainly to raising of duty on certain items, mostly, of a semi-luxury nature. The Revised Estimates for 1954-55 place the receipts at Rs. 140.3 crores, the increase over the previous year being mainly due to the additional yield from large imports of sugar and relaxation of imports of commodities carrying high duties, partially offset by a decrease under motor spirit following reduced imports as a result of the commencement of production within the country in one of the oil refineries. For 1955-56, the yield is estimated at Rs. 115 crores, reflecting a further decline in revenue from imports of motor spirit, kerosene and lubricants and smaller receipts under the import duty on sugar. The bulk of this loss would, however, be made good by increase in excise revenue from the domestic production of these commodities. For the period of the Second Plan, receipts from import and excise duties may be estimated as follows.

Revenue from Sugar

3.6 The yield from import duty on sugar may be expected to taper off gradually with a progressive elimination of sugar imports, while receipts under excise duties may be taken to rise following increases in domestic production. Assuming that by 1960-61, domestic

consumption and production of sugar goes up to about 21 lakhs tons*, net change in receipts from customs and excise on sugar may be taken roughly as follows :

Year ¹ (Crop year for sugar)	Production (Lakh tons)	Year ² (Financial).	Imports (Lakh tons)	Loss in revenue, as compared to the 1955-56 Budget level, under import duty on sugar (Rs. crores)	Gain in revenue, as compared to the 1955-56 Budget level, under excise duty on sugar (Rs. crores)	Net loss in revenue from sugar as compared to the 1955-56 Budget level (Rs. crores)
1955-56	14	1956-57	4	1.5	1.1	0.4
1956-57	15	1957-58	3	4.1	2.2	1.9
1957-58	17	1958-59	1½	8.0	4.5	3.5
1958-59	19	1959-60	..	12.0	6.8	5.2
1959-60	21	1960-61	..	12.0	9.0	3.0

¹November to October.

²April to March.

Thus, the net loss in revenue over the period of the Second Plan from sugar under both import and excise duties may be taken at about Rs. 14 crores. If, however, the increase in domestic production is less than assumed here, imports would be larger, and the net loss in revenue from sugar would be correspondingly reduced.

Receipts from Motor Spirit and Kerosene

3.7 With an increase in domestic production of motor spirit and kerosene, revenue from import duties on these commodities may be expected to disappear almost completely. In the case of kerosene, the excise duty is levied at the same rate as the import duty, so that the substitution of imports by domestic production would involve no net loss in revenue to Government. In the case of motor spirit, the import duty is only 5 per cent higher than the excise duty, so that the loss resulting from the substitution of remaining imports by domestic production may be taken at roughly Rs. 35 lakhs a year. On the other hand, the consumption of motor spirit and kerosene must certainly rise, so that there would be a further expansion of the indigenous production of these commodities on this account, resulting in additional receipts by way of excise. On the whole, it appears reasonable to assume a net increase of about Rs. 17 crores over the next five years in the total receipts from motor spirit and kerosene.

Revenue from Import Duties on Other Commodities

3.8 In the case of remaining commodities the yield from import duties may be estimated to show, on net, a total increase of about Rs. 20 crores over the five-year period of the Second Plan as a result of larger imports following expanded industrial activity and increased incomes.

*The target of sugar production in the First Five Year Plan is 15 lakh tons. For the Second Plan, it may be taken as 21 lakh tons.

Revenue from Excise Duties on Other Commodities

3.9. The details of the yield from excise duties since 1948-49, and the trends during this period in the production of the main commodities subject to these duties, are shown in Statements X and XI. As compared to the 1955-56 Budget level, the yield from various commodities may be expected to go up as follows :

(i) *Matches*.—Production of matches is at present considerably below the target of 35.3 million gross boxes fixed in the First Five Year Plan.* In future, therefore, it may be expected to increase substantially. On the assumption that the bulk of this increase will take place in small-scale and cottage enterprises, which are subject to a slightly lower rate of excise duty, the additional revenue from this source over the period of the Second Plan may be taken at about Rs. 5 crores.

(ii) *Vanaspati*.—The current production of Vanaspati is also substantially lower than contemplated in the present plan, amounting to only 191,400 tons in 1953 and 194,200 tons in the first ten months of 1954, as against the plan target of 300,000 tons. The 1955-56 Budget Estimate of the yield from the excise on vegetable products is Rs. 3 crores. A total increase of about Rs. 5 crores may be assumed under this head for the period of the Second Plan.

(iii) *Tyres*.—With increasing production of automobiles, cycles, etc. in India, production of tyres may be expected to increase substantially. The Budget Estimate of the yield from the excise duty on tyres in 1955-56 is Rs. 5.3 crores. A total increase of about Rs. 10 crores under this head may be assumed for the period of the Second Plan.

(iv) *Others*.—A total increase in the yield of about Rs. 30 crores over the five years of the Second Plan may be taken under other commodities—steel ingots, tobacco, cement, cotton cloth, soap, footwear, artificial silk fabrics, woollen fabrics, electrical goods, paper and paper board, paints and varnishes, etc.

3.10 On the basis stated above, a total increase of about Rs. 73 crores for the period of the Second Plan may be taken under both import and excise duties. The States' share in this increase is likely to be about Rs. 8 crores. These estimates do not take into account the additional revenue that would be raised by way of further extension of excise duties as recommended by the Taxation Enquiry Commission.

Estate Duties

3.11 The Estate Duty Act came into operation from the 15th October, 1953 and the machinery for administering it was set up soon after. Realisations in 1954-55 are estimated at about Rs. 1.3 crores. The Budget Estimate of the yield in 1955-56 is Rs. 3 crores. In future, the receipts may be expected to show some further improvement. For the five years of the next Plan, therefore, the total yield from Estate Duties may be taken at about Rs. 25 crores. Of this, about Rs. 2 crores may be taken to represent the cost of collection and the share of Part C States, and the remaining Rs. 23 crores as the share of Part A and B States.

*In 1953, production amounted to 29.5 million gross boxes. During the first nine months of 1954, it was running at a still lower level.

Surplus Profits of the Reserve Bank and Coins, etc.

3.12 In 1954-55, contributions from surplus profits of the Reserve Bank are expected to be Rs. 5 crores more than in 1953-54. This increase is explained by the larger creation of *ad hoc* Treasury Bills in favour of the Reserve Bank to finance the development schemes included in the First Five Year Plan. For 1955-56 the Budget envisages a further increase of Rs. 2.5 crores. The same trend may be expected to continue in future, and the contributions of the Reserve Bank to Central Revenues may be taken to increase appreciably.

The Rest of the Items

3.13 The 1955-56 Budget Estimates of the yield under the remaining items include a transfer of Rs. 8 crores from the capital account in respect of the accumulated profits on the sale of imported sugar. Over the next five years, such transfers may be assumed to be of a very small order. However, some increases may be expected under other heads of revenue.

Total Revenue Estimates

3.14 On the assumptions stated above, the picture of revenue receipts of the Central Government for the Second Plan period would be somewhat as follows :—

(Rs. crores)

Revenue Receipts of the Central Government

	1955-56 B.E.	Five Yrs. 1951-52 to 1955-56	1960-61 Estimates	Five Years 1956-57 to 1960-61	
				Estimates of total receipts	Increase (+) or de- crease(—) over the 1955-56 B.E. multi- plied by five
1. Income tax	76.96	390.92	88.00	414.80	+30.00
2. Corporation tax	39.77	204.93	53.00	233.85	+35.00
3. Import & excise duties	238.29	1073.21	264.50	1256.45	+65.00
4. Exports	47.70	271.04	51.00	248.50	+10.00
5. Estate duties	0.21*	0.29*	0.50*	2.05*	+1.00
6. Other taxes and duties	3.70	19.51	3.70	18.50	..
7. Surplus Profits of RBI, etc.	23.18	81.15	35.00	150.90	+35.00
8. Rest	42.49	196.70	40.00	192.45	—20.00
Total	472.30	2237.75	535.70	2517.50	+156.00

*Represents cost of collection and share of Part C States.

The total revenue receipts during the period of the Second Plan are estimated at about Rs. 2,518 crores, representing an increase of Rs. 156 crores as compared to the five-year total at the 1955-56 Budget level. In 1960-61, the receipts are estimated at about Rs. 536 crores, or about 14 per cent higher than in 1955-56.

B. Revenue Receipts of State Governments*Share in Central Income-tax, Excise Duties and Estate Duties*

4.1 The basis on which the estimates have been framed has been already explained.

Land Revenue and Agricultural Income-tax

4.2 Following abolition of Zamindari and other land reforms in several States, land revenue increased substantially from 1952-53 onwards. The bulk of this increase was, however, counterbalanced by the expenditure incurred on Zamindari abolition (including compensation payments), consolidation of holdings, etc. and the decrease in receipts under agricultural income-tax, so that the net increase in land revenue and agricultural income-tax together was comparatively small. For 1955-56 and the subsequent years, the estimates take into account only net increases under land revenue and agricultural income-tax resulting from further progress in land reforms, land reclamation and land resettlement, etc. The combined yield under both these heads has been assumed to increase from about Rs. 75 crores in 1954-55 to Rs. 77 crores in 1960-61, representing a total increase of Rs. 7 crores over the period of the Second Plan as compared to the 1954-55 estimates multiplied by five.

State Excise

4.3 Receipts from State excise have been decreasing progressively from 1952-53 onwards. This is mainly due to a fall in prices and to reduced consumption of country spirits and opium in several States.* In view of the existing policy of prohibition, revenue from State excises may be expected to decline further. For 1954-55, the receipts are estimated at Rs. 41.86 crores. In 1960-61, they may be assumed to decrease to Rs. 37.5 crores.

Stamps

4.4 The stamp revenue has been affected adversely by Zamindari abolition in recent years. For 1954-55, the Budget Estimates place the receipts at Rs. 22.71 crores, which represents an improvement of Rs. 66 lakhs over the previous year's level. By 1960-61 they might be expected to increase to Rs. 25.5 crores.

Registration

4.5 The Revised Estimates for 1953-54 and the Budget Estimates for 1954-55 show some improvement over the 1950-51 level. Accordingly, a moderate increase over the current level has been assumed for the future.

Motor Vehicles Taxes

4.6 Receipts from motor vehicles taxes have increased progressively from 1951-52 onwards. This is partly due to the measures of additional taxation adopted during this period. In view of the likely expansion in passenger and goods traffic carried by motor vehicles, receipts under this head may be expected to increase appreciably in future. If passenger and goods traffic is assumed to increase at the same rate at which national income increases, the yield of motor vehicles taxes may be taken to increase from Rs. 12.84 crores in 1954-55 to about Rs. 16.5 crores in 1960-61.

*In some States, especially Punjab, the yield from excise has been rising. The rise in yield in Punjab is mainly due to better auction results, greater sales of wines and spirits, introduction of the power alcohol scheme and withdrawal of concessions in respect of Indian made foreign spirits supplied to troops.

General Sales Tax

4.7 Revenue from general sales tax decreased both in 1951-52 and 1952-53. The decrease in 1951-52 was mainly due to the exemption of inter-State trade from taxation. The decrease in 1952-53 reflected the effects of both the exemption of inter-State trade from sales taxes and the fall in the general level of prices. Thereafter, receipts picked up substantially as a result of the measures of additional taxation introduced in various States. These measures are expected to contribute about Rs. 10.5 crores in the current year.

4.8 In future, with increasing production, incomes and consumption, receipts from sales tax should go up appreciably. If the consumption of articles subject to sales tax is assumed to increase at about the same rate at which national income increases, the sales tax revenue (at existing rates) would increase from Rs. 54.89 crores in 1954-55 to about Rs. 70 crores in 1960-61. Our estimates are, however, based on a somewhat smaller rate of increase in the consumption of articles subject to sales tax.

Tax on Sale of Motor Spirit

4.9 The yield from the tax on sale of motor spirit increased substantially from 1951-52 onwards. Only a part of this increase was due to the measures of additional taxation introduced in various States. The rest of the increase is explained by the rapid rise in the consumption of motor spirit which was restricted in the earlier years due to inadequate supplies. For 1955-56, we have assumed an increase of Rs. 25 lakhs in collections under this head. For the period of the Second Plan, they have been assumed to increase by a little over 4 per cent per year.

Other Taxes and Duties

4.10 The 1954-55 Budget Estimates place the yield from these taxes and duties at Rs. 28.33 crores. This includes substantial receipts from inter-State transit duties levied in Part 'B' States. According to the scheme of Federal Financial Integration, the inter-State transit duties have to be abolished by the end of 1954-55. We may, however, assume that the bulk of the loss in revenue resulting from the abolition of these transit duties would be made good by the States concerned by the levy of new taxes or by raising the coverage or rates of the existing taxes. The yield in other States may be expected to increase moderately in 1955-56, and a somewhat less than proportionately to the increase in national income thereafter. On this basis, the yield from other taxes and duties may be taken to increase from Rs. 28.33 crores in 1954-55 to about Rs. 32 crores in 1960-61.

Debt Services

4.11 The yield under debt services has been taken at the 1954-55 level. The likely increase in receipts has been deducted from the expected increase in interest payments, and the latter is shown on a net basis in the estimates of expenditure.

Forests

4.12 Receipts from forests may be assumed to increase somewhat.

Irrigation

4.13 Following an increase in the area under irrigation, receipts from irrigation (net of working expenses) have been increasing substantially in recent years. The Budget Estimates for 1954-55 place the receipts at about Rs. 12.3 crores, which is Rs. 5 crores higher than the 1950-51 level. The progress of the irrigation programme till 1953-54, as compared to the Plan target, is indicated below :

	Plan target for 1955-56 (mill. acres)	Achievement till end of 1953-54. (mill. acres)
Additional irrigation—		
(a) Major irrigation programme	8.5	2.8
(b) Minor irrigation programme	11.2	4.7
TOTAL	19.7	7.5

The irrigation programme has been further strengthened by the inclusion of additional works, particularly for scarcity affected areas, sanctioned in 1953-54 by way of "adjustments" to the Plan. The Second Five Year Plan may also be expected to include a sizeable irrigation programme. In view of these factors, receipts from irrigation rates, at the existing level of these rates, may be expected to increase further to about Rs. 22.5 crores by 1960-61.

4.14 The State Governments have also accepted the principle of imposing betterment levies in areas benefited by new irrigation. The Taxation Enquiry Commission consider the taxation of unearned increment in land values "a sound principle", and are of the view that betterment levies "would fulfil other desired objectives, e.g., the stabilisation of land values and, what is even more important in the present context of increasing costs of construction, provide additional resources to Government to liquidate at least a part of the capital cost of the (irrigation) projects". They have, however, not recommended betterment levies on land served by ordinary wells and tanks. In the case of minor irrigation works like tubewells and storage tanks also, they consider it more appropriate to make a small addition to the water rates than to levy a betterment charge. On the assumption that on land irrigated by major projects the betterment charge would be at the average rate of Rs. 100 per acre, payable in fifteen equated instalments, the total yield for the period of Second Plan from this source may be taken at roughly Rs. 50 crores.

Electricity

4.15 In the case of electricity schemes, receipts in 1954-55 (net of working expenses) are estimated at about Rs. 5 crores. As compared to the 1950-51 level, this represents an increase of Rs. 2 crores. In future, revenue from electricity schemes may be expected to increase progressively as the work on the various power projects already in hand is completed and new projects are taken up. By 1960-61, it may be expected to reach a level of about Rs. 14 crores a year.

Civil Administration

4.16 Receipts from Civil Administration have been increasing substantially from 1951-52 onwards. For the period of the Second Plan, they have been assumed to increase at the rate of uoe per cent per annum.

Rest

4.17 Some increases have been assumed under civil works, road transport and miscellaneous items as well. Revenue Gap Grants would, however, decrease progressively. On the other hand, grants for primary education and welfare of scheduled areas and tribes might increase. The whole question of statutory grants would be examined by the Second Finance Commission. For the purpose of his note, however, we may assume that over the period of the Second Plan these grants would amount to about five times the 1954-55 level.

Total Revenue Receipts

4.18 On the assumptions stated above, the picture of revenue receipts of the States for the Second Plan period would be somewhat as follows:

Revenue Receipts of Part A and B States

(Rs. Crores)

	1954-55	1955-56	Five Yrs.	1960-61	Five Yrs.	1956-57
	B.E.	Esti- mates	1951-52 to 1955-56	Esti- mates	to 1960-61	1960-61
					Esti- mates of total yield	Increase (+) or decrease (-) over the 1954-55 B.E. multiplied by five.
1. Share in Central income tax	55.68	56.97	279.42	85.00	354.90	+76.50
2. Share in Central excise duties	16.30	16.46	66.63	19.50	90.50	+9.00
3. Share in estate duties.	*	2.79	2.79	5.50	22.95	+22.00
4. Land revenue and agricultural income-tax	74.96	75.50	333.31	77.00	381.80	+7.00
5. General sales tax	54.89	55.50	269.28	67.00	304.45	+30.00
6. State excise	41.86	41.00	219.39	37.50	199.30	-10.00
7. Stamps & registration	26.62	26.95	131.19	29.75	141.60	+8.50
8. Receipts under Motor Vehicles Acts	12.84	13.10	59.71	16.50	74.20	+10.00
9. Tax on sale of motor spirit	7.75	8.00	33.77	10.00	45.25	+6.50
10. Other taxes and duties	27.33	28.50	145.26	32.00	150.70	+10.00
11. Irrigation rates (net) and betterment levies.	12.29	14.29	53.43	35.00	151.45	+90.00
12. Electricity Schemes	5.03	6.00	22.11	14.00	65.15	+40.00
13. Forests	19.57	19.75	98.73	20.75	101.35	+3.50
14. Civil administration	37.47	37.85	179.04	41.00	196.35	+9.00
15. Other non-tax revenue	26.91	27.56	138.25	30.36	143.05	+8.50
16. Statutory grants from the Centre	22.70	23.20	103.81	20.15	113.50	..
TOTAL	443.20	453.42	2136.12	541.01	2536.50	+320.50

*Included under other taxes and duties.

The total revenue receipts (including statutory grants from the Centre) over the period of the Second Plan may be taken at about Rs. 2,536 crores. As compared to the five-year total at the 1954-55 Budget level, this represents an increase of about Rs. 320 crores. In 1960-61, the receipts are expected to go up to Rs. 541 crores, or by about 22 per cent over the 1954-55 level.

II. ESTIMATES OF EXPENDITURE ON REVENUE ACCOUNT OUTSIDE THE SECOND FIVE YEAR PLAN

5.1 Expenditure outside the Second Five Year Plan may be classified under two broad heads :

- (i) Non-development expenditure, that is, expenditure on defence, administration and ancillary activities, debt services, etc.
- (ii) Expenditure on developmental heads, mainly maintenance expenditure, including the recurring expenditure on schemes completed in the First Plan period.

5.2 Estimates of *non-development expenditure* of the Centre and the States (Part 'A' & 'B') on revenue account for the period of the Second Plan are shown in Statements III and IV. Expenditure on defence on revenue account, which is already expected to increase to a little less than Rs. 203 crores in 1955-56 as compared to Rs. 171 crores in 1951-52, has been assumed to increase further to Rs. 210 crores in the third year of the Second Plan, and to remain at that level thereafter. Capital outlay on defence has been assumed to increase from the budgetted level of Rs. 22.4 crores in 1955-56 to Rs. 30 crores in 1960-61. Expenditure on Central administration has been taken to increase from Rs. 39.2 crores in 1955-56 to Rs. 45 crores in 1960-61. Expenditure on administration and ancillary activities in States has been assumed to increase from the estimated level of Rs. 211.4 crores in 1954-55 to Rs. 226.5 crores in 1960-61. Expenditure on debt services is expected to increase from about Rs. 39.2 crores in 1955-56 to Rs. 45 crores in 1960-61 in the case of the Centre, and from Rs. 33.2 crores in 1954-55 to Rs. 75 crores in 1960-61 in the case of States, due to the anticipated increase in public debt and other interest bearing obligations of the Central and the State Governments. The increase in interest payments has been taken on a net basis. In the case of the Centre, the interest charged to States, railways, commercial departments, etc. is deducted in the budget itself in arriving at the estimates of liability for interest payments. We have also deducted for the period of the Second Plan the likely increase in receipts of interest and dividends on investments in commercial enterprises. Similarly in the case of States, the likely increase in receipts of interest and dividends has been deducted in arriving at the estimates given here. The State Governments' appropriation for reduction or avoidance of debt has also been assumed to increase substantially. The entire proceeds of betterment levies—about Rs. 50 crores—are expected to be applied towards loan repayments. This would, however, not constitute a net drain on the aggregate resources of the Central and the State Governments taken together since the bulk of the provision would be utilised for repayment of loans to the Centre—credit for which has been taken in net receipts under deposits, fund and other miscellaneous items on capital account,

5.3 Expenditure of the Centre and States (Part 'A' and 'B') on revenue account *on development heads*, including expenditure on the First Five Year Plan schemes, is shown in Statements V and VI. For 1954-55, the total development expenditure of the Centre (on revenue account) is estimated at Rs. 108.4 crores (R.E.). Of this, about Rs. 50 crores represent expenditure on the Central Plan and about Rs. 10 crores are in respect of Central assistance for State Plans. The balance of Rs. 48.4 crores represents development expenditure outside the Central Plan. For 1955-56, this "non-Plan" development expenditure is estimated at about Rs. 50 crores.

5.4 In the case of the States, the Budget Estimates for 1954-55 placed total development expenditure on revenue account at Rs. 276.8 crores. Of this, about Rs. 91 crores represented expenditure on State plans. The balance of Rs. 185.8 crores represented development outlay outside the State plans. A part of this expenditure is, however, financed by grants from the Centre which is, therefore, already included in the figures of development expenditure shown above for the Centre. If adjustment is made for this factor, the total "non-Plan" development expenditure of States financed from their own resources, that is, inclusive of States' share of expenditure on 'matching' schemes sponsored by the Central Government, works out at about Rs. 156 crores. In 1955-56, it may be expected to increase to about Rs. 165 crores.

5.5 On this basis, the total development outlay of the Centre and the States outside the Plan may be taken at about Rs. 215 crores for 1955-56.

5.6 For the period of the Second Plan, the recurring expenditure, both at the Centre and in States, on schemes included in the First Five Year Plan may be taken at roughly Rs. 30 crores a year. There would also be small increases in other development expenditure outside the Plan. On the other hand, some resources may be expected to be released by the completion of schemes taken up by the State Governments outside the plan over the last four years. According to the Five Year Plan Progress Report published in 1954, "expenditure on development schemes outside the State plans, appears to have been about Rs. 37 crores over the three years (1951-52 to 1953-54), and of this only Rs. 5 crores or so represent States' share of expenditure on 'matching' schemes sponsored by the Centre." On the whole, a net increase of about Rs. 25 crores over the five-year total at 1955-56 level might be assumed under "other development expenditure" outside the Plan.

III. BALANCE AVAILABLE FROM REVENUE ACCOUNT FOR FINANCING THE SECOND PLAN

6. The resources that could be made available by the Centre and States (Part A & B) from revenue account for financing the Second Plan may now be calculated as follows.

Thus, contributions from revenue account for the Second Plan are estimated at about Rs. 406 crores—Rs. 301 crores in the case of the Centre, and Rs. 105 crores in the case of States.

Balance Available from Revenue Account for Financing the Plan

(Rs. Crores)

	1954-55			Second Plan 1956-61			First Plan 1951-56		
	Centre (R.E.)	States (B.E.)	Total	Centre	States	Total	Centre	States	Total
1. Total receipts on revenue account (exclusive of grants from the Centre in the case of States)	436.0	420.5	856.5	2518	2423	4941	2238	2032	4270
2. Total expenditure on revenue account outside the Plan :									
(a) Non-development	323.6	244.6	568.2	1849	1418	3267	1621	1164	2785
(b) Statutory grants to Part 'A' & 'B' States other than for development purposes which are included in (d) below.	17.3	-17.3	..	70	-70	..	85	-85	
(c) Grants to Part 'C' States and Jammu & Kashmir for non-development purposes	4.4	..	4.4	18	..	-18	14	..	14
(d) Development expenditure (including grants to States in the case of the Centre)	48.4	156.1	204.5	280	970	1250	242	731	973
TOTAL	393.7	383.4	777.1	2217	2318	4535	1962	1810	3772
3. Balance available from revenue account for the Plan	42.3	37.1	79.4	301	105	406	276	222	498

IV. ESTIMATES OF CONTRIBUTION FROM CURRENT REVENUES FOR FINANCING THE SECOND FIVE YEAR PLAN ON THE ASSUMPTION THAT THE PROPORTION OF GOVERNMENT REVENUES TO NATIONAL INCOME WOULD BE MAINTAINED AT THE PRESENT LEVEL

7. The estimates shown above, it may be repeated, have been worked out on the basis of existing rates and coverage of taxation, both at the Centre and in States. We may now make a further assumption, *viz.*, over the period of the Second Plan the proportion of national income absorbed through Government revenues would be maintained at about the current level, which is roughly estimated at about 8.5 per cent. This would involve some adjustments in the existing tax structure. On the basis of this assumption, the contribution from current revenues for financing the Second Five Year Plan may be roughly estimated at over Rs. 650 crores as follows:

	(Rs. Crores)
1. Total revenue receipts	5200
2. Total expenditure on revenue account outside the Second Five Year Plan	
(a) non-development	3285
(b) development	1250
3. Balance available for financing the Second Plan	665

V. RESOURCES LIKELY TO BE RAISED BY RAILWAYS FOR FINANCING THE RAILWAY PLAN

8. The First Five Year Plan included a total investment programme of Rs. 400 crores for Railways—Rs. 250 crores for development and rehabilitation and Rs. 150 crores for replacement of current depreciation. To finance the development outlay of Rs. 250 crores, the Railways were expected to find Rs. 170 crores from their own resources and the remaining Rs. 80 crores were to be contributed by the Central Government out of general revenues. The actual outlay incurred on the Railway Plan during the five-year period might exceed the Plan provision by about Rs. 12.5 crores. However, the Railways are expected to find from their resources only Rs. 111 crores, the balance of over Rs. 151 crores being made available by the Centre. For the next five years, the total size of the Railway Plan, including provision for current depreciation, is expected to be of the order of Rs. 800 crores. It, therefore, appears reasonable to assume a contribution of about Rs. 200 crores, in addition to provision for meeting current depreciation, from the Railways' own resources for financing the development programme in the Second Plan.

VI. RECEIPTS OF THE CENTRAL AND STATE GOVERNMENTS ON CAPITAL ACCOUNT

Loans from the Public

9. In 1954-55, net receipts from loans from the public, after taking into account repayments of about Rs. 48 crores, amounted to Rs. 113 crores. The Budget for 1955-56 envisages net receipts of about Rs. 69 crores from this source. For the Second Plan, the target for net receipts from loans from the public should perhaps be taken at Rs. 600 crores, after taking into account loan maturities of the order of Rs. 430 crores* during this period.

*Loans involving option have been treated as repayable at the beginning instead of at the end of the period involved.

Small Savings and Unfunded Debt

10. Receipts from small savings and unfunded debt have risen substantially over the last two years. The Budget Estimates for 1955-56 place the yield at Rs. 68.6 crores, representing a further increase of over Rs. 3 crores. For the five years of the Second Plan, the target for small savings and unfunded debt may, therefore, be taken at Rs. 400 crores.

Deposits, funds and other receipts on capital account

11. This is a composite head. The factors governing receipts and payments under a number of items included in it are of a very uncertain character. For the First Plan period, only a small amount is expected to be realised, on net, from this source. Over the next five years, however, the net receipts may be expected to go up sizeably, due mainly to the following factors :

- (i) Larger loan repayments to the Centre by the States out of their appropriations from current revenues.
- (ii) Increase in recoveries of the Central and State Governments in respect of loans and advances given to industries, agriculturists, local bodies, etc.
- (iii) Savings resulting from smaller payments by way of refunds of E.P.T. and income-tax deposits. Over the period of the First Plan, the net refunds of E.P.T. and income-tax deposits, are estimated at about Rs. 94 crores. In future, such refunds may be expected to be of a much smaller order.

On the whole, it appears reasonable to assume net receipts of about Rs. 150 crores for the period of the Second Plan under this head.

VII. TOTAL INTERNAL RESOURCES LIKELY TO BE AVAILABLE IN THE PUBLIC SECTOR

12. The total internal resources likely to be available in the public sector for financing the Second Five Year Plan may now be summed up as follows.

	<i>On the basis of the existing rates and coverage of taxation</i>	<i>(Rs. Crores) On the assumption that the proportion of Government reve- nues to national in- come would be main- tained at the exis- ting level</i>
1. Resources available from revenue account	406	665
2. Contribution from railways	200	200
3. Loans from public	600	600
4. Small savings and unfunded debt	400	400
5. Deposits, funds and other miscellaneous items on capital account	150	150
	1756	2015
	(Or, say, Rs. 1750 crores)	(or, say, Rs. 2000 crores)

Thus, at the existing rates and coverage of taxation, the Central and State Governments are likely to raise about Rs. 1750 crores from internal sources for financing the Second Plan. If, however, suitable adjustments are made in the tax structure so that the proportion of national income absorbed through Government revenues is maintained at about the existing level, these resources would increase to approximately Rs. 2,000 crores.*

*Since this Paper was written, the Budget proposals placed before the Parliament for 1955-56 have been modified further. These modifications will involve a loss in revenue of about Rs. 7.4 crores in 1955-56. Since the object of the paper is to present a broad picture of resources likely to be available in the public sector for financing the Second Plan, the estimates of revenue receipts as worked out earlier have not been altered to take into account this change.

STATEMENTS

STATEMENT I

Receipts of the Central Government on Revenue Account, 1948-49 to 1955-56

	1948-49 Accts.	1949-50 Accts.	1950-51 Accts.	1951-52 Accts.	1952-53 Accts.
I	2	3	4	5	6
1. Direct Taxes:					
(a) Income tax.	119·50 (77·71)	121·59 (75·85)	132·73 (85·21)	146·19 (93·33)	141·43 (84·45)
(b) Corporation tax.	62·26	39·53	40·49	41·41	43·80
(c) Estate duties. . . . .	..	..	..	..	..
TOTAL	181·76 (139·97)	161·12 (115·38)	173·22 (125·70)	187·60 (134·74)	185·23 (128·25)
2. Indirect Taxes:					
(a) Customs—total	127·59 (126·16)	127·29 (124·71)	157·15	232·60 (231·69)	173·75
(i) Sea Customs—exports	26·54 (25·11)	25·74 (23·80)	47·36	90·74	55·97
(ii) Land & air customs & misc. minus refunds.	2·81	1·25 (0·61)	2·09	0·27 (—0·64)	0·29
(iii) Sea Customs—imports	98·24	100·30	107·70	141·59	118·07
(b) Excise duties.	50·63 (50·10)	67·85 (66·44)	67·54 (66·08)	85·78 (82·39)	83·03 (65·00)
(c) Other taxes and duties.	3·17	3·60	6·61	7·78	2·02
TOTAL	181·39 (179·43)	198·74 (194·75)	231·30 (229·84)	326·16 (321·86)	258·80 (240·77)

*Since a composite estimate has been worked out in respect of receipts from both import and

NOTES:—1. In the case of taxes whose proceeds are divisible between the Centre and States, the total proceeds represent the Centre's share.

2. Up to 1951-52, the totals of the revenue receipts retained by the Centre as shown in the Budget documents. For the subsequent years, however, the totals as collections under Central excise duties and treat the payment to States of their

3. The estimates of the Central share in income-tax for 1955-56 do not take into account income-tax. The comparatively smaller increase shown in this Table in respect 1960-61 is largely explained by this factor. The distribution in 1960-61 to the cessation of Federal Revenue Gap Grants is also expected to reduce the Centre's

STATEMENT I

and Estimates for 1956-57 and the next Five Years of the Second Plan.

(Rs. crores)

1953-54 Accts.	1954-55 R. E.	1955-56 B. E.	Five Years 1951-52 to 1955-56	1960-61 Estimates	Five Years 1956-57 to 1960-61 Estimates	
					Total Yield	Increase (+) or decrease (-) over 1955-56 Budget Estimates multiplied by five
7	8	9	10	11	12	13
122.84 (65.55)	126.59 (70.63)	133.93 (76.96)	670.98 (390.92)	173.00 (88.00)	769.65 (414.80)	+100.00 +(30.00)
41.54	38.41	39.77	204.93	53.00	233.85	+35.00
..	11.26 (0.08)	3.00 (0.21)	4.26 (0.29)	6.00 (0.50)	25.00 (2.05)	+10.00 +(1.00)
164.38 (107.09)	166.26 (109.12)	176.70 (116.94)	880.17 (596.14)	232.00 (141.50)	1028.50 (650.70)	+145.00 +(66.00)
158.71	180.00	164.50	909.56 (908.65)	*	*	*
38.53	38.10	47.70	271.04	51.00	248.50	+10.00
0.58	1.60	1.50	3.66 (2.75)	1.50	7.50	..
119.60 94.98 (79.43)	140.30 103.65 (88.54)	115.30 139.45 (122.99)	634.86 506.89 (438.35)	284.00 (264.50)	1346.75 (1256.45)	+73.00 +(65.00)
2.51	2.25	2.20	16.76	2.20	11.00	..
256.20 (240.65)	285.90 (270.79)	306.15 (289.69)	1433.21 (1363.76)	338.70 (319.20)	1613.75 (1523.45)	+83.00 +(75.00)

excise duties, no separate figure is shown for total customs receipts.

the amounts retained by the Centre are shown in brackets. Wherever no figures are indicated in brackets,

brackets here correspond to the total revenue receipts of the Central Government as shown in shown here are different from those shown in the Budget. Since the latter include total share in these collections as an out-go on the expenditure side.

the likely payment in subsequent years to the States of their share in advance collections of of proceeds of income-tax likely to be retained by the Centre over the five years, 1956-57 to States of Travancore-Cochin, Mysore and Saurashtra of their shares in income-tax following share further by a little over Rs. 4 crores.

THE SECOND FIVE YEAR PLAN

STATEMENT I—Contd.

	1948-49 Accts.	1949-50 Accts.	1950-51 Accts.	1951-52 Accts.	1952-53 Accts.	
	1	2	3	4	5	6
3. Other Receipts:						
(a) Surplus profits of R.B.I. & coins, etc.	12.63	11.22	12.27	11.30	10.17	
(b) Contribution from P&T.	2.36	2.38	3.98	3.43	1.87	
(c) Dividend payable by railways.	7.34	7.00	6.50	6.93	7.11	
(d) Net receipts from irriga- tion and electricity.	0.01	0.01	0.02	0.02	0.01	
(e) Forests	0.64	0.81	2.33	2.47	0.79	
(f) Receipts from civil works	1.30	1.64	1.68	1.74	1.71	
(g) Receipts from civil administration	7.05	7.91	10.86	12.61	11.40	
(h) Net receipts from sale of opium	0.92	1.24	2.68	2.68	2.18	
(i) Interest	1.61	1.36	2.13	1.78	2.91	
(j) Extraordinary receipts	14.37	1.33	0.70	5.58	3.91	
(k) Miscellaneous	3.54	3.95	10.33	6.83	6.00	
TOTAL	51.77	38.85	53.66	55.37	48.06	
4. GRAND TOTAL	414.92 (371.17)	398.71 (348.98)	458.18 (409.20)	569.13 (511.97)	492.09 (417.08)	

FINANCIAL RESOURCES IN THE PUBLIC SECTOR

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STATEMENT I—Contd.

1953-54 Accts.	1954-55 R. E.	1955-56 B. E.	Five Years 1951-52 to 1955-56	1960-61 Estimates	Five Years 1956-57 to 1960-61 Estimates	
					Total Yield	Increase (+) or decrease (-) over 1955-56 Budget Estimates multiplied by five
7	8	9	10	11	12	13
15.74	20.76	23.18	81.15	35.00	150.90	+35.00
2.40	1.40	0.70	9.80	.	.	.
6.95	7.08	6.15	34.22	.	.	.
0.01	..	-0.01	0.03	.	.	.
0.75	0.82	1.01	5.84	.	.	.
2.29	1.80	1.90	9.44	.	.	.
9.80	10.81	10.54	55.16	.	.	.
1.96	2.26	2.00	11.08	.	.	.
2.91	3.61	2.91	14.12	.	.	.
2.51	0.75	1.29	14.04	40.00	192.45	-20.00
7.37	6.77	16.00	42.97	.	.	.
52.69	56.06	65.67	277.85	75.00	343.35	+15.00
473.27	508.22	548.52	2591.23	645.70	2985.60	+243.00
(400.43)	(435.97)	(472.30)	(2237.75)	(535.70)	(2517.50)	+(156.00)

THE SECOND FIVE YEAR PLAN

STATEMENT II

Revenue Receipts of Part 'A' and 'B' States since 1950—51

	1950-51 Accts.	1951-52 Accts.	1952-53 Accts.	1953-54 R. E.
A. Tax Revenue				
1. Share of Central excise duties	1·39	1·82	16·25	15·80
2. Share of income-tax	47·68	52·66	56·97	57·14
3. Share in estate duties				
4. Land revenue	49·59	47·99	55·89	67·25
5. Agricultural income-tax	4·09	4·33	3·92	3·47
6. State excise	47·34	49·40	44·38	42·75
7. Stamps	22·17	21·99	21·96	22·05
8. Registration	3·82	3·93	3·71	3·98
9. Receipts under Motor Vehicles Acts.	8·47	9·79	11·17	12·81
10. General Sales-tax	56·50	54·47	49·77	54·65
11. Tax on sale of motor spirit	3·54	4·53	5·96	7·53
12. Other taxes and duties	26·42	30·97	29·17	28·29
TOTAL	271·01	281·88	209·15	315·72
B. Other Revenue				
13. Debt Services	6·64	6·49	6·86	8·27
14. Forests	19·22	21·22	18·95	19·24
15. Irrigation—				
(a) Irrigation Rates (net)	7·35	8·03	8·52	10·30
(b) Betterment levies. . . . .	..	..	..	..

*Included under other taxes and duties.

STATEMENT II

and Estimates for 1955-56 and the period of the Second Plan.

(Rs. crores)

1954-55 B.E.	1955-56 Estimates	Five years 1951-52 to 1955-56	1960-61 Estimates	Five years 1956-57 to 1960-61 Estimates.	
				Total yield	increase (+) or decrease (-) as compared to 1954-55 Budget Estimates multiplied by five
16.30	16.46	66.63	19.50	90.50	+ 9.00
55.68	56.97	279.42	85.00	354.90	+76.50
*	2.79	2.79	5.50	22.95	+22.00
71.76	75.50	333.31	77.00	381.80	+7.00
3.20	41.00	219.39	37.50	199.30	-10.00
41.86					
22.71	23.00	111.71	25.50	121.05	+7.50
3.91	3.95	19.48	4.25	20.55	+1.00
12.84	13.10	59.71	16.50	74.20	+10.00
54.89	55.50	269.28	67.00	304.45	+30.00
7.75	8.00	33.77	10.00	45.25	+6.50
28.33	28.50	145.26	32.00	150.70	+10.00
<u>319.23</u>	<u>324.77</u>	<u>1540.75</u>	<u>379.75</u>	<u>1765.65</u>	<u>+169.50</u>
7.86	7.86	37.34	7.86	39.30	
19.57	19.75	98.73	20.75	101.35	+3.50
12.29	14.29	53.43	22.50	101.45	+40.00
..	..	..	12.50	50.00	+50.00

THE SECOND FIVE YEAR PLAN

STATEMENT II—Contd.

	1150-51 Accts.	1951-52 Accts.	1952-53 Accts.	1953-54 R.E.
16. Civil works	3.11	3.29	3.81	4.34
17. Civil administration	30.50	33.15	33.87	36.70
18. Receipts form electricity schemes (net)	2.96	3.41	3.30	4.37
19. Receipts form road transport schemes (net)	0.49	0.59	0.12	0.71
20. Miscellaneous receipts	13.48	13.95	12.25	11.14
21. Extraordinary receipts	1.41	3.91	2.55	2.01
22. Transfers from State funds*	1.11	1.37	0.94	1.18
TOTAL	86.27	95.41	91.17	98.26
C. Statutory Grants from the Centre				
23. Revenue gap grants	12.02	12.56	9.18	9.00
24. Grants under Art. 275	1.83	3.35	6.95	8.72
25. Grants in lieu of export duty on jute.	1.85	1.85	3.15	3.15
TOTAL	15.70	17.76	19.28	20.87
D. GRAND TOTAL	372.98	395.05	409.60	434.85

*Exclusive of transfers from Revenue Reserve Funds and Special Development Funds which represent drawings on reserves of un earmarked securities and cash balances.

STATEMENTS II—Contd.

1954-55 B.E.	1955-56 Estimates	Five Years 1951-52 to 1955-56	1960-61 Estimates	Five Years 1956-57 to 1960-61 Estimates	
				Total Yield	Increase + or decrease (—) as compared to 1954-55 Budget Estimates multiplied by five
3.66	3.80	18.90	4.60	21.30	+3.00
37.47	37.85	179.04	41.00	196.35	+9.00
5.03	6.00	22.11	14.00	65.15	+40.00
0.84	0.90	3.16	1.40	5.70	+ 1.50
11.42	15.00	78.85	16.50	76.75	+4.00
2.10					
1.03					
<u>101.27</u>	<u>105.45</u>	<u>491.56</u>	<u>141.11</u>	<u>657.35</u>	<u>+151.00</u>
9.00	8.50	48.24	..	29.00	-16.00
10.55	11.55	41.12	17.00	68.75	+16.00
3.15	3.15	14.45	3.15	15.75	..
<u>22.70</u>	<u>23.20</u>	<u>103.81</u>	<u>20.15</u>	<u>113.50</u>	<u>..</u>
<u>443.20</u>	<u>453.42</u>	<u>2136.12</u>	<u>541.01</u>	<u>2536.50</u>	<u>+320.50</u>

STATEMENT III

Non development Expenditure of the Centre met from Revenue (Exclusive of Grants to States)

(Rs. crores)

	1951-52	1952-53	1953-54	1954-55	1955-56	1960-61	Five years 1955-56 to 1960-61	
	Accts.	Accts.	Accts.	R.E.	B.E.	Esti- mates	Total Esti- mates	Increase over 1955-56 Budget Esti- mates multi- plied by five
1. Defence	171.0	179.5	186.3	198.0	202.7	210.0	1043.5	+30.0
2. Civil administration	27.7	26.8	30.4	35.1	39.2	45.0	216.0	+20.0
3. Currency and mint	2.5	3.0	2.6	3.5	3.4	4.0	19.0	+ 2.0
4. Direct demands on revenue (<i>minus</i> transfer of States' share of Central ex- cise duties)	11.4	11.5	13.2	14.1	14.6	17.5	81.0	+ 8.0
5. Debt services.	39.0	36.5	40.8	39.4	39.2	45.0	216.0	+20.0
6. Price subsidies	39.9*	11.8*	3.9	0.2	..	..	..	..
7. Miscellaneous and extraordinary	27.0	37.8	20.1	20.2	26.3	28.0	136.5	+ 5.0
8. TOTAL	318.5	306.9	297.3	310.5	325.4	349.5	1712.0	+85.0
9. Capital outlay on de- fence	10.2	6.0	10.2	13.1	22.4	30.0	137.0	+25.0
10. GRAND TOTAL	328.7	312.9	307.5	323.6	347.8	379.5	1849.0	+110.0

* Include capital loss on sale of American loan wheat. Correspondingly, the subsequent write back of this loss to revenue is not included in the figures shown in this statement.

STATEMENT IV

Non-development Expenditure on Revenue Account of Part 'A' & 'B' States

(Rs. crores)

	1951-52 Accts.	1952-53 Accts.	1953-54 R. E.	1954-55 B.E.	1955-56 Esti- mates	1960-61 Esti- mates	Five years to 1960-61	Total Esti- mates	Increase over 1954-55 Budget Esti- mates multi- plied by five
<i>Administration & ancillary activities.</i>									
1. Direct demands on revenue (minus forests).	25.6	27.5	30.1	40.2	41.0*	45.0*	218.0	218.0	+17.0
2. General Administration.	33.4	33.7	35.4	34.7	35.5	37.0	182.5	182.5	+9.0
3. Administration of justice.	10.5	10.8	11.0	11.3	11.5	12.5	60.5	60.5	+4.0
4. Jails and convict settlements.	7.6	7.6	7.7	7.4	7.6	8.0	39.5	39.5	+2.5
5. Police.	54.9	53.1	53.3	53.3	53.5	55.0	272.0	272.0	+5.5
6. Miscellaneous.	46.5	49.8	53.2	44.9	45.0	48.0	234.5	234.5	+10.0
7. Extraordinary charges.	9.4	11.8	12.3	10.4	10.5	11.0	54.0	54.0	+2.0
8. Transfer to State funds.	1.8	6.0	12.3	9.2	9.0	10.0	48.0	48.0	+2.0
TOTAL	189.7	200.3	215.3	211.4	213.6	226.5	1109.0	1109.0	+52.0
<i>Debt Services</i>									
9. Interest payments.	8.6	10.3	12.3	18.4	25.0	45.0	185.0	185.0	+93.0
10. Appropriation for reduction or avoidance of debt.	8.0	8.3	10.5	14.8	17.0	30.0	124.0	124.0	+50.0
TOTAL	16.6	18.6	22.8	33.2	42.0	75.0	309.0	309.0	+143.0
GRAND TOTAL	206.3	218.9	238.1	244.6	255.6	301.5	1418.0	1418.0	+195.0

* Do not include expenditure connected with zamindari abolition as receipts from the latter are taken on a net basis.

STATEMENT V

Development Expenditure on Revenue Account—Centre

(Rs. crores)

Development heads	1951-52 Accts.	1952-53 Accts.	1953-54 Accts.	1954-55 R.E.	1955-56 B.E.
1. Agriculture, irrigation and rural development	2.7	2.7	2.6	5.2	5.3
2. Industries and supplies	6.1	5.5	12.4	13.0	16.6
3. Transport and communications	4.7	4.6	4.5	4.9	5.8
4. Education, medical, public health and scientific research	11.6	10.9	10.8	13.9	22.2
5. Ports and pilotage, light houses, etc.	0.9	1.0	1.0	1.2	1.4
6. Civil works	11.4	12.1	13.9	15.1	16.3
7. Post-war planning and development	1.4	..	..	..	..
8. Expenditure on displaced persons	3.2	1.3	2.5	1.8	2.5
9. Expenditure on community development projects, N.E.S. and local development works not included in grants . . . . .	..	..	0.1	0.2	0.2
10. Development expenditure on tribal areas	0.1	0.4	0.6	1.1	1.7
11. Forests	1.4	0.9	1.0	1.3	1.8
TOTAL	43.5	40.4	49.4	57.7	73.8
12. Development grants to States	17.7	16.5	24.7	50.7	60.6
13. Total development expenditure of the Centre, including grants to States of which,	61.2	56.9	74.1	108.4	134.4
Outlay on Central Plan.	5.3	7.4	18.0*	50.0*	73.0*
Assistance for State Plans	4.3	6.1	7.0*	10.0*	11.5*
Development outlay outside the First Five Year Plan	51.6	43.4	49.1*	48.4*	49.9*

*Figures are tentative.

STATEMENT VI

Development Expenditure on Revenue Account of Part 'A' and 'B' States

(Rs. crores)

Development head	1951-52 Accts.	1952-53 Accts.	1953-54 R.E.	1954-55 B.E.
1. Forests	8.65	9.13	9.72	10.33
2. Irrigation	11.79	10.31	13.43	11.88
3. Civil works	40.98	46.58	50.40	57.32
4. Electricity schemes	2.28	3.37	2.30	3.79
5. Education	60.33	66.30	70.92	82.31
6. Medical	20.05	20.78	22.50	24.68
7. Public health	9.18	9.66	11.57	12.41
8. Agriculture (including Fisheries and Rural Development)	19.37	18.34	24.33	20.29
9. Veterinary	4.06	3.95	4.46	5.06
10. Cooperation	3.77	3.89	5.42	5.29
11. Industries & supplies	6.47	6.37	7.71	10.73
12. Scientific departments	0.40	0.42	0.48	0.57
13. Miscellaneous departments	10.66	10.38	11.95	13.55
14. Community projects and N.E.S. . . . .	..	0.94	8.86	14.59
15. Local development works . . . . .	..	..	1.34	2.27
16. Other miscellaneous heads	0.07	0.47	3.72	1.86
TOTAL	198.06	210.89	249.11	276.83
17. Outlay on State Plans	67.6	69.5	78.0	91.0
18. Development outlay outside the State Plans*	130.5	141.4	171.1	185.8

*Includes expenditure on Community Projects, N.E.S. and other schemes sponsored by the Centre, as these do not form part of the State Plans.

STATEMENT VII

Statement showing Grants from the Centre to States

(Rs. crores)

Grants for Development	1951-52 Accts.	1952-53 Accts.	1953-54 Accts.	1954-55 R.E.	1955-56 B.E.
1. G.M.F. grants	2.5	3.4	3.8	4.0	4.0
2. Assistance for natural calamities and scarcity affected areas	0.2	2.2	1.4	6.0	3.0
3. Community development projects . . . . .	..	0.5	1.9	5.2	7.0
4. National extension services . . . . .	..	..	0.6	2.5	5.2
5. Basic, social and secondary education	*	*	*	6.0	10.0
6. Welfare of backward classes . . . . .	..	..	0.3	1.3	1.6
7. Co-operative training and experiments . . . . .	..	..	..	0.1	0.2
8. Key village schemes and Gosadan scheme . . . . .	..	..	0.1	0.2	0.5
9. Resettlement of landless workers . . . . .	..	..	..	0.1	0.5
10. Improvement of land records and agri- cultural statistics . . . . .	..	..	..	..	0.2
11. N.E.S. and training of village level workers . . . . .	..	..	0.1	0.4	1.2
12. Social welfare . . . . .	..	..	0.2	1.5	2.3
13. Soil conservation . . . . .	..	..	..	0.2	0.4
14. Higher agricultural education . . . . .	..	..	..	..	0.3
15. National malaria control scheme . . . . .	..	..	1.9	2.8	2.1
16. National filaria control scheme . . . . .	..	..	..	0.7	0.2
17. Industrial housing . . . . .	..	..	0.8	..	..
18. Local works . . . . .	..	..	0.8	..	..
19. F.F.I. grants to Part 'B' States	1.1	0.7	0.7	0.7	..
20. Bonus for internal procurement of food	1.7	0.1	0.3	0.1	..
21. Write-back of grants made from the capi- tal account . . . . .	..	..	..	..	0.9
22. Development grants to Part 'C' States . . . . .	..	..	0.1	0.1	0.2
23. Grants for primary education under the substantive portion of Art. 275 (1) of Constitution. . . . .	..	..	1.5	2.0	2.5
24. Grants for scheduled areas and sche- duled tribes and development grant to Assam for tribal areas under provisos to Art. 275	1.6	1.6	2.3	3.6	4.4
25. Rehabilitation of displaced persons.	9.9	6.4	6.3	9.3	7.9

* Separate actuals not available.

STATEMENT VII—*Contd.*

	1951-52 Accts.	1952-53 Accts.	1953-54 Accts.	1954-55 R.E.	1955-56 B.E.
26. Other Grants	0·4	..	..	..	..
TOTAL	17·4	14·9	23·1	46·8	54·6
<i>Minus</i> grants for community projects and N.E.S. met from the Special Develop- ment Fund	..	..	0·4	0·9	0·9
NET TOTAL	17·4	14·9	22·7	45·9	53·7
<i>Other Grants</i>					
1. Grants under substantive portion of Art. 275 (1)	0·7	5·2	5·1	5·1	5·1
2. Grants under Art. 273	1·8	3·2	3·2	3·2	3·2
3. Grants under Art. 278 (1) (b)	13·2	..	9·0	9·0	9·0
4. Grants to Part 'C' States* (to meet revenue deficit)	..	12·8	4·7	5·2	7·5
5. Grants in aid to Kashmir*	..	..	..	3·9	4·0
TOTAL	15·7	21·2	22·0	26·4	28·8
GRAND TOTAL	33·1	36·1	44·7	72·3	82·5

* Includes development grants also for which separate figures are not available.

THE SECOND FIVE YEAR PLAN
STATEMENT VIII
Sea Customs—Exports

(Rs. crores)

	1948-49 Accts.	1949-50 Accts.	1950-51 Accts.	1951-52 Accts.	1952-53 Accts.	1953-54 Accts.	1954-55 R.E.	1955-56 B.E.
1. Jute ¹ :								
(a) Raw	1·23	10·07	26·12	59·33	19·43	10·35	7·10	7·10
(b) Manufactured	6·35							
2. Cotton, raw and waste ²	1·80	2·20	1·20	8·00	10·07	5·27	4·80	4·70
3. Cotton cloth & yarn ³	4·03	0·36	0·31	3·33	5·97	2·93	1·32	1·10
4. Manganese ⁴	0·39	0·85	1·32	2·08	3·18	3·57	0·80	..
5. Tea ⁵	10·81	10·99	11·24	10·20	10·62	11·62	19·00	30·00
6. Black Pepper ⁶	..	0·64	4·26	4·56	3·48	2·84	1·51	1·51
7. Other agricultural produce	0·18	0·26	0·40	0·46	0·43	0·41	0·44	0·44
8. Mica	0·22	0·11	0·29	0·33	0·23	0·20	0·16	0·16
9. Oil and oilseeds ⁷	1·53	0·05	0·02	1·52	2·13	0·73	1·31	1·15
10. Cigarettes . . . . .	..	0·17	..	..	..	..	..	..
11. Raw wool ⁸	..	..	1·99	0·78	0·01	0·02	..	..
12. Others ⁹	..	0·04	0·21	0·15	0·42	0·59	1·66	1·54
TOTAL EXPORTS	26·54	25·74	47·36	90·74	55·97	38·53	38·10	47·70

(1) In 1949-50, the duty on hessian was raised by Rs. 270 per ton to Rs. 350 per ton. In 1950-51, the duty on jute manufactures was enhanced from Rs. 50 to Rs. 150 in the case of sacking and from Rs. 350 to Rs. 750 and later to Rs. 1500 per ton in the case of hessian. In 1952, it was reduced.

In 1953-54, the duty on jute manufactures other than cloth both of hessian and sacking variety was abolished, and that on hessian cloth and bags was reduced further.

(2) The duty on raw cotton was raised during 1949-50 by Rs. 60 to Rs. 100 per bale. In 1950-51, new export duties were levied on cotton waste at 50% *ad valorem* and export duty on raw cotton was enhanced from Rs. 100 to Rs. 400 per bale. In 1952-53, the duty on cotton was reduced for certain varieties and abolished for others. In 1954, it was reduced further for certain varieties.

(3) The decrease in receipts during 1949-50 and 1950-51 is due to the withdrawal in 1949-50 of the export duty on cotton cloth. In 1951-52, export duties on certain types of cotton cloth were raised from 10 per cent *ad valorem* to 25 per cent *ad valorem*. In 1952-53, the duty on coarse and medium cloth was reduced from 25% *ad valorem* to 10 per cent *ad valorem* and in 1953-54 that on medium cloth was abolished. A loss of Rs. 50 lakhs has been taken into account in the Budget Estimates for 1955-56 due to the proposed reduction to 6-1/4 per cent of the export duty on cotton cloth.

(4) The export duty on manganese ore was abolished in 1954.

(5) The increase in 1954-55 and 1955-56 is due to the enhancement of the export duty on tea in 1954.

(6) In 1949-50, a new export duty was levied on black pepper. This duty was reduced in 1954.

(7) In 1951-52, new duties were levied on exports of oilseeds and vegetable oils, and the duty on groundnuts was raised from Rs. 80 to Rs. 150 per ton. In 1953-54, the duty on seeds and oils was reduced and that on tobaccoseed oil was abolished. In 1954, the export duty on mustard oil, linseed oil, kardiseed oil, nigerseed oil and rapeseed oil was abolished while that on castor oil was reduced. A new duty was levied on deoiled groundnut meal and certain oilcakes.

(8) In 1950-51, a new export duty on raw wool was levied at 30 per cent *ad valorem*.

(9) In 1949-50, export duty was levied on certain categories of iron and steel. The increase during 1952-53 and 1953-54 is mostly due to the levy of a new duty in 1952-53 on mercury flasks at the rate of Rs. 300 per flask of 75 lbs. A new duty was levied on coffee at the rate of Rs. 62-1/2 per cwt. in 1953-54 and the duty on certain iron and steel manufactures was abolished.

STATEMENT IX
Sea Customs—Imports

(Rs. crores)

	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56
	Accts.	Accts.	Accts.	Accts.	Accts.	Accts.	R.E.	B.E.
A. Revenue Duties								
1. Liquors, spirits and wines, etc.	1.92	1.74	1.70	2.57	2.35	2.16	2.39	2.42
2. Tobacco	8.77	4.89	4.70	3.61	3.33	2.02	2.30	2.30
3. Kerosene oil	2.42	3.93	5.75	6.11	6.66	7.19	8.30	5.50 ²
4. Motor spirit	9.72	14.01	19.93	26.04	27.59	27.53	22.00 ¹	7.00 ²
5. Oils—batching, fuel & lubricating	1.37	1.72	2.07	3.38	4.00	3.04	3.10	1.20 ²
6. Cotton, raw	2.40	4.65	5.75	6.15	4.92	3.13	0.05	..
7. Motor cars, cycles, scooters, buses, lorries and parts thereof	8.05	5.24	10.12	12.38	8.70	6.37	8.30	8.60
8. Coal-tar dyes and coal-tar derivatives	1.29	0.79	1.27	1.65	0.90	1.94	2.11	2.00
9. Machinery	7.04	6.09	5.38	6.63	5.62	5.34	5.08	5.17
10. Iron and steel	1.59	2.24	3.54	4.14	3.21	2.86	2.51	2.51
11. Railway plant and rolling stock	0.49	1.01	0.75	0.80	2.22	2.15	1.50	1.50
12. Wood-pulp, paper and stationery	2.90	1.83	1.65	3.11	2.59	3.10	2.60	2.60
13. Artificial silk yarn and thread	4.10	4.22	5.29	6.38	3.09	4.53*	5.00	5.00
14. Yarn and other Textile fabrics	3.71	3.36	0.41	0.81	0.57	0.75	0.50	0.55
15. Betel nuts	2.79	3.99	4.45	4.75	3.69	4.65	6.60	6.50
16. All other articles	33.61	32.06	26.34	42.29	31.05	36.46	60.63 ³	55.15 ³
B. Protective Duties etc.*	6.06	8.53	8.60	10.79	7.58	6.38	7.33	7.30
TOTAL IMPORT DUTIES .	98.23	100.30	107.70	141.59	118.07	119.60	140.30	115.30

*Includes duties on American disposals.

(1) The decline in the yield is due to a reduction in imports following commencement of production in one of the recently set up oil refineries in India.

(2) The decline in the yield is explained by the anticipated replacement of imports by indigenous production.

(3) Includes revenue from sugar imports.

NOTES—

(i) The increase in import duties during 1951-52 is due to larger imports and a rise in import prices which yield larger revenue in the case of *ad valorem* duties.

(ii) The improvement in 1954-55 is largely due to import of sugar and liberalisation of imports of commodities carrying high duties.

STATEMENT X

Yield of Union Excise Duties from 1948 onwards

(Rs. crores)

	1948-49 Accts.	1949-50 Accts.	1950-51 Accts.	1951-52 Accts.	1952-53 Accts.	1953-54 Accts.	1954-55 R.E.	1955-56 B.E.
1. Motor Spirit	1.41	1.73	2.08	2.07	2.11	2.47	8.50 ⁽¹⁾	21.80 ⁽¹⁾
2. Kerosene	0.20	0.22	0.28	0.26	0.24	0.33	0.70 ⁽¹⁾	1.75 ⁽¹⁾
3. Sugar ⁽²⁾	6.47	7.34	6.46	8.43	9.93	14.36	8.50	15.00
4. Matches	7.30	7.57	8.07	8.69	9.45	9.32	9.00	8.50 ⁽³⁾
5. Steel Ingots	0.46	0.52	0.54	0.55	0.61	0.60	0.65	0.70
6. Tyres	1.98	3.57	4.04	6.09	4.40	4.95	5.30	5.30
7. Tobacco	25.46	28.23	31.99	35.55	34.68	33.00	31.65 ⁽⁴⁾	34.95
8. Vegetable products	1.96	2.28	2.19	2.45	2.75	2.79	3.00	3.00
9. Coffee	0.49	0.50	1.17	0.77	0.59	0.77	0.90	0.90
10. Tea	3.66	2.54	3.36	4.31	3.46	2.09	3.00	3.50
11. Cotton Cloth	0.87	12.33 ⁽⁵⁾	9.26 ⁽⁶⁾	16.36	13.46 ⁽⁷⁾	21.67 ⁽⁸⁾	26.50 ⁽⁹⁾	34.00 ⁽⁹⁾
12. Coal Cess	1.02	1.32	1.62	1.66	2.42	2.54	2.30	2.10
13. Others	0.36	0.33	0.44	0.42	0.63	1.17	5.15 ⁽¹⁰⁾	9.20 ⁽¹¹⁾
TOTAL	51.64	68.48	71.50	87.61	84.73	96.06	105.15	140.70
Deduct—Refunds	1.01	0.63	3.96	1.83	1.70	1.08	1.50	1.25
TOTAL NET REVENUE	50.63	67.85	67.54	85.78	83.03	94.98	103.65	139.45

⁽¹⁾ The increase during 1954-55 and 1955-56 is due to the increased production of petroleum and kerosene in the country due to the coming into production of oil refineries in India.

⁽²⁾ The figures for 1952-53 and 1953-54 include collections under the special excise duty of Rs. 1-6-0 per cwt., which was levied during 1952-53 to cover the compensation to sugar factories on account of the reduction in the controlled price of the 1951-52 season stocks. This duty was continued till the end of October, 1953. The fall during 1954-55 is due to decline in sugar production. Following better production and increase in the rate of excise duty, collections under sugar excise are expected to improve by Rs. 6.5 crores in 1955-56.

⁽³⁾ The decrease of Rs. 50 lakhs in the Budget Estimates for 1955-56 is due to the concessions announced for the cottage industry products.

⁽⁴⁾ The fall in receipts in 1954-55 is due to the concession in duty given during the year as a measure of relief in view of the large accumulations of stocks with growers and traders and the resultant fall in prices.

⁽⁵⁾ A duty of 25 per cent *ad valorem* was levied on superfine cloth with effect from Jan. 1, 1949. In addition, the 1949-50 Budget levied a duty of 6-1/4 per cent *ad valorem* on fine cloth and of 1/4 anna per yard on coarse and medium cloth. Subsequently, there was a reduction in the duty on fine and super fine cloth (involving a loss of about Rs. 3.5 crores in a full year) towards the end of 1949-50.

⁽⁶⁾ The receipts were affected by the two months' strike of the textile workers in Bombay and also by the difficulty in the supply of raw cotton to the mills.

⁽⁷⁾ The decrease is accounted for mainly by a fall in the offtakes of superfine and fine varieties.

⁽⁸⁾ The increase is due to the levy of a special cess on mill-made cloth for the benefit of the handloom and khadi industries.

⁽⁹⁾ The increase is due to raising of excise duties.

⁽¹⁰⁾ The increase during 1954-55 is due to new excises introduced on soap, footwear, cement, etc.

⁽¹¹⁾ Includes an estimated yield of about Rs. 4 crores from the new excise duties proposed to be levied on electrical goods, woollen fabrics, paper and paperboard and paints and varnishes.

STATEMENT XI

Industrial Production in India, 1948 to 1954

	1948	1949	1950	1951	1952	1953	1954 (10 months Jan.-Oct.)
1. Sugar (ooo Tons) ¹	10,75·2	10,00·8	9,76·8	11,14·8	14,94·0	12,91·2	10,00·7 ²
2. Matches (ooo cases) ³	5,32·8	5,26·8	5,23·2	5,77·2	6,08·4	5,90·4	3,78·9 ⁽⁵⁾
3. Steel ingots and metal for casting (ooo tons).	12,65·4	13,52·4	14,37·6	15,00·0	15,78·0	15,07·2	13,95·4
4. Tobacco manufactures, cigarettes only (lakhs).	21,82,44	21,89,04	23,62,92	21,46,80	20,11,92	19,67,64	16,37,87
5. Vegetable oil products (ooo tons)	1,29·7	1,55·5	1,71·6	1,72·3	1,90·8	1,91·4	1,94·2
6. Tea (lakh lbs.) ⁴	56,86·8	58,50·0	60,66·0	73,03·2	62,26·8	60,81·6	55,48·2
7. Cotton cloth (lakh yds.)	4,31,88	3,90,48	3,66,68	4,07,64	4,59,84	4,89,00	4,15,14
8. Tyres (Automobiles) (ooo's).	7,70·4	6,86·4	6,38·4	8,70·4	7,21·2	7,68·0	6,99·6
9. Tyres (cycles) (ooo's.)	33,69·6	46,11·6	33,25·2	39,42·8	44,89·2	46,45·2	44,48·4
10. Tyres (Tractors) (Nos.)	..	..	..	..	3,852	9,612	13,784 ⁵
11. Tyres (Cabs) (ooo ft.).	..	..	..	3,73·2	3,85·2	4,42·8	2,58·9

¹ Figures relate to crop year (Nov. to Oct.) and are in respect of cane sugar only.

² The figure is for the full year, November 1953 to October 1954.

³ Figures relate to production of organised factories ; 50 gross boxes of 60 sticks each.

⁴ Figures for 1954 are exclusive of production in the Punjab (Kangra and Mandi).

⁵ Figures are for January-September only.

FINANCIAL RESOURCES FOR THE SECOND FIVE YEAR PLAN —A AND B STATES

(Economic Division, Planning Commission)

INTRODUCTION

An attempt has been made in this paper to estimate the financial resources of the State Governments for the Second Plan. Part I of the paper brings out the estimate of contribution for the Second Plan from current revenues at the level of taxation assumed for 1955-56; Part II deals with estimates of additional resources worked out on the basis of the recommendations of the Taxation Enquiry Commission and suggestions made by the Planning Commission in this regard from time to time; Part III deals with the estimates of resources for the Plan on capital account and Part IV sums up the overall position.

I. ESTIMATE OF CONTRIBUTION FOR THE SECOND PLAN FROM CURRENT REVENUES

1. Estimate of Receipts on Revenue Account

For the purpose of these estimates, revenue receipts of the State Governments may be classified broadly into four categories: (i) revenue from taxation; (ii) revenue from irrigation, electricity schemes and other commercial ventures; (iii) other non-tax revenues; and (iv) grants from the Centre. Estimates of receipts from these sources for the period 1956-57 to 1960-61 and the assumptions on which these have been based are indicated in the subsequent paragraphs.

(i) *Tax Revenue*.—Tax revenue of the State Governments is estimated to amount to about Rs. 320 crores for 1954-55 and about Rs. 331 crores for 1955-56. As a result of growth in economic activity and rise in national income, tax revenue is expected to increase by about Rs. 105 crores during the period 1956-57 to 1960-61 as indicated below:—

(Rs. crores)

	1954-55 (B.E.)	1955-56 Estimated	1956-61 (five years)	Estimated increase during 1956-61 over the 1955-56 level
Share of Income-tax	56.0*	57.0*	325.0	40.0
Share of Central Excise	15.1*	16.7*	93.5	10.0
General Sales Tax	54.9	58.0	325.0	35.0
Tax on sale of motor spirit	7.8	9.0	50.0	5.0
Stamps and Registration	26.6	27.5	147.5	10.0
Estate duty	1.3	3.0	20.0	5.0
Other taxes	158.3	160.0	800.0	..
TOTAL	320.0	331.2	1761.0	105.0

*As indicated in the Budget documents for 1955-56 of the Central Government.

Increases in yield under land revenue expected to take place as a result of abolition of Zamindari have not been taken into account in the above estimates. Larger receipts on this account during the Second Plan period are expected to be more than offset by increases in expenditure connected with payment of compensation to Zamindars and other administrative provisions. Other assumptions on which the above estimates have been based are:—

- (a) National income will rise by about 25 per cent by the end of the Second Plan period. It is expected that increase in yield from some of the taxes, e.g. States' share of income tax and Central excise, general sales tax, tax on sale of motor spirit, would be almost proportionate to increases postulated for national income. The rate of increase in receipts from stamps and registration would be somewhat lower.
- (b) Net yield from Estate duty will amount to about Rs. 20 crores over the five-year period.
- (c) The return from other taxes and duties during the Second Plan period will remain at about the level estimated for 1955-56. Some increase in receipts likely to take place under land revenue and other taxes will be neutralised partly by losses under excise and partly by estimated transfer of about Rs. 8 crores a year under land revenue and about Rs. 2 crores under Motor Vehicles Tax to local bodies in accordance with the recommendations of the Taxation Enquiry Commission.

(ii) *Revenue from Commercial Undertakings.*—Irrigation and power projects undertaken during the present Plan period are expected to yield results in the current and in the course of the Second Plan periods. On account of increase in irrigated area and generation of power, collections under irrigation rates and electricity schemes will be considerably enhanced. Some increase in returns from road transport schemes and forests may also be expected. These sources, it is estimated, will bring in an additional amount of Rs. 82 crores over the five-year period as indicated below:—

(Rs. crores)

	1954-55 ¹ (B.E.)	1955-56 Estimated	1956-61 (5 years)	Estimated increase during 1956-61 over the 1955-56 level.
Forests	19.6	20.0	110.0	10.0
Irrigation (net of working expenses)	12.3	15.0	110.5	35.5
Electricity Schemes (net of working expenses)	5.0	8.0	75.0	35.0
Road Transport (net)	0.8	0.9	6.0	1.5
TOTAL	37.7	43.9	301.5	82.0

The above estimates are based on the following assumptions:—

- (a) As a result of partial or full completion of irrigation projects, new irrigation facilities will extend to about 20 million acres of land by the end of the present Plan period. Though irrigation rates vary with the type of irrigation, crops, etc.

the average annual rate per acre for the purpose of these estimates has been assumed at Rs. 5 and working expenses at about 30 per cent of the gross collections.

- (b) It is estimated that the supply of firm power will increase by 16 lakh kW by 1956-57. The rate at which this power will be supplied has been assumed at Rs. 100 per kW per year and the working expenses have been assumed at 60 per cent of the gross earnings.
- (c) Yield under forests is expected to increase at the rate of about Rs. 2 crores per annum during the course of the Second Plan period due to larger building activity envisaged under the Second Plan.

(iii) *Other Non-Tax Revenues.*—Collections under revenue heads in this category amounted to about Rs. 71.7 crores in 1954-55 and are estimated at about Rs. 75 crores for 1955-56. Of this, receipts under debt services are estimated at about Rs. 8 crores for 1954-55 and might be put at about Rs. 10 crores for 1955-56. Increase in receipts on this account during the Second Plan period has been taken care of on the expenditure side of these estimates. Other items, e.g., transfer from State Funds, etc., are of unpredictable nature. On an *ad hoc* basis, additional inflows over the five years under this head may be put at about Rs. 20 crores and total receipts at Rs. 395 crores.

(iv) *Grants from the Centre.*—Statutory and other grants received by the State Governments during 1954-55 amounted to about Rs. 50 crores and are estimated at Rs. 55 crores for 1955-56. Of this, about Rs. 21 crores are accounted for by statutory grants. The question relating to statutory grants to the State Governments is likely to come up shortly for the consideration of the Second Finance Commission, but, for the purpose of our estimates, statutory grants may be assumed to continue at the 1955-56 level for the Second Plan period also. On this basis, the State Governments are expected to receive about Rs. 105 crores. Non-statutory grants, strictly speaking, do not form part of the States' own resources. As such, while working out the States' contribution for the Second Plan from current revenues, receipts on this account have to be kept out.

In the light of the above estimates, the picture in respect of revenue receipts of State Governments for the period 1956-57 to 1960-61 would be as follows:—

	1954-55 (R.E.)	1955-56 Estimated	1956-61 (5 years)	Estimated increase during 1956-61 over the 1955-56 level
Tax Revenues	320.0	331.2	1761.0	105.0
Revenue from Commercial Undertakings	37.7	43.9	301.5	82.0
Other non-tax revenues	71.7	75.0	395.0	20.0
Statutory grants	21.0	21.0	105.0	..
TOTAL.	450.4	471.1	2562.5	207.0

(Rs. crores)

It will be seen that the total revenue receipts of the State Governments, exclusive of non-statutory grants, over the period 1956-57 to 1960-61 would roughly amount to Rs. 2563 crores.

2. Estimate of Expenditure on Revenue Account

The bulk of the increase in non-Plan expenditure on revenue account expected to take place during the Second Plan period would be attributable to debt services under non-development heads and to recurring expenditure for the maintenance of the new development activity taken up during the current Plan period under developmental heads. The estimates of increases during 1956-61 in expenditures under non-developmental and developmental heads are brought out in the following paragraphs.

(i) *Non-Development Expenditure.*—Non-development expenditure of the State Governments is estimated to increase by about Rs. 144 crores over the period 1956-57 to 1960-61 as compared to the level expected to be reached by 1955-56. Assumptions on which these estimates have been based are as follows:—

- (a) The expenditure in respect of direct demands on revenue, general administration and other miscellaneous expenditure will increase by about 1 per cent per annum over the next five years.
- (b) The State Governments would raise, on net, about Rs. 200 crores a year as from 1956-57 by way of loans from the Centre and the public, unfunded debt, etc., for financing expenditures on the State Plans during the next five years. Interest at the rate of 4 per cent per annum will be payable on Rs. 200 crores in 1957-58, Rs. 400 crores in 1958-59, Rs. 600 crores in 1959-60 and Rs. 800 crores in 1960-61. This is based on the assumption that interest on the loan raised in 1956-57 will be paid in 1957-58. Of the loans raised it is estimated that about Rs. 50 crores a year will be advanced by the State Governments by way of loans to outside agencies like municipalities, cultivators, etc. Thus, the interest payable by the State Governments on the loans raised will be offset to the extent of Rs. 20 crores.
- (c) As a result of increase in debt liabilities appropriation of funds for repayment will also increase. The funds thus raised are available to the State Governments for easing their ways and means position but are not un earmarked so as to be available for financing development expenditures. As already mentioned, the State Governments will increase their interest-bearing liabilities at the rate of Rs. 150 crores a year from 1956-57 for financing expenditure under the State Plans. For the purpose of our estimates, however, increases in appropriations during the Second Plan period have been assumed at Rs. 50 crores—this being the estimated collections on account of the imposition of betterment levy. Collections on account of betterment levies are to be made over to the Centre towards repayment of loans taken for financing the multipurpose and irrigation projects.

The distribution of increase in non-development expenditures over major components is indicated below:—

	(Rs. crores)			
	1954-55 (R.E.)	1955-56 Estimated	1956-61 (5 years)	Estimated increase during 1956-61 over the 1955-56 level
Direct demands on Revenue	40.2	45.0	232.5	7.5
Interest on debt and other obligations	18.4	20.0	160.0	60.0
Appropriation for reduction of debts	14.7	20.0	150.0	50.0
General administration and other miscellaneous expenditure	171.3	172.0	886.1	26.1
TOTAL	244.6	257.0	1428.6	143.6

The estimate of increase in expenditure does not take into account additional expenditure connected with payment of compensation to Zamindars and other administrative expenditures involved in the abolition of Zamindari.

(ii) *Development Expenditure*.—Increase in non-Plan development expenditures during the Second Plan period to which the State Governments resources would be committed is largely in the nature of recurring and maintenance expenditure in connection with new development activity taken up during the current Plan period. The maintenance of the level of new development activity attained by 1955-56, it is estimated, will involve a recurring expenditure of approximately Rs. 41 crores a year during the next five years. This increase is expected to take care also of the maintenance of new projects financed on capital account during the present Plan. The annual non-Plan* development expenditure for the next five years in addition to recurring expenditure mentioned above is estimated at Rs. 167 crores as indicated in the statement on the next page.

*Non-plan development expenditure has been arrived at by reducing from total development expenditure, expenditure under the Plan and expenditures connected with Community Projects, National Extension Services and Centrally sponsored schemes which are expected to form part of the States' Second Plans.

(Rs. crores)

	1950-51	1951-54	1954-55	1955-56
1. Total development expenditure	188.7	633.3	266.1*	300.0*
2. Expenditure under the Plan	63.0**	215.3	85.0*	95.0*
3. Development expenditure outside the Plan	125.7	418.0	181.1	205.0
4. Outlays on new development activity outside the Plan taken up during 1951-56 . . . . .	..	40.9	55.4	79.3
5. Outlays on community projects, National Extension Services and other Centrally sponsored schemes† . . . . .	..	12.0	25.0	38.0
6. Outlays on new development activity outside the Plan, exclusive of Centrally sponsored schemes (4-5)	--	28.9	30.4	41.3
7. Total increase in development activity, the maintenance of which will be the first charge on the States' resources (2+6)	63.0	244.2	115.4	136.3
8. Recurring and maintenance expenditure at 30 per cent of the new development activity as at 7 above	18.9	73.3	34.6	40.9
9. Development expenditure excluding outlays on Plan and Centrally sponsored schemes	125.7	406.0	156.0	167.0

Recurring expenditure at the 1955-56 level (*i.e.*, Rs. 40.9 crores) as indicated against item 8 in the above statement and the level of non-Plan development expenditure (*i.e.*, Rs. 167 crores) for 1955-56 as indicated against item 9 above together represent the annual magnitude of the non-Plan development expenditure (*i.e.*, Rs. 207.9 crores) to which the State Governments resources should be considered as committed for the Second Plan period. The position in regard to expenditure under non-developmental and developmental heads for 1956-61 on the basis of the above estimates would be as follows:

(Rs. crores)

	1954-55 (B.E.)	1955-56 Estimated	1956-61 Total	Estimated increase during 1956-61 over the 1955-56 level
Non-development expenditure	244.6	257.0	1428.6	143.6
Development expenditure (non-Plan)	156.0	167.0	1039.5	204.5
TOTAL	400.6	424.0	2468.1	348.1

*These figures have been based on the assumption that the Plan outlay on revenue account will roughly amount to Rs. 450 crores during the five-year period.

**This figure has been assumed at 33 per cent of the total development expenditure in 1950-51.

†Recurring and other expenditures connected with these schemes, likely to be incurred during the Second Plan period, will form part of the Second Plan in the States' sector,

Total non-development and non-Plan development expenditure it is thus estimated, would amount to about Rs. 2468 crores for the second five-year period.

3. Estimate of Savings from Current Revenues for the Second Plan

It will be seen from the above estimates that total revenue receipts over the period 1955-56 to 1960-61 would roughly amount to Rs. 2563 crores and total expenditures (exclusive of Plan outlays and expenditures connected with community projects, etc.) which would be the first charge on revenues of the State Governments, to about Rs. 2468 crores. Thus, the contribution for the Second Plan from current revenues at the existing level of taxation, would work out at about Rs. 95 crores.

II. ESTIMATE OF ADDITIONAL RESOURCES FOR THE SECOND PLAN THROUGH ADOPTION OF FRESH MEASURES OF TAXATION

In this part of the paper an attempt has been made to estimate additional resources for the Second Plan expected to be realised through adoption of new measures of taxation. The suggestions put forth by the Planning Commission from time to time and the recommendations of the Taxation Enquiry Commission in this regard have been made the basis for these estimates.

4. Tax measures adopted by the State Governments during the Current Plan

At the time of the formulation of the first Plan, it was felt that though the State Governments were rightly anxious to accelerate the pace of development within their respective jurisdictions, the resources available for financing the investments envisaged were not sufficient. A portion of the short-fall of Rs. 298 crores in the funds required, it was agreed, would be found by the State Governments partly through liquidation of past reserves and partly through adoption of additional measures of taxation amounting to about Rs. 230 crores. The general pattern indicating the heads of taxation under which additional resources were to be raised, is indicated below:

	(Rs. crores)
(i) Additional revenue from taxation of land	34.0
(ii) Revenue from irrigation (covering irrigation rates and betterment levies) .	29.5
(iii) Revenue from taxation on general commercial activity <i>i.e.</i> , salestax, etc. .	25.5
(iv) Taxes on luxury, etc.	37.5
TOTAL	126.5

The balance of the resources required to cover the short-fall was also to be found by the State Governments though the heads under which the amount had to be found were not stipulated.

Revenue from State taxes as a whole during 1951-54 has shown increase over the 1950-51 level, but the bulk of the increase has taken place under land revenue consequent on the abolition of zamindari and other intermediary tenures. The following table will illustrate the position :

	(Rs. crores)			
	1950-51	1951-52	1952-53	1953-54 (R.E.)
Land Revenue	49.6	48.0	55.9	67.8
Agricultural Income Tax	4.1	4.3	3.9	3.5
State Excise	47.3	49.4	44.3	42.8
General Sales Tax	56.5	54.5	49.8	55.9
Stamps and Registration	26.0	25.9	25.7	27.0
Other Taxes and Duties	38.4	45.3	46.4	49.2
TOTAL	221.9	227.4	226.0	246.2

It will be seen that no important changes have occurred in the yield of the principal taxes for the last three years. The increases in land revenue returns, which have been utilised for additional expenditure in connection with the abolition of zamindaris, do not represent any additional burden on the savings of the community. Increase in yields due to adoption of fresh measures under certain heads of taxation during this period has been offset by declines in returns under certain other taxes. On the basis of data available in the budget documents, fresh measures of taxation adopted by the State Governments during 1951-54 and proposed to be adopted during 1954-55 are likely to yield, over the five-year period, about Rs. 75 crores under the following major heads of taxation; inclusive of estate duty receipts, the total works out at Rs. 80 crores.

	Estimated yield during 1951-56 on the basis of measures adopted during 1951-54 and proposed to be adopted during 1954-55. (Rs. crores)
(i) Land revenue and Agricultural Income Tax	3.6
(ii) Irrigation rates and betterment levies	8.0
(iii) Receipts from commercial ventures (forests, electricity & minerals)	5.4
(iv) General sales tax including taxes on specific commodities like petrol and cement	35.1
(v) Miscellaneous taxes covering taxes on passenger-fares and freights, cess on molasses, education cess, Motor Vehicles Tax, Entertainment Tax, etc.	23.6
(vi) Estate Duty	4.3
TOTAL	80.0

It would be seen that additional resources raised by State Governments for development have considerably lagged behind the anticipated targets in the Plan. The Planning Commission has, from time to time, been suggesting to the State Governments new measures of taxation for raising additional funds required for meeting their increasing expenditures on development activities. Some of these are :

- (i) Raising of water rates to economic levels.
- (ii) Betterment levies.
- (iii) Special cesses on commercial crops.
- (iv) Taxes on land—including land revenue resettlements, surcharge on land revenue, agricultural income-tax, etc.
- (v) Special assessment of ground rents in urban areas. The scope for (iii) and (iv) above has to be reviewed in the light of the latest trends in prices and incomes, but (i), (ii) and (v) offer considerable scope.

5. Recommendations of the Taxation Enquiry Commission

The Taxation Enquiry Commission has made some concrete suggestions for raising more funds in view of expected increases in development outlays of the State Governments. The recommendations of the Taxation Enquiry Commission are more or less on the lines suggested by the Planning Commission except that it is not in favour of imposing special cess on commercial crops. It has also recommended that taxes on properties and assessments of rents, etc. should exclusively be transferred to the jurisdiction of local bodies. In addition, the Commission has made the following recommendations:—

General Sales Tax

Yield from sales tax could be considerably increased by extending it to lower income groups and larger number of persons. The rate of the tax, therefore, has to be low and the system a multi-point one. In this context, it has been recommended, that all dealers having a turn-over of Rs. 5000 a year may be made liable to the multi-point tax at the rate of 1/2 per cent with practically no exemptions except when the sale is by agriculturists who grow and sell their own produce. In addition, the Commission has recommended a single-point tax at the last stage of sale payable by dealers with turn-over of say Rs. 30,000 a year. The rate of this tax will be comparatively much higher and will apply to goods other than those entering into the cost of living of the poor classes. The rate of single-point tax and the taxable quantum have been left to be determined by the State Governments themselves.

It has been suggested, however, that a higher rate should be imposed on luxury goods and the list of luxury articles should be further increased. It has also been recommended that each State should determine its own list of exemptions on the basis of its revenue needs. As an example foodgrains are mentioned as an item which could be exempted.

It has been suggested that while sales tax should continue to be a State tax, inter-State sales should be taxed only by the Union Government, and net proceeds made available to the State Governments. For preventing evasion of the tax, administrative requirements including accounts, forms of returns, etc., should be simplified and administration tightened up.

State Taxes on Motor Vehicles and Motor Spirit

Wheel tax at present being levied by Municipal authorities should be discontinued and appropriate increase should be made in Motor Vehicles Tax levied by the State Governments. Part of the yield should be apportioned to the municipalities concerned. The abolition of wheel tax by municipalities is not intended to apply to wheel tax levied by corporations which spend substantial sums on construction of roads.

Rates of Motor Vehicles Tax and taxes on goods and passengers should be suitably adjusted so as to reduce the tax on goods and passengers in the States where Motor Vehicles Tax itself is kept at a high level.

It has been recommended that the entrance taxes on motor vehicles, fees, licenses, duties, etc. wherever these are in the nature of tax on motor vehicles registered in other States should be abolished.

In regard to sales tax on petrol, it has been suggested that the rate of 6 annas a gallon should be a ceiling rather than a uniform rate.

Stamp Duties

The State Governments should carefully examine the list of exemptions and withdraw such of them as were not connected with some important policy of the Government.

In view of the very considerable leeway which banking in general and the cheque habit in particular had yet to make in this country, no stamp duties should be levied on cheques.

Stamp duties could be extended to instruments relating to transactions in the Stock Exchange markets.

Court Fees

It has been suggested that court fees should be levied to cover expenses of justice. Some additional revenue could, however, be realised by curtailing numerous exemptions. Evasion should be minimised by stricter observance of the payment of court fees and periodical checks by special investigators.

Entertainment Tax

Slab system of the tax as is levied in some States at present, it is recommended, should be replaced by tax on a percentage basis. For the purpose of exemptions, entertainment should be divided into professional and non-professional. Exemptions

should be extended to non-professional entertainments and entertainments in professional sector where the proceeds are devoted to a philanthropic or charitable purposes.

Tax on Prize Competition

Taxation and regulation of prize competitions should be taken over by the Central Government. The Union Government, it is suggested, might impose the tax and retain the receipts.

Betting Tax

The tax should be levied on all stake money including the winnings and not only on the winnings as was being done in some States.

Electricity Duty

It has been suggested that the rate of the duty should be reasonably low on lights and fans, lower on other domestic appliances and sufficiently low on industrial consumption.

Water Rates

The present system of irrigation rates had developed in different States without much regard to any principle. Water rates should primarily cover at least the maintenance charges of the servicing project. It has been recommended that water charges should be of two types, a small charge covering cost of repairs, establishment, etc. to be recovered from every land-holder under the command of the irrigation project (irrespective of whether the water is used or not) and an additional charge for the supply of water from those who made use of it to cover debt charges and overhead expenses on a project. The method which has been suggested for fixing water rates is to determine them on the basis of the value of crop grown.

Betterment Levy

Betterment levy is based on the principle of taxing unearned increment in land values. The Commission, however, suggests that this should not be extended to minor irrigation works. These works do not provide adequate protection. The betterment in these cases is neither permanent nor determinable. The cost of construction is small and the maintenance cost low. In the case of minor irrigation works, enhancement of water rates would, therefore, be more appropriate.

The quantum of the levy on major irrigation works may be fixed at a maximum of 50 per cent of the increase in the capitalised value of land due to irrigation. The recovery of the levy should not impose heavy burden by way of large instalments and should, therefore, be spread over a reasonably long period.

6. Additional Resources for the Second Plan

It is difficult to foresee how soon and to what extent it would be possible for the State Governments to enforce the above recommendations. However, if the recommendations and measures suggested by the Planning Commission and the Taxation Enquiry Commission were to be adopted at about the beginning of the Second Plan period, additional resources of the order of Rs. 210 crores could be estimated for the next five years under the following main heads:

	1956-57 to 1960-61 (Rs. crores)
(1) Betterment levy :—	
(a) Multi-purpose projects	38.0
(b) Major irrigation works	17.0
(2) Sales tax	55.0
(3) Increase in yield on account of imposing sales tax on inter-State transactions by the Union Government	15.0
(4) Stamps and Court fees	10.0
(5) Entertainment and betting tax	5.0
(6) Special cess on Commercial crops	5.0
(7) Irrigation rates (estimated increase due to upward revision of rates)	20.0
(8) Land Revenue (estimated increase due to surcharge and revenue resettlements)	35.0
(9) Agricultural Income Tax	10.0
TOTAL	210.0

In arriving at these estimates, as already mentioned, account has been taken of the recommendations of the Taxation Enquiry Commission in regard to the enhancement of rate and coverage of various taxes. The bases of these estimates in certain cases are further explained.

Betterment Levy (Multipurpose and Major Irrigation Projects)

The estimate of yield from this source has been calculated on the basis of information contained in the project reports in regard to the extension of irrigation facilities to new areas during the current and the next Plan periods and the rate of the levy as indicated in enabling legislation passed so far by various State Governments. It has been assumed that about 17 million acres of additional land will be brought under irrigation due to the completion of these projects partly during the present Plan and partly during the course of the Second Plan. The rate of levy, on an average, has been assumed at about Rs. 100 per acre payable in fifteen equated annual instalments.

The principle of imposition of betterment levy on minor irrigation works has been accepted by some of the State Governments, but in view of recommendations to the contrary by the Taxation Enquiry Commission in this regard, no credit has been taken for receipts from this source in the above estimates.

Sales Tax

The recommendations of the Taxation Enquiry Commission in so far as general sales tax is concerned are quite far reaching. In States other than Madras, Andhra, Bombay, Mysore, Hyderabad and Travancore-Cochin, where single-point sales tax is being levied, the adoption of the dual system recommended by the Taxation Enquiry Commission is estimated to rise by about 50 per cent the present annual yield of about Rs. 20 crores a year in these States. Increases in yield will also take place in other States *viz.*, Bombay, Madras, Andhra, Mysore and Travancore-Cochin where double-point and multi-point sales tax systems already prevail, but these may not be very large. On this basis estimate of additional amount from this source has been put at Rs. 55 crores for the next five years.

It is estimated that net yield of another Rs. 15 crores might accrue by bringing within the purview of sales tax inter-State transactions as suggested by the Taxation Enquiry Commission.

Cess on Commercial Crops

The Taxation Enquiry Commission is not in favour of imposing special cesses on commercial crops. The estimate of Rs. 5 crores indicated above is based on the estimates in this regard recently furnished by some of the State Governments.

Irrigation Rates

Area under irrigation will increase from 50 million acres in 1950-51 to about 70 million acres by 1956-57. Total annual yield at the rate of Rs. 5 per acre] net of working expenses at 30 per cent would come to about Rs. 22 crores a year. The increase in rates by about 15 per cent should bring in an additional amount of Rs. 20 crores over the five-year period.

Land Revenue

In view of the fall in agricultural prices, it may be difficult to expect at present substantial increase in yield from this source, but as a result of increase in development outlays envisaged over the Second Plan period, one could anticipate increase in agricultural prices and, therefore, some action on the part of the State Governments for increasing yield from land revenue would not be unjustified. In so far as surcharge on land revenue is concerned, the Taxation Enquiry Commission has recommended that this tax should be levied by local bodies and proceeds of the tax should also go to them. For the purpose of these estimates, it has been assumed that during the next Plan period, State Governments will retain the proceeds of the tax. The additional yield has been worked out on the assumption that the States where surcharge on land revenue is not being levied at present would levy it at the rate of about 20 per cent on holdings below 30 acres and 40 per cent on the holdings above this level during the course of the Second Plan period.

Stamps, Court Fees, Entertainment and Betting Taxes

Increases under these heads have been estimated on the basis of the Taxation Enquiry Commission's recommendations summed up earlier in this paper.

Agricultural Income Tax

At present agricultural income tax is levied in eleven States. The yield from this source has been declining due to land reform policy of the governmental authorities. However, if recommendations of the Taxation Enquiry Commission in regard to the lowering of the exemption limit of the tax and bringing it in line with the general income tax is accepted and if the remaining States impose the tax, an additional yield of about Rs. 10 crores might be expected over the next five years.

7. Estimate of Total Contribution on Revenue Account

It would be recalled that the State Governments' contribution for the Second Plan from revenue account, at the existing level of taxation, was estimated at about Rs. 95 crores. Total contribution on revenue account after taking into account the estimated additional resources is thus expected to amount to about Rs. 305 crores.

III. ESTIMATE OF CONTRIBUTION FOR THE SECOND PLAN ON CAPITAL ACCOUNT

8. Receipts and Disbursements on Capital Account

It is estimated that net inflows on capital account excluding loans from the Centre for financing expenditures under the Plan during the next five years would be of the order of Rs. 395 crores as indicated below:—

	1956-57 to 1960-61 (Rs. crores).
1. Loans and advances	(+ 50
2. Unfunded debt and share of Small Savings	(+ 125
3. Deposits and Advances (net)	(+ 150
4. Loans from the public (these may either be raised by the State Governments or by the Central Government for them)	(+ 250
5. Disbursements on account of repayments of loans to the public	(— 30
6. Disbursements on account of repayments of loans to the Centre	(— 150
NET CONTRIBUTION ON CAPITAL ACCOUNT (1+2+3+4)—(5+6)	(+ 395

The bases of these estimates are explained below:—

Loans and Advances

It is expected that over the current Plan period, there would be net outflows of about Rs. 140 crores under loans and advances. These outflows are partly due to larger loan accommodation to cultivators on account of scarcity and partly due to advances made under development schemes. It is estimated that at least about Rs. 50 crores of these loans will be repaid

to the State Governments. This estimate of inflow does not take into account outflows which might take place under the Second Five Year Plan. The disbursements on this account are to be included in development outlays under the Plans of the State Governments.

Unfunded Debt and share of Small Savings

Assuming the yield from Small Savings at about Rs. 60 crores a year and assuming that the State Governments will continue to receive by way of loans from the Centre, collections above Rs. 45 crores a year under Small Savings, the State Governments would receive about Rs. 75 crores on this account. The balance of Rs. 50 crores is estimated to accrue to the State Governments under 'Unfunded debt'. At present, net annual receipts under this head are estimated at about Rs. 8 crores.

Deposits and Advances

Net outflows under Deposits and Advances over the current Plan period, on present indications, are expected to amount to Rs. 125 crores to Rs. 130 crores. About 50 per cent of this amount is accounted for by bonds issued by some of the States like Uttar Pradesh in favour of Zamindars towards payment of compensation and thus are not real. Other factors governing the movement of funds under this head are also of uncertain character. Therefore, no net receipts are expected from this source during the Second Plan period on account of outflows during the current Plan. The estimate of inflow of Rs. 150 crores represents appropriations on revenue account for avoidance of debt envisaged over the Second Plan period.

Loans from the Public

The estimates in regard to receipts under loans from the public are based on the assumptions that the market will develop the capacity of absorbing net issues (*i.e.*, net of repayment) of the order of about Rs. 110 to Rs. 120 crores a year over the period of the Second Plan. Of this, the States' share will roughly amount to Rs. 40 to 45 crores a year.

Repayments of Loans to the Centre

The estimate of repayment of Central loans covers loans from S.D.F., loans given to the State Governments for financing expenditures in respect of projects under the Centre's and States' Plans and other loans. It is assumed for the purpose of this statement that amount realised on account of betterment levies will be made over to the Centre towards repayment of loans received for irrigation projects.

IV. ESTIMATE OF CONTRIBUTION OF THE STATE GOVERNMENTS FOR THE SECOND PLAN ON REVENUE AND CAPITAL ACCOUNTS

9. In the light of the above estimates of contributions from revenue account for the Second Plan at the existing level of taxation, of additional estimates of resources through adoption of fresh measures of taxation, and of inflows on capital account, the net contribution of the

State Governments for the Second Plan might be put at about Rs. 700 crores. The following statement sums up the position :—

	(Rs. crores) 1956-57 to 1960-61
Savings from current revenues estimated at the existing level of taxation	95·0
Estimated additional receipts on account of adoption of new measures of taxation	210·0
Estimated inflows on capital account	395·0
TOTAL	700·0

10. Resources estimated to be available to the State Governments for the Second Plan are not sufficient to enable them to undertake a high level of development activity. In fact, even these estimates may prove to be on the optimistic side. In working them out, it has been assumed that non-Plan development expenditures (exclusive of recurring and maintenance expenditure on new development activity taken up during the present Plan) during the Second Plan period will not exceed the level reached by 1955-56. Revenue from sales tax, taxes on sale of motor spirit, the States' share of income tax and Central excise will increase almost proportionately to increases postulated for national income. Additional measures of taxation recommended by the Taxation Enquiry Commission and suggested from time to time by the Planning Commission will be adopted during the course of the Second Plan period. Inflows on account of borrowings from the public will exceed the level reached in 1954-55. These assumptions may or may not materialise. To conclude, it may be said that substantial stepping up of development outlays of the State Governments will have to be sustained by Central assistance at a rate higher than that reached for the present Plan.

STATEMENT I

Receipts on Revenue Account, 1951-55; Estimates for 1955-56 and 1956-61—Part 'A' and 'B' States.

(Rs. crores)

	1950-51 Accts.	1951-52 Accts.	1952-53 Accts.	1953-54 R.E.	1954-55 B.E.	1955-56 Estimated	1951-56 5 years total	1956-61 Estimated total 5 years	Estimated increase during 1956-61 over the 1955-56 level
I. Tax Revenue									
Share of Income tax	47.7	52.7	57.0	57.3(a)	56.0(c)	57.0(d)	280.0	325.0	40.0
Share of Central excise duties	1.4	1.8	16.2	15.6(a)	15.1(c)	16.7(d)	65.4	93.5	10.0
Share in estate duties . . . . .	...	...	...	...	1.3	3.0	4.3	20.0	5.0
General sales tax	56.5	54.5	49.8	54.6	54.9	58.0	271.8	325.0	35.0
Tax on sale of motor spirit	3.5	4.5	6.0	7.5	7.8	9.0	34.8	50.0	5.0
Stamps and Registration	26.0	25.9	25.7	26.1	26.6	27.5	131.8	147.5	10.0
Land Revenue	49.6	48.0	55.9	67.2	71.78	74.5	759.7	800.0*	*
Agricultural Income tax	4.1	4.3	3.9	3.5	3.2	3.0			
State excise	47.3	49.4	44.4	42.8	41.9	41.0			
Receipts under Motor Vehicles Act	8.5	9.8	11.1	12.8	12.8	13.0			
Other Taxes and Duties	26.4	31.0	29.2	28.3	28.3	28.5			
TOTAL TAX REVENUE	271.0	281.9	299.2	315.5	320.0	331.2	1547.8	1761.0	105.0

II. Revenue from Commercial Ventures

Forests	19.2	21.2	18.9	19.2	19.6	20.0	98.9	110.0	10.0
Irrigation (Net)	7.4	8.0	8.5	10.3	12.3	15.0	54.1	210.5	35.5
Receipts from Electricity Schemes	3.0	3.4	3.3	4.4	5.0	8.0	24.1	75.0	35.0
Road Transport	0.5	0.6	0.1	0.7	0.8	0.9	3.1	6.0	1.5
TOTAL COMMERCIAL VENTURES	30.1	33.2	30.8	34.6	37.7	43.9	180.2	301.5	82.0(b)

III. Other Revenue

Debt Services	6.6	6.5	6.9	8.1	7.9	9.0	38.4	} 395.0 20.0(b)
Civil Works	3.1	3.3	3.8	3.6	3.7	4.0	18.4	
Civil Administration	30.5	33.2	33.8	33.7	37.5	39.0	177.2	
Miscellaneous Receipts	13.5	13.9	12.3	10.1	11.4	11.8	59.5	
Extraordinary Receipts	1.4	3.9	2.6	2.6	3.5	3.5	16.1	
Transfer from State Funds	5.8	10.7	13.0	8.1	7.7	7.7	39.5	
TOTAL OTHER REVENUE	60.9	71.5	72.4	66.2	71.7	75.0	356.8	

IV. Statutory Grants from the Centre

GRAND TOTAL	377.7	404.4	421.7	437.1	450.4	471.1	2184.9	2562.5	207.0
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*Increase in yield from land revenue on account of abolition of Zamindari has not been taken into account. It is estimated that other increases in receipts from these taxes will be neutralized by estimated transfer of funds approximately amounting to about Rs. 10 crores a year to local bodies as a result of the Taxation Enquiry Commission recommendations.

(a) Actual as shown in Central Government Budget documents.

(b) Assumptions on which these increases have been based are mentioned on pages 373 and 374 of the paper.

(c) Revised Estimates as shown in Central Government Budget documents.

(d) Budget Estimates as shown in Central Government Budget documents.

STATEMENT II

Financing of the State Plan 1951-55, Estimates for 1955-56 and for 1956-61

(Rs. crores)

	1951-52 Actuals	1952-53 Accts.	1953-54 R.E.	1954-55 B.E.	1955-56 Estimated	1951-56 Total	Targets for the first Plan	Estimates for 1956-61 Total
1. Balance from Revenue Account	64.7	56.3	39.1	37.1	35.0	232.2	412.7	305.
2. Loans from the Public	11.5	16.6	39.9	25.0	40.0	133.0	79.0	250.0
3. Deposits, loans and advances and other mis. sources on capital account	20.7	-15.7	19.5	15.0	20.0	18.1	42.8	70.0*
4. States' share of small savings . . . . .	...	...		n	n	...	...	75.0
5. Funds raised by withdrawal from Cash Balance, sale of securities and increase in floating debt	45.0	49.7	11.7	59.6	50.0	216.0	67.9	**
TOTAL (1 to 5)	100.5	106.9	110.2	136.7	145.0	599.3	602.4	700
6. Central assistance for the State Plans	28.5	36.7	57.1	85.7	108.0	316.0	316.0	†
7. Total Resources for the State Plans	129.0	143.6	167.3	222.4	253.0	915.3	918.4	700

*Of this, about Rs. 50 crores are accounted for by estimated receipt under unfunded debt during the next five years.
N— Negligible.

**It is estimated that drawable reserves of cash and securities accumulated by the State Governments in the past would be almost exhausted by the end of the present Plan period.

†The resources position estimated for the Second Five Year Plan period reveals that for development outlays in the Plan Central assistance will be required at a rate higher than that reached for the present Plan. No estimate of the likely order of Central assistance is however made in this statement.

**ESTIMATES OF SAVINGS AND INVESTMENT AND AN APPRAISAL OF THE
PROBLEMS OF RESOURCE MOBILISATION; BALANCE OF PAYMENTS AND
PLANNED DEVELOPMENT**

Department of Research and Statistics, Reserve Bank of India

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LETTER OF TRANSMITTAL

Two notes are sent herewith, one on "Estimates of Savings and Investment and an Appraisal of the Problems of Resource Mobilisation" and the other on "Balance of Payments and Planned Development". Both have been prepared by members of the Staff of the Department of Research and Statistics, Reserve Bank of India. They do not represent the views of the Department, much less of the Bank. They are very tentative and are merely intended to be of assistance in thinking about the Plan Frame. The estimates for the Second Plan have been set out only in order to afford a convenient starting point for discussion, and have been based, as far as possible, on information available with us or what seemed to us to be reasonable to assume in particular cases. The appraisal of the problems of resource mobilisation aims merely at raising issues which will have to be considered carefully and on which policy decisions would have to be taken.

The note on Savings and Investment covers the following :— (i) Policy Issues for Consideration, (ii) Current Savings and Investment in the Economy, (iii) An Appraisal of the Problems of Resource Mobilisation for the Second Five Year Plan, (iv) Small Savings and (v) Bank Finance for Industry. That on the Balance of Payments contains three sections: (i) Balance of Payments during the First Five Year Plan, (ii) Available Foreign Exchange Resources for the Second Five Year Plan and (iii) Balance of Payments Problems in the Second Five Year Plan.

*Department of Research and Statistics,
Reserve Bank of India, Bombay-I.
March 30, 1955.*

P. J. J. PINTO,
Director of Monetary Research (Offg.)

I. ESTIMATES OF SAVINGS AND INVESTMENT AND AN APPRAISAL OF THE PROBLEMS OF RESOURCE MOBILISATION

I. POLICY ISSUES FOR CONSIDERATION

An attempt is made in the following pages to elucidate the main policy issues that arise in connection with the framing of the Second Five Year Plan, and on which decisions will have to be taken. It is assumed that this Plan will be one of a series covering, say, 25-30 years.

2. It is useful to start with certain obvious facts. The series of policy measures that may be suggested for the Second Plan have to satisfy the following conditions :

- (i) They must be mutually consistent.
- (ii) They must make a significant difference to the rate of development.
- (iii) They must facilitate the reduction in inequalities of income and wealth over a period of time.
- (iv) They must be broadly compatible with the democratic structure envisaged in the Constitution.

There are no ready-made criteria for judging the suitability of any set of policies. Whether or not different policies may be considered mutually consistent depends on the ends in view. The compatibility of policies has therefore to be considered along with the compatibility of the desired objectives.

3. We might presume the general acceptance in the country of two 'omnibus' objectives. The first is the strengthening and preservation of the democratic political structure ; the second is the building up of "a socialistic pattern of society". How far these are simultaneously attainable is a question which we need not take up here. It would be more useful to consider the implications of these two.

4. Very broadly, the desirability of maintaining the basic democratic structure obtaining in the country limits the extent to which the making of policy decisions could be centralised. In the economic sphere, the allocation of productive resources will have to be determined (in part, at any rate) by the decisions taken by a multiplicity of agencies, public and private. This puts a premium on measures which, without directly prescribing the pattern of behaviour for each unit, can bring about the desired result through generally applicable checks and stimuli. Alternatively, where compulsory measures are resorted to, they must have a clear-cut mandate from Parliament.

5. This has certain implications. A carefully worked out plan will in fact involve direction of physical resources in a given manner. In a completely collectivised system, this may be achieved by strict control over the distribution of materials and manpower, thus involving the curtailment of freedom in regard to the use of one's labour or property. Should this be considered by society as unacceptable, the allocation of resources has to be engineered through

the market mechanism. That is to say, over a wide field, the Government can only operate as a competing buyer or seller, and seek to influence the supply-demand-price complex in a manner conducive to the desired manner of utilisation of resources. Broad decisions as to the extent to which such interference in markets is necessary and possible have to be taken. The main factors here are, on the one hand, the 'boldness' of the plan envisaged, and, on the other, the capacity of the administrative machinery to operate effectively in several markets.

6. This is brought out more clearly when we look at the other main objective, *viz.*, the creation of a socialistic pattern of society. Basically, this involves (a) a certain measure of social ownership or control of means of production and (b) reduction of inequalities in individual income. While these are being sought, there has to be at the same time a marked increase in national output and employment. Indeed, the beneficial effects on these should be demonstrably higher than what would obtain under a non-socialistic pattern. If it is demonstrated that State interference in allocation of resources leads to a substantial increase in production and employment, and that these are further associated with more equitable distribution, opposition to such measures on non-economic grounds would be greatly reduced.

7. We might, at this stage, put down the series of questions that arise from the above :

(a) At the end of the First Five Year Plan, despite the increase in public investment, the size of the public sector—*i. e.*, the sector in which the ownership and use of resources rests with Government or Government agencies—will be smaller than that of private sector. The *relative* size of each of the sectors has to be altered if, over a period, firm bases for a socialistic economy are to be laid. Should the relative increase in size of the public sector be brought about by concentrating Government investment in certain sectors? Or, should it be through Government's entry into a variety of fields?

(b) Nationalisation as a means of extending the public sector has apparently to be limited to those cases where such a policy is clearly expected to add to output, directly or indirectly, or to serve the national interest in some other defined way. From the policy angle, the questions are : are there any spheres in which nationalisation of existing units is called for? If so, what is the order of priority for taking over these?

(c) In the matter of extension of the size of the public industrial sector, there is already the Industrial Policy Statement which lays down the broad fields of operation for public and private enterprise. This makes the State primarily responsible for development of the basic and heavy industries. In this connection, the relative emphasis to be placed on such industries *vis-a-vis* light industries and consumer goods industries will have to be determined.

(d) In certain fields, *e.g.*, steel, private investment in new units is not at present permissible. It is for consideration whether the desired increase in private investment can take place within the existing range of industries. If the answer is in the negative should Government's industrial policy be reformulated so as to permit private investment in hitherto reserved sectors?

(e) Arising from the above, a decision has to be taken regarding permissible expansion in consumer goods industries in the private sector. With larger investment, there will obviously be an increased demand for consumer goods, and their output will have to be stepped up. While considerations of employment warrant a larger share to small-scale units, other factors, such as productive efficiency, absorption of output of machine-making industries, etc., support sizeable expansion of organized consumer goods industries. How should the increase be distributed between large and small-scale units?

(f) Since fuller employment is one of the objectives, should labour-intensive methods of production be in general preferred? What should be the policy regarding rationalisation?

(g) The place of State trading in the socialistic pattern of society that is envisaged has to be elucidated. The main criteria here would be : (i) rationalisation of the distributive mechanism (e.g., in regard to raw materials and products of small-scale industries), (ii) augmentation of the resources of the public sector through trading profits and (iii) mitigation of speculative price variations. In the light of these, what is the proper approach to extension of State trading activities?

8. No attention has been paid in the above paragraphs to such matters as agricultural investment, construction activity, foreign trade, etc. It is assumed that, by and large, these will remain in the private sector. Also, changes in these will be closely related to wider issues like land reform, trade, exchange policy, etc. To the extent that these sectors are relevant to questions of mobilisation of resources, they are briefly touched upon in later paragraphs.

Resources and their Mobilisation

9. The problems that arise in regard to mobilisation of financial resources for the Second Plan are generally known. We shall therefore deal with these here very briefly. The principal considerations to be borne in mind in framing policy are the following :

- (a) All savings out of current income should be mobilised for financing the Plan ;
- (b) As income increases, an increasing portion of it should be diverted to investment;
- (c) This diversion should, as far as practicable, be through voluntary rather than 'forced' savings;
- (d) Simultaneously, there should be a reduction in income-inequalities; and
- (e) In the aggregate, consumption expenditure should keep a step ahead of the increase in population, so that per capita consumption is not reduced.

These are the basic requirements. They become complicated because the needs of the public and private sectors have to be satisfied concurrently.

Public Sector

10. The resources for the public sector are the following : (a) Taxation, (b) Borrowing, (c) Profits of Public Enterprises, (d) Social Security Contributions, (e) Foreign Assistance and (f) Deficit-financing. The scope for each of these, and the principal considerations

involved, are examined at some length in a later section of this note. They have also been closely surveyed in the Taxation Enquiry Commission Report. Here, a few general points may be mentioned.

(a) *Taxation* :—

(i) The objective of reducing income inequalities supports the case for progressive taxes, both on income and wealth. How much farther than the 1955-56 budget can we go ?

(ii) In the field of commodity taxation, consistent with the objectives of higher standards of life and social justice, and taking into account political opposition to increased taxation on, e.g., the rural sector, what is the extent to which it may be widened or deepened ?

(iii) Increased taxation and garnering of surpluses from public enterprises are modes of raising ' public savings '. But this can be brought about only if Government ' consumption ' expenditure remains stable or increases only slowly. In practice, however, such expenditure might go up inevitably with the extension of the functions of the State and other reasons. For instance, exercise of greater control on the private sector, which may be essential for the plan, will mean larger outlay on administration of such controls. This is obviously not part of development outlay, but it is in a way unavoidable. What steps would be necessary for keeping down non-development outlay, properly defined ? Related to this, would formation of ' public corporations ' for carrying out development programmes of the Government help in cutting down costs of operation ?

(b) *Borrowing*.—The crux of the problem here is setting a target which would not choke off private capital borrowing and which would be met out of genuine savings. Some of the points that may be considered are :

(i) What should be the maturity pattern of government debt ?

(ii) Should a sinking fund be created ?

(iii) What should be the relation of public debt policy to monetary policy in general ?

As regards small savings, the question is primarily one of organisation. Already several innovations have been made in this field ; if these prove effective in the coming years, the rate of increase in small savings should go up more rapidly.

(c) *Profits of Public Enterprises*.—It is necessary to go into the entire question of price policy for such enterprises. In principle, they should be able to cover their costs and yield a surplus. How big, as a proportion of the investment, should such surpluses be ? What enterprises should be allowed to function on a no-profit-no-loss basis or subsidised ? If they cater to a variety of consumers, what should be the policy regarding price or product discrimination ? Related to this is the question of fiscal monopolies. What is the scope for these as a source of funds for development ?

(d) *Social Security Contributions*.—This is a relatively untapped field in India. A beginning has been made in the Employees' State Insurance Scheme. What further scope there is for such measures requires consideration.

(e) *Foreign Assistance*.—It is difficult to say how important this source will be, for it depends partly on our policies and attitudes, and partly on those of the countries providing it. While the approach to direct Government-to-Government assistance has therefore to be somewhat circumspect, assistance from international organisations should be readily acceptable. These will, by and large, be in the form of loans. To what extent India's external debt could be increased without straining the balance of payments needs to be determined. The question of external resources for the Plan is discussed in a separate note entitled "Balance of Payments and Planned Development".

(f) *Deficit Financing*.—Decisions have to be taken regarding the total deficit as well as its phasing. On the face of it, the larger the deficit, the 'bolder' the Plan seems to be. The size of the deficit has to be related to a variety of factors (*vide* Section III). Considering all these, fixing the size of the deficit amounts in effect to fixing the size of the Plan. All the policy decisions relevant to the latter are therefore relevant to the former. In a wider sense, it involves a general policy decision regarding controls. Since in the past few years we have dispensed with controls over a wide field, the point for decision is this : Is deficit financing to be envisaged with less or more controls ? If larger deficit financing warrants more controls, would a reversal of the trend towards decontrol be practicable ?

Private Sector

II. Within the private sector, the sources for investment in agriculture, rural construction, etc. are in general found within the rural areas. Augmentation of these is dependent on increase in agricultural incomes in one way or another. Undoubtedly, a large part of rural investment is direct, and therefore mobilisation of resources for these amounts to mobilisation of materials and manpower. No question of finance intervenes. Increase in such investment is a matter of physical organisation. With regard to monetary savings and investment, however, the problem of proper institutional arrangements for drawing in and utilisation of all the funds has to be tackled. One of the questions which arises here is that of the place of commercial banking as a means of mobilising rural resources. The question of the need for or advantages of free access of urban areas to rural resources or *vice versa* has to be considered.

Like agriculture, small-scale industries and housing depend on more or less unorganised sources. The problems with regard to small-scale industries have recently been examined by the Shroff Committee and the Ford Foundation Team. As regards housing, the issue is how much of national savings should be allowed to go into this type of investment ? Since house construction is relatively labour intensive in India, increased investment in that field will add to employment substantially. Apparently, the public sector could devote sizeable amounts to industrial housing projects and construction of roads, etc. ; this would perhaps take up some of the slack in employment. There may thus be a case for some restraint on the growth of private investment in housing. Bearing all this in view, what should be the priority for and size of private investment in buildings ?

Lastly, to enable larger investments in productive fields, investments in trading stocks may have to be kept in check. With increase in economic activity, the absolute size of trading stocks may also go up. But it appears essential to moderate the increase in such investment. What policy should be adopted to prevent large reinvestments of trading profits in stocks? In this connection also, the question of State trading comes up.

Turning to the organised industrial sector, the sources are : (i) Undistributed profits and Depreciation allowances, (ii) Borrowings on the capital market, (iii) Assistance from special institutions, (iv) Foreign investment and (v) Financial institutions for working capital. The magnitude of resources available as undistributed profits and depreciation allowances depends on the sales proceeds, costs, tax-payments and dividends. We might presume that with greater economic activity, sales proceeds will generally increase. The resources position will depend, apart from taxation, mainly on the following : (a) policy regarding prices of raw materials especially agricultural products, (b) labour policy including rationalisation, (c) policy regarding imported raw materials, and (d) the general policy regarding dividends. What combination of these will be conducive to the best interests of private industry as well as the others requires elucidation. In regard to dividends policy, higher rates may act as an incentive to new investors. A view has to be taken on the importance to be attached to this.

Foreign private investments (including reinvestments) have been of some importance in the First Five Year Plan. The general attitude to such investments has to be defined. How far and in what direction should they be encouraged?

As regards working capital, given the expansion in money supply consequent upon deficit financing and increase in economic activity, there should be no serious difficulty so far as organised industry is concerned. A main point of importance is the extent to which the pattern of bank advances could be altered to suit the needs of industry through policy measures.

We have confined ourselves in the preceding paragraphs to an elucidation of some of the policy issues that need to be resolved for formulating the Second Five Year Plan. The list is obviously not exhaustive. But it seeks to draw attention to those issues in respect of which 'bold' decisions have to be taken if the Plan is to be a 'bold' one.

II. CURRENT SAVINGS AND INVESTMENT IN THE ECONOMY

Estimates of savings and investment in the economy for 1950-51 and 1953-54 are given in the Report of the Taxation Enquiry Commission. The method and assumptions are described briefly at pp. 136-139 of the Report. Similar estimates for 1954-55 may be made, but they would be provisional, even in respect of public investment which forms the larger part of total investment. In the table below public investment is shown lower than outlay

under the Plan, as only what broadly corresponds to net investment in the latter is included here.

Investment

	(In. crores of rupees)		
	<u>1950-51</u>	<u>1953-54</u>	<u>1954-55</u>
Public Investment	185	305	380
Private Investment—			
(a) Organized Enterprise	55	55	60
(b) Urban Housing	90	120	135
(c) Rural Investment	140	160	170
(d) Transport (other than Railways)	25	20	20
Investment abroad (net)	60	70	15
Aggregate Net Investment	550	730	750
National Income	9,530	10,500*	..
Rate of Investment (% of National Income)	5.8	7.0	..

Savings

	<u>1953-54</u>	<u>1954-55</u>
A. <i>Public Sector</i> (Centre and States)—		
(a) From current revenues	55	70
(b) Net Loan Receipts	46	70
(c) Treasury Bills	20	..
(d) Small Savings	40	45
(e) Other Unfunded Debt, Deposits, etc.	47	55
	<u>208</u>	<u>240</u>

*Estimated.

Savings—Contd.

	<u>1953-54</u>	<u>1954-55</u>
B. <i>Other Savings of the Private Sector</i> —		
(a) New Subscriptions to Capital of Companies	15	25
(b) Savings of Corporate Enterprise	60	70

Savings—Contd.

(c) Deposits of Scheduled Banks	9	40
(d) Insurance Companies	14	18
(e) Estimated increase under Share Capital and Deposits of Co-operatives	11	12
(f) Savings in Rural Sector (Investment in Housing and other Rural Investment)	160	170
(g) Other Private Savings	253	175
	522	510

A brief explanation of the 1954-55 estimates is given below. Industrial production shows a sustained rise since 1950: the index for 1954 is placed at 145 as against 135 in 1953 and 129 in 1952. Again, the paid-up capital of 854 common companies, according to balance sheet data, increased from Rs. 300 crores as at the end of December 1953 to Rs. 320 crores as at the end of December 1954. A part of this increase is due to bonus shares. Even after allowing for capitalisation of reserves, there would remain a noticeable increase in fresh capital. Further, available data of fresh issues in the market, more recently, also show a definite increase in subscriptions over previous years. The trends in dividend declarations and indices of variable dividend industrial securities indicate a certain improvement in the profits of industry. This may also be inferred from recent price movements; there has been a slight rise in the price indices for manufactures in the context of a general price decline, particularly of foodgrains (therefore, lower wage costs), and to a less extent of industrial raw materials (therefore, lower raw material costs for industry). Hence, both savings and investment of corporate enterprise are placed higher in 1954-55.

While it is not possible to estimate directly the investment in urban housing, the estimate for 1954-55 is placed higher than for 1953-54 in view of the rise in cement output of 8 per cent in 1953 over 1952 and of 16 per cent in 1954 over 1953. Taking into account the available results of successive rounds of the National Sample Survey regarding rural expenditure, per household, on improvement and construction of houses, wells, etc., agricultural implements and land improvement, and adjusting for the fact that with the progress and completion of irrigation projects, there would be a complementary increase in private investments in this sector, total rural investment is placed *slightly* higher for 1954-55, even allowing for the decline in agricultural prices.

Before we proceed to indicate the size of the Second Five Year Plan, it would be pertinent to take a view, in broad terms, of the actual investment in the First Five Year Plan period.

	(In crores of rupees)		
	Public	Private	Total
Estimated Plan Outlay	2,240	1,500	3,740
Of which, Net Investment	1,800	1,200	3,000
Actual Net Investment	1,600	1,800	3,400

Actual investment in the private sector is based on the estimates given above, and differs from the Plan estimate for the private sector partly due to differences in coverage and methods of estimation. Therefore, only the respective shares of public and private sectors in total investment activity in the economy may be compared.

Certain items included in the Plan outlay would not correspond to net investment ; for instance, in the public sector, some recurring expenditure on revenue account was included in the Plan outlay. Again, of the programme for railways amounting to Rs. 400 crores, only Rs. 250 crores was to be spent on expansion, and this figure was included in the Plan outlay. Actually, however, it would appear that not more than Rs. 200 crores is in the nature of expenditure on expansion, so that a part of expenditure on replacement was included in the original estimate. In the private sector, expenditure on modernisation, replacement, etc. and working capital was included in the programme for industry totalling Rs. 600 crores, whereas the outlay on expansion and new units was only Rs. 233 crores.

As regards the progress of expenditure in the public sector in the first four years of the Plan, it would seem that a 15 per cent shortfall in the total is almost a certainty. As compared to a total outlay of Rs. 2240 crores which was planned for the public sector, the actual programme may amount to Rs. 1900 crores—Rs. 860 crores in the first three years, about Rs. 500 crores in 1954-55 and about Rs. 600 crores in 1955-56. (For details of planned outlay by the Central Government see Table 1). Allowing for the non-investment part of it, on the basis of actual performance, the public sector would seem to have had a somewhat smaller share *in total investment* than the private sector in the First Five Year Plan period. This relates to total investment and not to the rate of increase during the period. It has also to be underlined that private investment includes rural investment and other items which are largely non-monetary.

On the estimates of the Taxation Enquiry Commission, which are the latest available, though they are in parts 'in the realm of informed conjecture', aggregate net investment in the economy (*including* investment in small enterprise), may well be 9 per cent of national income at the beginning of the Second Five-Year Plan, as compared to about 6.5 per cent in 1950-51. It is the rate of increase in the investment ratio rather than its absolute level in any particular year which is significant, as the latter itself would vary according to the method of estimation and its coverage.

It seems likely that domestic private investment would reach a level of Rs. 420 crores by the end of the First Plan, i. e., in 1955-56, and may be placed at Rs. 450 crores in 1956-57, the beginning of the Second Plan period ; projecting a somewhat lower rate of increase in it than hitherto, say, of about 4 per cent a year, annual private investment may be assumed to rise to about Rs. 550 crores at the end of the Second Plan period. This would give a total of about Rs. 2,500 crores for investment in the private sector.

III. AN APPRAISAL OF THE PROBLEMS OF RESOURCE MOBILISATION FOR THE SECOND FIVE YEAR PLAN

Objectives and Priorities

Before we proceed to consider the Second Plan estimates of investment, particularly in regard to the public sector, and the resources likely to be available during the period, certain assumptions regarding the objectives and priorities of the Plan should be clearly set out.

The basic objectives of the Plan may be stated to be the raising of the total national dividend, *per capita* income and the incomes accruing to the largest number in the community, increasing the strength and resilience of the economy and, concomitantly, providing 'full' employment. A certain stress on heavy and basic industry (to raise income potential) and on small-scale and cottage industries (to increase employment and improve distribution) is indicated. Necessarily, the development of power resources and the provision of transport facilities and communications would continue to have high priority in this initial phase of planned development. The gradual evolution of a socialistic economy would imply a planned increase in social ownership and social control and management of the means of production.

The stress on heavy and basic industry would imply a considerable increase in the allocation to industry of public funds. However, it would upset the balance of growth in the longer period, if investment in industry were to be concentrated almost exclusively in heavy industry and small enterprise ; a complementary development of consumer goods industries is required even in the Second Five Year Plan period. While, due to the need to protect the (low) living standards of large groups in the economy and on considerations relating to the maintenance of political and economic stability, consumer goods industries cannot be ignored, in this sector, emphasis may more appropriately shift to the small and cottage units which are highly labour intensive. However, the extent to which reliance on small enterprise may be stretched is a matter for investigation in regard to organization, techniques, etc., as undue emphasis on this aspect on short-term considerations may ultimately lead to uneconomic use of the material and manpower resources. Organised consumer goods industries cannot be altogether inhibited from expansion.

The First Five Year Plan started off, somewhat on a tentative basis, under conditions of inflation. The various schemes of post-war reconstruction which were initiated by the Centre and the States since 1946 were based on an unduly optimistic assessment of resources and were ill co-ordinated. Under the circumstances, a measure of abundant caution was necessary in formulating the First Five Year Plan. On the other hand, the Second Five Year Plan is being formulated when inflationary conditions have altogether subsided, production levels, both in agriculture and industry, have shown a consistently upward trend, and, more

recently, prices have been on the decline and the employment situation is somewhat disturbing. Mainly due to difficulties relating to organization and personnel, development expenditure in the First Five Year Plan period has been less than was anticipated, and there has been so far hardly any *net* inflationary financing of public investment. This is the setting for a bolder Plan (both in its size and in the approach).

It is not necessary at this stage to discuss the approach in terms of physical resources versus financial resources. In an economy where accelerated development is being deliberately planned allocation of available physical resources is inevitable; at the same time, short of total planning under a completely collectivist system, the appraisal and mobilization of financial resources is necessary, if only for affecting an appropriate channelling of real resources. The national income aggregates, estimates of savings and investment, investment targets and such other data used in the following paragraphs are not meant to be precise estimates but only as rough approximations, to illustrate and underline the argument. Necessarily, there would be provision for review and revision of targets for individual sectors and for adaptations in the planning machinery itself, as more precise data become available and as continuing study of the problem reveals gaps in the Plan Frame.

The Size of the Second Plan and its Components

In the first year of the Second Plan, public investment cannot be less and must be larger than the level reached in the final year of the First Five Year Plan ; it would also show further increase during the Second Plan period, certainly in the present stage of our economic development. Hence, public investment may be expected to rise from about Rs. 600 crores to Rs. 800 crores in the five-year period, 1956-57 to 1960-61 (or by about one-third) at an annual rate of 6-7 per cent, giving a total of Rs. 3,500 crores, as against about Rs. 2,500 crores in the private sector for the five-year period. Total investment may then be placed at Rs. 6,000 crores in the Second Plan period. This would show a decisive extension of the public sector, relatively to the private sector, in total investment activity as compared to the performance in the First Five Year Plan period. Public investment, as a proportion of total investment in the economy, would rise from 47 per cent in the First Plan to nearly 60 per cent in the Second Plan. A probable level of investment in the public sector of Rs. 3,500 crores in the Second Five Year Plan period looks impressive enough when compared to the corresponding total of something less than Rs. 1,900 crores in the public sector likely to be realised in the First Five Year Plan period. At the same time, it cannot be equated wholly to net investment since some non-investment expenditure will remain, particularly under social services. It would seem to be unrealistic to think in terms of a larger programme of public investment than Rs. 3,500 crores, in view of the organizational and personnel problems involved ; the ability to spend in excess of this amount may not just be there.

Taking the public and private sectors together, total investment in the economy may be expected to rise from Rs. 1,050 crores in 1956-57 to about Rs. 1,400 crores in 1960-61; that is, in relation to probable national income levels, from 9.5 per cent to 11 per cent, giving an average of about 10.5 per cent for the whole period*.

*See Table at page 414.

Taking into account the pattern of investment in the First Five Year Plan, the relative priorities that have been indicated for the Second Plan, particularly in the public sector, and the normal growth that is likely in private investment, the investment during the Second Five Year Plan may be categorised illustratively as below :

(In crores of rupees)

Private Sector

Organised Industry	450
Urban Housing	750
Rural Investment (housing and other)	1,000
Transport	100
Small enterprises, etc.	200
	2,500

Public Sector

Agriculture, Community Development, etc..	420
Irrigation	200
Multi-purpose Projects	350
Power	150
Industry : Organized	500
Small-scale	120
Transport, Communications, etc.	900
Social Services and Miscellaneous (Education, Health, Rehabilitation, etc.).	860
	3,500

The proposed distribution of outlays in the public sector may be compared with the First Five Year Plan. In the public sector, relative to the First Five Year Plan period, there is to be greater emphasis on industry, transport and communications. This is brought out by the following table.

	Amount (Crores of Rs.)		Per cent of total	
	I Plan	II Plan	I Plan	II Plan
Agriculture, Community Development, etc.	374	420	16·6	12·0
Irrigation and Power	617	700	27·4	20·0
Transport and Communications*	536	900	23·8	25·7
Industry	178	620	8·0	17·7
Social Services and Miscellaneous*	544	860	24·2	24·6
TOTAL	2,249	3,500	100·0	100·0

*What may be called the investment portion of 'Transport and Communications' and 'Social Services, etc.' would be a larger proportion of the total in the Second Plan than in the First.

It may be assumed that on present indications, private investment in organized industry would amount to Rs. 300 crores in the five years of the Second Plan. With the possibility of substantial assistance from the public sector in regard to expansion of steel capacity in the private sector, the effective working of the development rebate, tax holiday and other important tax incentives recommended by the Taxation Enquiry Commission and financial assistance to industry in general by the Industrial Finance Corporation, the National Development Corporation and the Industrial Credit and Investment Corporation, it would not be unduly optimistic to place private investment in organized industry at Rs. 450 crores, even if private foreign investment should be somewhat less than in the First Plan period. Not taking into account the reinvested profits of foreign enterprise in the country, private foreign investment in the First Plan period may amount to Rs. 60-65 crores, of which the major part will be in oil refineries. As oil is a main field of direct foreign investment, and as similar investment in oil refineries may not be expected in the Second Plan period also, private foreign investment may be somewhat less in the Second Plan.

Urban housing may at first sight appear to be somewhat on the high side and, in view of the limited resources available, the question may be raised whether a part should not be diverted to other more productive uses. Urban housing would take up Rs. 150 crores a year in the Second Plan, as compared to about Rs. 130-140 crores currently, and should be quite in order considering the needs of industrial labour in particular, which may be expected to increase considerably in the Second Plan period.

The other categories of private investment are, by and large, assumed to show the same rate of increase as hitherto and it is also assumed that, with the increase in national income, resources would be available for these investments, particularly because a substantial part of private investment under these categories represents direct investment which does not require the channelling of resources in money terms.

Of the total estimated cost of Rs. 330 crores in respect of Bhakra Nangal, Hirakud and DVC Projects, about Rs. 80 crores is likely to be thrown forward to the initial stages of the Second Five Year Plan. The five new projects Kosi, Koyna, Chambal, Rihand and Krishna may cost over Rs. 250 crores; the estimated investment on multi-purpose projects is, therefore, placed at Rs. 350 crores.

If a target of 6 million tons of steel is to be reached at the end of the Second Five Year Plan, an increase in capacity of $4\frac{1}{2}$ million tons has to be envisaged during the Plan period. Of this, 1.5 million tons may be attained through expansion of existing units in the private sector (with Government assistance and under Government regulation) and 3 million tons of new capacity may be created in the public sector. In that event capital investment in respect of iron and steel alone in the public sector may be of the order of Rs. 250 crores. On this basis, an investment of Rs. 500 crores in organized industry in the public sector seems appropriate, mostly in heavy and basic industries including capital goods industries.

The broad category 'transport, communications, etc.' would include about Rs. 500 crores on railways for expansion and improvement, as against Rs. 250 crores in the First Five

Year Plan (net of current depreciation). Expenditure on social services, etc. is accorded as much as one-fourth of total public investment, as social improvement is no less important than industrial and agricultural growth and, in fact, further standards of living.

Finance for Private Industry

We may now consider the private industrial sector in more detail. Taking the public and private sectors together, total investment in industry in the Second Plan is placed at about Rs. 1,200 crores comprising :

		(In crores of rupees)
Private Sector	550	(including 100 for small-scale industry)
Public Sector	620	(including 120 for small-scale industry).
OR		
Organized Industry	950	
Small-scale and Cottage Industry	220	

These figures compare with Rs. 330 crores in the First Plan, of which Rs. 95 crores was in the public sector and Rs. 235 crores in the private sector.

It is unlikely that any serious problem of financing this scale of investment in the private sector would emerge. Net profits after tax in relation to net worth (share-holders' equity)—the best index of profitability in industry—averaged over 8 per cent for the period 1946 to 1951 according to the Taxation Enquiry Commission's study. We may assume that this rate of profitability will continue. In the light of experience regarding allocation of profits between dividends and reserves in a period of good profits, and trends in the capital market, fresh capital and retained profits of industry may provide Rs. 350-375 crores in all, and the rest would be assistance from the public sector.

The study of capital formation and its financing for the period 1946-51 undertaken by the Taxation Enquiry Commission shows that fresh capital (excluding capitalization of reserves) and internal finance (total retained profits) were adequate to finance net assets formation, and that the liquid resources position also was fairly satisfactory during the period under review. However, with the virtual elimination of E. P. T. deposits and considerable reduction of government securities holdings, it has been stated that the liquid assets position may be less satisfactory hereafter and the need for larger borrowings is therefore clearly indicated, the more so, if the role of the managing agency system and of private limited companies were to be severely curtailed.

No precise estimate of working capital needs is possible except on the basis of detailed production targets for each industry. However, as output levels are related to fixed investment in plant and machinery, except for changes in unutilised production capacity, we may consider working capital requirements on the basis of the investment levels contemplated. This would only provide, at best, a rough guide to the dimensions of the problem. On the basis of data

given in the study of the private industrial sector by the Taxation Enquiry Commission, it would seem that working capital requirements of industry are generally about equal to (net) fixed assets; this would, however, be true of industrial units which are operating at full capacity. When investment is actually being made and plant and machinery and other fixed assets are being set up, actual production even in the later years of the Second Plan would be at less than capacity, and working capital requirements would be smaller. While these considerations would generally hold for private investment, working capital requirements are likely to be larger here as a part of it will be for expansion of existing units and as the main emphasis in the private sector is on light and consumer goods industries. Inventory requirements may then be estimated to increase by about Rs. 400 crores when net fixed assets of industry increase by Rs. 450 crores, *even at full production capacity* and total borrowings by about Rs. 275 crores (over three-fifths of the increase in inventory). About two-fifths of this increase in borrowings, may be expected to be from banks, that is; about Rs. 100—120 crores. However, as loan finance from managing agents, private deposits and other sources of short-term funds are likely to be less important in future, the increase in bank advances to private industry would have to be of the order of Rs. 150—175 crores *by the end of the Second Five Year Plan*. This appears to be the upper limit to the increase in bank lending to industry that may become necessary. The problem has to be viewed against the current level of bank advances to industry of less than Rs. 200 crores, a level which has not registered any significant increase in the last three or four years.

If there should be, as seems likely, an expansion in money supply in the Second Five Year Plan period of over Rs. 1,000 crores, one may expect an increase in deposits (both demand and time) of Rs. 500—550 crores. This would be reflected automatically (on a ratio of advances to deposits of 60%) in an increase of over Rs. 300 crores in total bank advances, of which about Rs. 125 crores would be in respect of bank credit to industry and the remainder to trade (for inventory financing) and other sectors. An expansion of this order may be expected within the confines of the present institutional pattern and banking practice. It may be necessary to effect suitable adjustments in the machinery and methods of the banking system, to induce a larger expansion of bank credit to industry, without correspondingly affecting bank investments in Government securities. The gap that would need to be made good, however, does not appear to be such as would necessitate major changes in the banking field. (A more detailed examination of this problem is attempted in Section V.)

Appraisal of Resources for the Public Sector

The resources required to be mobilised by the public sector in the Second Five Year Plan period would be of the order of Rs. 3,600 crores, of which about Rs. 100 crores would be assistance to private sector. We may consider the possibilities of raising these resources under various heads, namely, taxation, economies in current expenditure, borrowings from the market, unfunded debt and deposits, and external finance (loans and gifts from other countries and drawing down of sterling balances). We may then, as a residue, arrive at the net (inflationary) gap in the public account.

Additional Tax Resources

Keeping in view the objective that "the maximum practicable rate of investment in the public sector should be attained, consistent with maintaining and strengthening the incentives to the private sector to step up its own rate of investment" and also of "how to adapt the tax system to the imperative need of stepping up the rate of capital formation in both the public and the private sectors", the Taxation Enquiry Commission have made detailed recommendations in the Central, State and local spheres of taxation which involve a "deepening and widening of the tax system", as also certain incentive tax reliefs. It is their finding that a sizeable increase in total tax revenues is both necessary and feasible. If there should be expeditious and decisive implementation of the Commission's recommendations, additional tax revenue of over Rs. 100 crores per year may be expected to materialise. Even if the tax changes were to be fully reflected only in the last one or two years of the Second Plan, an increase in total tax revenue of the order of Rs. 400 crores for the five-year period may be expected. This will be mainly in higher Central excise duties, a net increase in income-taxation, surcharge on land revenue and extension of agricultural income-tax, betterment levies and wider coverage of the sales-tax. One has also to take into account the possibilities of stricter enforcement of tax laws to reduce evasion and avoidance. The increase in taxation would raise the proportion of total tax revenues to national income from 7 to 8 per cent. Further, the Commission have recommended these increases in taxation, fully alive to the requirements of private enterprise. The Commission state: "The approach must be realistic in the sense that the tax system should not be strained to a limit which will endanger the productive system of the country or impair the possibilities of its expansion by affecting savings and investment in the private sector. We have, therefore, paid special attention to the importance of promoting savings and investment by suggesting appropriate incentives for the purpose in the income tax system. In particular, we have suggested tax concessions for encouraging industrial expansion".

Economy in Expenditure

As for economy in expenditure, it would be unrealistic to assume any net release of resources for development through this means. While utmost care should be taken to avoid any waste or inefficient use of public funds—and this is necessary as much in development expenditure as in non-development expenditure—in a period when development expenditure itself is growing, there would be a certain necessary increase in recurring charges, including the costs of administration. With increasing urbanisation, there will be a rise in expenditure on law and order and ordinary governmental services. As large capital projects are undertaken, until they become remunerative, there is a net addition to interest charges. As for defence, while increases under certain heads may be met by reductions in others on revenue account, the provision for capital expenditure may have to be larger in the immediate years ahead. This has also been generally the experience of governments since 1950. In fact, between 1950-51 and 1953-54, there was a larger increase in non-development expenditure (Rs. 85 crores) than in development expenditure (Rs. 80 crores) charged to revenue account of the Central Government, Part A and Part B States taken together, though a part of the increase under non-development

heads is explained by special factors operative during the period. Such inevitable increases in certain items of revenue expenditure should be met from savings in others and, if necessary, from the normal increase in revenue. While we may not assume that any net resources will be released for investment by economy measures, it should be the endeavour to ensure that no part of the additional budgetary resources raised hereafter would be utilised for non-development purposes.

Current Surplus

In the four years, 1951-52 to 1954-55, total resources amounting to Rs. 460 crores would appear to have become available from current revenues of public authorities and railway surpluses, or an average of Rs. 115 crores a year. The abnormal surplus of over Rs. 200 crores in 1951-52 is unlikely to be repeated but, taking into account the normal increase in revenue year to year as incomes are rising, as also the buoyancy of revenues in a period when deficit financing takes place, we may assume the continuance of the same rate of current surpluses in the Second Five Year Plan period as in the First Five Year Plan period, which would provide a total of Rs. 600 crores on the existing basis of taxation. Some adjustment, say, of Rs. 30 crores per year, has to be made, however, for a part of the development expenditure now met from revenue and is included in the development programme (correspondingly raising current surplus) but is excluded in our estimates for the public sector. Therefore, current surpluses of public authorities (including railways and other Government undertakings) may be expected to provide a total of Rs. 450 crores and additional taxation a total of Rs. 400 crores for the Second Five Year Plan.

Small Savings, other Unfunded Debt and Deposits

Collections of small savings averaged Rs. 41 crores a year during 1951-52 to 1954-55. The estimate for 1955-56 is placed at Rs. 52 crores, as against Rs. 47 crores for 1954-55 and less than Rs. 40 crores for 1953-54. On the basis of these trends and the steps that have been instituted for promoting small savings, small savings may rise from about Rs. 55 crores in 1956-57 to Rs. 75 crores in 1960-61, giving a total of about Rs. 320 crores for the five-year period. Together with (net) receipts under other items of unfunded debt and (net) deposits, the total of small savings, other unfunded debt and deposit items may be over Rs. 450 crores. (For a fuller review of the question of small savings see Section IV.)

Market Borrowings

While there was no net market borrowing in 1951-52, there has been a steady improvement since then under loan receipts. The Budget estimates of the Central Government for 1955-56 place net market borrowings at Rs. 55 crores. Together with State borrowings or for the States by the Centre, net borrowings may be placed at about Rs. 90 crores on current trends; on this basis an annual (net) borrowing programme of Rs. 80 crores can be envisaged for the next Plan. Loans due for repayment during the Second Five Year Plan amount to Rs. 500 crores for the Centre and the States together or about Rs. 100 crores a year. Considering the definite improvement in public response to Government loans in more recent years, the

general state of the capital market, the order of repayments due, and the impact of deficit financing on Government borrowings, net market borrowings may be expected to provide a total of about Rs. 600 crores. This gives an annual average of Rs. 120 crores which is about a third higher than the estimate for 1955-56.

Included in the above estimates of current surpluses and market borrowings is an addition of about Rs. 300 crores to budgetary resources (Rs. 100 crores in ordinary revenues and Rs. 200 crores by way of borrowings, mainly from banks and other institutional investors), which is anticipated directly from the deficit financing that is contemplated.

External Assistance

External assistance in loans and grants is placed at Rs. 75 crores in 1955-56 including some throw-forward from 1954-55 ; the average for the five years of the First Plan works out to Rs. 50 crores a year (including the Wheat Loan). We may not postulate a higher rate of external assistance for the next five-year period than the scale reached towards the end of the First Plan, i.e., Rs. 60 crores a year, or a total of Rs. 300 crores. While anything more than this should be welcome, and should be sought for, it would be unrealistic to start on the premises of a larger scale of external aid.

Utilisation of Sterling Balances

The level of our sterling balances is now around Rs. 730 crores and, on a consideration of the relevant factors, the balances are likely to stand at Rs. 650-675 crores at the beginning of the next Plan. The reduction of food imports from Rs. 200 crores in 1952 to Rs. 85 crores in 1953 and about Rs. 40-50 crores in 1954 and 1955 has helped to maintain the balances at a satisfactory level at the end of the First Five Year Plan. Apart from the requirements of sterling as backing for the currency, a certain minimum level of reserves would need to be maintained for normal trade purposes, and, with a rising national income, an increase in foreign trade has also to be assumed. A minimum balance of Rs. 350-375 crores would have to be retained by the end of the next Plan ; this would indicate that the use of sterling balances for the next Plan cannot exceed Rs. 300 crores. In addition to any current earnings, total foreign exchange resources for the next Plan would, therefore, amount to about Rs. 600 crores. It would be a matter for investigation whether, with the emphasis on heavy industry in the next Plan, the foreign exchange component of the Plan (cost of imported equipment and ancillary services) would exceed these available resources and, if they do, how to garner the additional resources required.

Extension of the Public Sector

A gradual extension of social ownership and management and control of the means of production and the channels of distribution is almost axiomatic in the evolution of a socialistic pattern of society. This could be attained through an extension of the public sector, relative to the private sector, in regard to all new investment, and large-scale nationalisation of existing

enterprises is not a pre-requisite. Whatever the general approach to the problem of nationalisation, it is a matter for specific examination whether the taking over of existing units in particular spheres by the State such as in insurance, banking, foreign trade and certain sectors of internal trade would make any worthwhile contribution to the resources for investment, over and above the resources that already accrue in taxes, institutional and personal investments in Government loans, and resources channelled through the private sector itself into private investment. The Taxation Enquiry Commission have expressed the view that no spectacular results may be expected from State trading purely as a revenue measure, though they seem to be somewhat more hopeful of the revenue possibilities of fiscal monopolies. Considered purely from the revenue aspect, extension of the public sector cannot be an important source of funds for investment. On the other hand, the possibility of using existing industrial and commercial undertakings of the Central Government and States, including railways, as a source of increased net profits, through appropriate readjustments in pricing and rate policies, for reinvestment in Government enterprises, should be a matter for close investigation, on the basis of the actual working of these concerns in these last few years. At this stage, however, we cannot take any credit for additional funds from this source.

The resources for public investment in the five years 1956-57 to 1960-61 may then be placed as follows :

	(In crores of rupees)
Current Budgetary Resources (including railways and other commercial undertakings)	850
Small Savings, other Unfunded Debt, Deposits, etc.	450
Loans	600
External Assistance and Withdrawals of Sterling Balances	600
	<hr/>
	2,500
	<hr/>

This would leave a net gap in resources required for the public sector of Rs. 1,100 crores for the five-year period; to this extent, there would be deficit financing. Though this represents 30 per cent of the total investment outlay on public account, it is unlikely to jeopardise economic stability. To the extent that larger external aid is obtained, it would mitigate the impact of this deficit on internal economic conditions. Should external assistance fall short of the anticipated amount, greater mobilization of internal resources and/or a lowering of the investment programme would be necessary, as any net deficit financing of a higher order would not be advisable. While price stability may not be the central requirement of a developmental economy, deficits should not be on a scale that would disrupt the economy ultimately in chaotic cost-price inflation.

Deficit Finance and the Second Plan

Deficit financing of Plan outlay in the public sector during the First Plan has been considerably less than was originally envisaged, mainly due to the fortuitous increase in current surplus in 1951-52 and the shortfall in the outlay itself. The total deficit of the Central and State Governments (including capital and debt transactions) during the four years 1951-52 to 1954-55 has been only about Rs. 175-200 crores. Expenditure abroad by Governments (net of food imports on Government account) may have been also about Rs. 200 crores, so that on Government account alone there does not seem to have been any net (inflationary) deficit financing. As for money supply, there has been no net increase so far during the Plan period, the increase in 1953 and 1954 having only offset the earlier decline.*

Production and price trends may be noted against changes in money supply. The index of agricultural production (with 1949-50 Agricultural year as base) has risen from 96 in 1950-51 to 102 in 1952-53 and 114 in 1953-54, there having been a particularly significant increase in food production. The index of industrial production (with 1946 as base) has risen steadily from 105 in 1950 to 135 in 1953 and 145 in 1954. The targets for the First Plan have already been attained by 1953 or 1954 in certain lines like cement and cloth. Mainly due to these substantial and steady gains in agricultural and industrial production, there has been a declining trend in prices, in spite of an increase in money supply of Rs. 95 crores in 1953-54 and about Rs. 125-150 crores in 1954-55.

The number of unemployed registered with employment exchanges has shown an increase and, while total factory employment has remained practically unchanged, there has been a decline in certain fields like engineering, cotton textile and mining groups. It is against this setting of an improved production outlook and a disturbing trend in prices and employment that the increase in money supply of 1953 and 1954 and a larger budgetary deficit in 1955-56 have to be viewed. Even according to Budget estimates, the net inflationary deficit in Government accounts in 1955-56 is only Rs. 200 crores, after allowing for Government expenditure abroad. Actually, with the likely shortfall in outlay, this deficit in the final year of the First Plan would be less and would perhaps be no more than a necessary corrective to the current trends in prices, employment and incomes. While we should continue to be circumspect in advocating the use of government deficits as a normal or substantial means of promoting economic development, there is now a greater cushion, both external and internal, against its adverse impact.

On the eve of the Second Five Year Plan, therefore, there will remain little inflationary potential in the economy. The satisfactory financial position of private industry, Government

* Changes in money supply have been :

(Rs. in crores)			
1951-52	1952-53	1953-54	1954-55 (up to March 18)
-173	-43	+96	+117

assistance for replacement and modernization of plant and machinery, the increase in electricity generation that has taken place already, and the unutilised capacity that still exists in certain lines of industry such as engineering, should sustain output in the industrial sector at satisfactory and rising levels. In the agricultural sector, a part of the increase in food production and certain cash crops is attributable to the cumulative results of the large number of minor irrigation schemes and G.M.F. schemes that have been undertaken since 1947 and may be deemed to be a permanent improvement. Additional production would also result in the coming years with the completion of the more important multi-purpose projects undertaken in the First Plan. Net deficit financing of the order of Rs. 1,100 crores, and a corresponding increase in money supply by the end of the Second Five Year Plan, may be viewed in this context of increasing industrial and agricultural production. Credit creation to a certain extent becomes necessary in a period of brisk economic activity and rising production levels ; otherwise a deflationary trend would set in, impairing production levels themselves. Under our conditions, in the initial planning phase, that is, until normal requirements are satisfied, a significant part of the additional incomes is likely to be spent on food and clothing and, on this scale of deficit financing, so long as supplies of these commodities are forthcoming in reasonable measure, no serious disturbance would arise in the economy. Needless to say, a strengthening of administrative and fiscal institutions and certain control measures would be necessary to see that structurally no serious maladjustments would arise in the economy, *e.g.* in regard to the distribution of incomes and concentration of economic power. The Taxation Enquiry Commission have stated that Excess Profits Tax, and taxation of capital gains may be kept in reserve for possible use in highly inflationary periods.

Investment, Employment and National Income

National income in 1950-51 was placed by the National Income Committee at Rs. 9,530 crores ; this has been estimated to have risen to Rs. 10,500 crores in 1953-54 in the Report of the Taxation Enquiry Commission. As there was only a very slight fall in prices during this period, it may be assumed that the estimate for 1953-54 of Rs. 10,500 crores is at constant (1950-51) prices. This gives an annual rate of increase of 3.5 per cent, as against a little over 2 per cent that was assumed in the First Plan in relation to a 1.25 per cent increase in population. Even with a somewhat lower rate of increase since then, national income in 1956-57 may be placed at Rs. 11,300 crores. A total investment level of about Rs. 1,050 crores at the beginning of the Plan period (taking the public and the private sectors together) will represent 9.3 per cent of national income. If the average capital-output ratio were assumed to be 3 : 1, as in the First Plan, national income level in 1960-61 would be about Rs. 13,000 crores. While the capital-output ratio in the First Plan period has turned out to be more favourable than 3:1, mainly because of the operation of certain non-economic factors like successively good monsoons and special circumstances like the availability of large unutilised capacity which could be tapped in the industrial sector, we may not assume a lower ratio than 3 : 1 for the Second Five Year Plan, particularly with the large element of investment in heavy industry. A total investment of about Rs. 1,400 crores in the last year of the Second Plan would then

form about 11 per cent of national income. On this basis, total investment outlay in the Second Plan period would average 10.5 per cent of national income. The table below is illustrative of the trends in investment and national income levels during the Second Plan.

(In crores of rupees)

	Investment			National Income
	Public	Private	Total	
1956-57	600	450	1050	11300
1957-58	640	470	1110	11650
1958-59	690	495	1185	12020
1959-60	750	525	1275	12410
1960-61	820	560	1380	12850
TOTAL	3500	2500	6000	

The capital output ratio is itself a function of the investment pattern and state of technology. While it may be generalised that this ratio would be lower in under-developed countries (due to the greater labour intensity of production methods) than in advanced countries, and that within any economy, it would be higher in heavy and basic industries than for small-scale enterprise and agriculture, such empirical studies as have been made even in other countries have not provided conclusive proof of such expectations ; hardly any data are as yet available in our own country. It would, therefore, be hypothetical in the extreme to give any general ratio for investment on the whole, relating increase in investment to increase in income. While this is a field where considerable work could be done and is being attended to in the investigations now in hand at the Indian Statistical Institute, and the results of intensive and continuous study would be of great use in checking upon actual performance and, perhaps, in formulating subsequent Plans, in the present state of our primary data, large assumptions will have to be made regarding the (incremental) capital-output ratios as well as capital requirements per worker in heavy industry, organised consumer goods industries, small-scale and cottage enterprises, agriculture, transport and communications, services, etc., if these techniques are to be used for projecting investment and income levels and formulating a Plan accordingly. What has been attempted above is only to illustrate the order of increase in national income levels on a certain extremely tentative capital-output ratio.

The large-scale disguised unemployment in the agricultural sector is a matter of common observance. This is said to constitute a saving potential in real terms which could be set to productive use, mainly on local works, such as minor irrigation schemes, road construction and public buildings; community development projects and national extension schemes and irrigation projects are important spheres in which labour could be absorbed in rural areas. However, one may not expect any significant shift of the existing agricultural population away from the rural side, it is another matter to postulate, even as a short-term objective, that effort should be to absorb the entire increase in working population in non-agricultural vocations. It would be prudent, any way, not to take credit for this so-called saving potential in any saving investment calculus in considering the public sector.

As for the employment aspect, the increase in working force may be taken to be 10 million between 1955 and 1960 at the rate of 1.25 per cent a year. It would be agreed that this entire increase in working force should be absorbed outside the agricultural sector. The above levels and pattern of investment in the Second Five Year Plan may be expected to provide additional employment for about 2.5 million workers in organised industry and power projects, on the assumption of a capital requirement of about Rs. 6,000 per worker in heavy industry and power generation and Rs. 2,500 per worker in consumer goods industries. Small-scale enterprise and cottage industry may provide employment for another 2.5 million, assuming an investment of less than Rs. 1,000 per worker. The figures for organised industry are broadly derived from data relating to capital employed and total employment provided in manufacturing industry, according to the Census of Manufactures and are adjusted for the higher current costs of equipment. Any alternative set of assumptions would no doubt give different results in regard to employment prospects; in this field we are again in the realm of conjecture. If one-half of the estimated increase in working population is likely to be absorbed in industry, it may reasonably be expected that the other one-half of the increase in total working force would be absorbed in the non-agricultural sector itself, as a result of the substantial investments that will be made in railways, other transport facilities, communications, housing, social services, etc. If the working force in agriculture remains stationary at the current level, by 1960 the proportion of total working population employed in agriculture would decline from 69 per cent at present to 62 per cent. With the investment contemplated in irrigation schemes, land improvement and other rural development, productivity in agriculture would show a corresponding rise. In so far as this scale and pattern of investment do not provide employment in the non-agricultural sector to the entire increase in working force during the five-year period and/or do not also provide employment to the existing unemployed, the scale of investment would prove to be inadequate to resolve the employment problem in a short period of five years; it would be a matter for major policy decisions whether the scale of investment should then be substantially stepped up, purely from the employment viewpoint, in spite of the attendant risks.

IV. SMALL SAVINGS

The object of this Section is to review the trends in small savings* in the recent past, and on the basis of this performance, to assess the possibilities and the probable magnitude of small savings in the Second Five Year Plan. Some suggestions are also made for a more effective mobilisation of small savings in India in the next Plan.

Recent trends in Small Savings

Table 2 shows the trends in net receipts on account of small savings in the Indian Union since 1948-49 under the various categories of small savings. This shows that, broadly, small savings in the Indian Union have been rising and the progress in this field may generally be regarded as encouraging. Over the six-year period from April 1948 to March 1954, net receipts aggregated Rs. 206 crores or Rs. 34 crores per year on an average. This compares favourably with an annual average for undivided India of Rs. 7 crores during the six-year period preceding the outbreak of World War II (1933-34 to 1938-39) and of nearly Rs. 16 crores during the war and immediate post-war years (1939-40 to 1947-48).

In the three years preceding the Plan period, net receipts of small savings totalled nearly Rs. 90 crores or Rs. 30 crores per year, but in the first three years of the Plan period (1951-54) small savings increased substantially, with net receipts aggregating about Rs. 117 crores or Rs. 39 crores per year. For the Plan period as a whole, net receipts under small savings are expected to amount to Rs. 219 crores or Rs. 44 crores per year on the basis of actuals for 1951-54 and estimates for 1954-56. The revised estimate for 1954-55 is Rs. 50 crores (as against over Rs. 38 crores realised in the ten months ended January 1955) and the budget estimate for 1955-56, over Rs. 52 crores. The Planning Commission has estimated net receipts under small savings and 'other unfunded debt' together at Rs. 270 crores for the entire Plan period. 'Other unfunded debt' (*i.e.*, service funds, State Provident funds and other accounts), on present indications, is estimated to amount to Rs. 67 crores. Adding this to the figure of Rs. 219 crores, mentioned earlier, we arrive at a figure of Rs. 286 crores (Rs. 57 crores per year) for small savings and other unfunded debt combined as against the Planning Commission's estimate of Rs. 270 crores (Rs. 54 crores per year). This means that the performance under this head will be better than what was envisaged in the Plan. It is, however, possible that the estimated targets of small savings for the years 1954-55 and 1955-56 may not be achieved and to that extent, the figures given above will have to be readjusted.

*"Small saving" are taken to mean only those savings which are collected by Government through sale of savings certificates and acceptance of deposits at the Post Office Savings Banks. The principal items of small savings considered here are Post Office Savings Bank Deposits, Seven-Year and Twelve-Year National Savings Certificates, Ten-Year Treasury Savings Deposit Certificates, Ten-Year National Plan Certificates and Fifteen-Year Annuity Certificates.

We may now look into the actual net receipts of small savings since the beginning of the Plan period a little more closely. During the period April 1951 to January 1955, net receipts of small savings amounted to Rs. 155 crores. In 1953-54, total net receipts, as compiled in the Office of the Accountant General, Posts and Telegraphs, were somewhat lower at Rs. 38 crores, as compared with Rs. 40 crores in the preceding year, but subsequent data supplied to us by the National Savings Commissioner indicate that total net receipts during 1953-54 amounted to over Rs. 40 crores. Total net receipts during the first ten months of 1954-55 aggregated higher as compared to the same period of 1953-54 by about Rs. 11 crores.

Among the principal items of small savings, the National Savings Certificates are relatively more popular than the Post Office Savings Bank deposits and account for the largest percentage (44) of aggregate small savings*; this is probably explained by the higher yields and the higher maximum limits on holdings compared to the Post Office Savings Bank deposits. Total net receipts from these certificates during the Plan period so far have amounted to Rs. 72 crores, thus exceeding those under Post Office Savings Banks by as much as Rs. 13 crores. Among the National Savings Certificates, those having a maturity of 12 years have been more popular than the 7-year and the 5-year certificates (since discontinued), indicating the small investor's preference for longer maturities.

In view of the relative popularity of savings certificates, the Union Government issued, in May 1954, the new 10-Year National Plan Certificates, as part of the National Plan Loan floated last year; by January 1955, *i.e.*, in a period of less than 9 months, these certificates had brought in more than Rs. 6 crores. Government also issued on July 1, 1954, the new 15-Year Annuity Certificates, but the response to this has been unsatisfactory, the total sales amounting to only Rs. 44 lakhs up to the end of January 1955.

In addition, there are also the Ten-Year Treasury Savings Deposit Certificates, introduced in February 1951. These certificates were very popular initially, but subsequently the rate of collections has tended to slacken gradually. During the Plan period so far, these certificates have brought in Rs. 31 crores or slightly over 19 per cent of aggregate small savings.

Net receipts in Post Office Savings Banks during the Plan period so far amounted to nearly Rs. 59 crores and formed 36 per cent of aggregate small savings. During the same period, time deposits of scheduled banks rose sharply by as much as Rs. 75 crores, while their savings deposits increased by only Rs. 11 crores. It may, however, be added that, although the aggregate rise in time deposits during the period was larger than the rise in postal savings deposits, the percentage rise in the former was only 26 as against 96 in the case of the latter. Thus, savings deposits outstanding in post office savings banks doubled from Rs. 61 crores to Rs. 120 crores in a period of less than four years from April 1951.

The gross turnover in deposits in the Post Office Savings Banks is fairly large and has been tending gradually upward, indicating their increasing use by the public. During the

*Excluding the National Plan Certificates and the Annuity Certificates issued in 1954.

three years 1951-54, gross receipts totalled Rs. 338 crores, and withdrawals Rs. 293 crores, averaging Rs. 113 crores and Rs. 98 crores, respectively, per annum ; the corresponding averages for the war years (1939-46) were Rs. 39 crores and Rs. 34 crores.

As regards the number of postal savings bank accounts, it appears from such figures as are available that the number of accounts in the Indian Union increased by about 8.8 lakhs over the period 1951-54 ; over the same period, net receipts increased by Rs. 45 crores. Roughly, the average amount of deposit per account was Rs. 145 at the end of 1950-51; it increased to Rs. 210 at the end of 1953-54.

Probable Magnitude of Small Savings in the Second Five Year Plan

The estimates of national income and small savings given in the subsequent paragraphs, it may be noted, are in the nature of broad magnitudes and mainly notional in character.

For the pre-Plan year (1950-51), national income was estimated by the National Income Committee at Rs. 9,530 crores, while total net receipts of small savings amounted to Rs. 33 crores. Small savings thus formed 0.35 per cent of national income. For 1951-52, national income was placed at Rs. 9,990 crores, whereas small savings aggregated Rs. 39 crores or 0.39 per cent of national income. For 1953-54, the Taxation Enquiry Commission has estimated national income at Rs. 10,500 crores ; with small savings aggregating over Rs. 40 crores, the percentage of small savings to national income was roughly about the same as in 1951-52.

It is difficult to forecast the level of national income for the remaining years of the Plan. The Planning Commission had placed national income for 1950-51 at Rs. 9,000 crores and it was estimated that by 1955-56 the national income will have gone up to about Rs. 10,000 crores or by about 11-12 per cent above the estimated level for 1950-51. Actually, taking the Taxation Enquiry Commission's estimate of Rs. 10,500 crores for 1953-54, this level was exceeded in the third year of the Plan. The annual rate of increase in national income was assumed by the Planning Commission at a little over 2 per cent, but the available figures show an annual rate of increase of 3.5 per cent in the first three years of the Plan. The capital-output ratio during this period, it is stated, was more favourable than that of 3 : 1 envisaged in the Plan, mainly because of successively good monsoons and the existence of large unutilised capacity. Assuming a somewhat lower rate of increase for the subsequent years, the national income for 1954-55 may roughly be estimated at Rs. 10,750 crores and that for 1955-56 at Rs. 11,000 crores.

For the next Five Year Plan, tentative estimates of the probable magnitude of national income have been indicated in Section III. This places the national income at Rs. 12,850 crores for 1960-61.

To a large extent, savings depend on the level of national income ; the higher the national income the higher, normally, should be the proportion saved. Apart from this, the proportion of national income that is saved also depends on various socio-economic factors, such as, social habits and customs, changes in the distribution of national income, changes in

consumption expenditures consequent on changes in incomes and the efficiency of the machinery for mobilising savings. As regards changes in the distribution of national income, no comprehensive data are available, but statistics for the period 1951-54 bearing on the number of income-tax assesseees and the income assessed indicate a decline in the number of individual assesseees and their incomes in the higher income groups (above Rs. 40,000) and a rise in the number of individual assesseees and their incomes in the 'middle' income groups (Rs. 5,000—Rs. 40,000), who may be said to constitute the potential small savers in the country. An increased flow of small savings from these groups may therefore be expected to take place in the coming years.

As already stated, the Finance Minister has estimated small savings during 1954-55 at Rs. 50 crores. An estimate of Rs. 50 crores for 1954-55 constitutes 0.47 per cent of the probable level of national income (Rs. 10,750 crores) which represents a big jump from 0.38 per cent of the previous year. It is possible that in practice, we may not realise the target of Rs. 50 crores since the total for the first ten months of the year was Rs. 38 crores. Relatively to the national income, this would work out at 0.42 per cent, and for 1955-56 it may reasonably be placed at 0.45 per cent. This represents an appreciable rise from the 1953-54 level of 0.38 per cent and indicates that if appropriate measures are adopted as during 1954-55*, there is scope for increasing the proportion of small savings to national income from year to year.

There are, however, other considerations pressing against the possibility of increasing the proportion of small savings to national income. Firstly, in accordance with the recommendations of the Taxation Enquiry Commission, there are likely to be, in the next few years, all-round increases in taxation on all groups including the lower and middle income groups. This increased taxation will reduce the margin between personal incomes and personal consumption, with consequent reduction in savings. A redistribution of incomes in favour of the lower income groups will undoubtedly result in a tendency to increase consumption expenditure. Consumption expenditure should also increase with the increasing availability of consumer goods. Furthermore, the price factor will be an important determinant of consumption expenditure; thus while price stability will tend to moderate the level of consumption expenditure, it will be sustained at higher levels by rising prices. In assessing aggregate consumption expenditure, allowance has also to be made for the growth in population. It would be necessary to ensure that as high a proportion of additional incomes generated through development expenditure as possible will be saved without any undue restraint on consumption. Leakage of income through hoarding will need to be prevented as far as possible.

On the calculations made above, the proportion of small savings to national income has been steadily rising in recent years; from 0.35 per cent in 1950-51, it is likely to be 0.43 per cent in 1954-55, and 0.45 per cent in 1955-56. This proportion may be expected to continue rising gradually in the next Plan. From 0.45 per cent in 1955-56, it may be

*In 1954-55, Government introduced the new 4½ per cent National Plan Certificates which brought in over Rs. 6 crores in a period of less than nine months.

estimated to rise to say 0.58 to 0.60 per cent. On the basis of the estimated national income of Rs. 12,850 crores for 1960-61, the estimated total of small savings may be placed at Rs. 75-77 crores for 1960-61. This indicates an average increase of Rs. 5-6 crores per annum.

For the next Five Year Plan, the total amount of small savings may broadly be placed at Rs. 325-350 crores, as against a possible total of around Rs. 215 crores in the First Five-Year Plan.

Suggestions for a More Effective Mobilisation of Small Savings

The present machinery for small savings is fairly well-developed and no major institutional changes are suggested. The main improvements suggested here for a more effective mobilisation of small savings relate to increasing the administrative efficiency and overcoming the present short comings of the existing system. In years to come, with the increasing trend towards socialisation and gradual evening-up of income inequalities, there will be a wider diffusion of incomes and atomisation of savings and the extent of mobilisation will increasingly depend on the Government's ability to reach the widely-diffused small investor. The main problem will, therefore, seem to be to extend and strengthen the existing set-up in an endeavour to mop up the diffused individual savings, which collectively would reach a substantial total. In this context, special attention will have to be given to the problem of mobilising rural savings, because of the large magnitude of the rural sector in India, the increasing monetisation of the rural economy and the emphasis on agricultural and community development in the First Five Year Plan.

The existing pattern of yields and maturities of small savings seems to be, on the whole, satisfactory. In view of the small-saver's preference for certificates of longer maturities, it is, however, suggested that a 15-year series of National Savings Certificates or National Plan Certificates with a slightly more attractive rate of interest (say 5 per cent or more) may be tried.

The present limits of maximum holdings are quite liberal and need not be raised. It is known that small savings attract considerable funds from the more well-to-do sections of the population and any increases in the limits of maximum holdings tend to benefit these groups rather than the small savers. In this context, the technique of limiting the maximum holdings of new issues to small amounts adopted in respect of the new National Plan Certificates would appear to be a step in the right direction.

There is need to revitalise and strengthen the existing machinery for mobilising savings. At present, the collection of savings is to a large extent a subsidiary function of the post offices, and it is felt that the savings machinery could be considerably strengthened by drawing a clear distinction between the two functions and recruiting special staff for the promotion of savings. Currently, the collection of savings is mostly done on "savers come to me if they want to" basis. It is essential that the postal staff should be trained in savings work and encouraged, through commission and additional allowances, to be more active agents in the mobilisation of small savings than hitherto.

It is necessary to make the small savings approach as broad as possible. Extensive voluntary co-operation from social, regional and occupational groups should be built up and savings groups should be formed in factories, offices, clubs and other social and cultural organisations. The agency system should be extended to cover commercial and co-operative banks. It will be advantageous to enlist small investors as regular subscribers, and to have a system of payroll deductions, under which workers will authorise employers to set aside specified amounts for investment in small savings.

There should be more effective savings drives and more intensive promotional campaigns. Special countrywide campaigns of at least a fortnight's or a month's duration should be conducted with the co-operation of several agencies and organisations. There is also need for wider publicity of small savings statistics for arousing mass consciousness towards small savings. At present, the national savings movement in India is relatively inconspicuous and mostly confined to urban areas. It is also necessary to entrust the general direction and control of the small savings movement to a high-powered Board, comprising, among others, the representatives of Government and political, social and financial organisations in the country. The direction and control of the small savings scheme in the rural areas may be entrusted to the proposed State Bank. Finally, the role of the State Governments in the small savings movement has not been as active as is desirable and they should be induced to organise and intensify the small savings movement in their respective areas.

V. BANK FINANCE FOR INDUSTRY

The Second Five Year Plan is expected to place greater emphasis on industrial development than was the case in the First Five Year Plan. On the assumption of Rs. 6,000 crores for the whole Plan, Rs. 3,500 crores may be put down in respect of the public sector and Rs. 2,500 crores for the private sector; of the amount provisionally suggested for the private sector, an assumption of Rs. 450-500 crores (or about double the figure of Rs. 235 crores for the First Plan) to cover the cost of expansion of industrial capacity does not appear unreasonable.

As far as working capital requirements are concerned, an estimation of industry's needs in this regard on the basis of the physical targets aimed at in the various sectors is not possible in the absence of these targets. The alternative method of estimation would be to relate it to the capital-sales ratio for the various industries, though even in this regard, detailed data are not available. Within the limitation set by the presence of unutilised capacity, the utilisation of which would increase sales without a corresponding increase in capital, the (fixed) capital-sales ratio may throw some light on industries' requirements of working capital.

It is likely that most of the private industrial investment in the next Plan will be in respect of consumer goods and light engineering industries, and in these industries, the capital-sales ratio is generally observed to be lower than in the case of heavy industries. On the other hand, some part of the investment would not have reached the stage when industry begins to require working capital. Taking these factors into consideration, an assumption that working capital requirements will broadly be equal to fixed capital requirements does not appear unreasonable.

Industry's capital requirements can be met either by internal or external financing. While internal financing would be almost wholly in respect of fixed assets formation, some fixed capital requirements and most working capital needs would have to be met through external financing *i.e.*, through (a) capital market issues, (b) loans from non-bank sources (including such institutions as Industrial Finance Corporation of India, State Financial Corporations and Industrial Credit and Investment Corporation) and (c) loans from the banking system. Loans from the banking system would have to be almost wholly in respect of working capital, as it is not desirable that banks whose resources are mostly a short-term should engage in financing the long-term (block capital) needs of industry. In fact this is the basic assumption of this note and the evaluation of the adequacy of bank finance is in respect of working capital requirements.

Before, however, proceeding to an evaluation of the adequacy or otherwise of bank finance, an attempt may be made to estimate the volume of requirements of bank credit. The analysis by the Taxation Enquiry Commission of corporate balance sheets has indicated that the level of borrowing is roughly 60 per cent of the level of inventories; and of total borrowings, the share of the banking system is less than half. On the assumption that the same ratio of borrowings to inventories would continue, and on the further assumption that the share of bank finance in the total of borrowings would rise to about one-half, the requirements from the banking system may be put roughly at Rs. 150 crores. In other words, in addition to the present provision of industrial credit of Rs. 180-200 crores (which constitutes over a third of total bank credit), banks would be called upon to provide a further Rs. 150 crores to industry.

The capacity of the banking system to meet the increasing credit needs of industry has to be examined, firstly, in the light of the present legal and institutional framework and secondly, to the extent that the framework is inadequate, on the assumption that the institutional structure is modified so as to expand the volume of bank finance to industry.

The assumption that the institutional framework broadly remains the same would mean that there is no significant change in the avenues of credit to industry both by way of the number and type of institutions available and of their traditions and practices. An increase in bank credit to industry could then come about either through an expansion in banks, resources

and/or a redistribution of their assets portfolio so as to enable a greater proportion of banks' resources to be diverted to credit in general and industrial credit in particular. The first of these raises the question of deposit trends while the second is related, among other things, to cash and liquidity considerations.

In recent years, there has been a significant reversal of the declining trend noticed for the greater part of the post-war period and the trends in 1954 indicate that perhaps a phase of deposit expansion has begun again. The likely volume of deposit increase is intimately linked with the question of trends in money supply, the most important single determinant of which in the next few years will be the scale of deficit financing. On the basis of recent trends, however, it appears reasonable to expect that about two-fifths to one-half of the expansion in money supply will take the form of deposit money.

An expansion in deposit liabilities would, even with the present assets structure, lead to a larger absolute level of advances. Scheduled banks in India have generally been observing in the last five or six years an advances-deposits ratio of 55-60 per cent though it may vary seasonally from 50-70 per cent. This is a fairly high ratio and compares with the (approximate) ratios in 1954 of 36 per cent for the U.K., 38 per cent for the U.S. and 60 per cent for Australia; in the case of Japan the ratio is much higher at about 90 per cent thus causing the problem of "overloaning." Advances now roughly account for Rs. 550 crores out of total deposits of about Rs. 950 crores. If the same ratio is to be maintained, and if it is assumed that industrial credit would account for half the credit expansion, a rise in industrial credit of the order of Rs. 150 crores would postulate a rise in total deposit liabilities of Rs. 500 crores (of which Rs. 400 crores would be in respect of demand deposits*).

The assumption that industrial credit expansion would account for half the credit expansion seems reasonable; if, however, the commercial and other sectors' credit needs for inventory financing etc. are greater than Rs. 150 crores, the required deposit expansion on the basis of a 60 per cent advances—deposits ratio would be over Rs. 500 crores. On the other hand, if the total deposits increase, if the share of time liabilities is greater than a fifth, the prospects of a rise in the advances-deposits ratio would be greater. An increase in the advances-deposits ratio from the present levels would imply that a reduction in the ratio of other assets, *viz.* cash and investments to deposits has to be brought about.

Indian banks have been working in the last two or three years on lower cash ratios*. The greater availability of Central Bank credit and more liberal remittance facilities have reduced the requirements of a large cash cushion and an extension in these as in clearing facilities might be expected to lead to some further lowering of cash ratios, though the extent to which this can be done is limited; the excess of balances of scheduled banks over the statutory minimum (of 5 per cent of demand and 2 per cent of time liabilities) has averaged only Rs. 17 crores in 1954, Rs. 13 crores in 1953 and Rs. 18 crores in 1952, and does not appear an adequate basis for credit expansion to any significant degree.

* On the basis of the assumed expansion of Rs. 400 crores in demand liabilities, money supply would rise by Rs. 1,000 crores.

An expansion in advances within a given volume of resources could also be brought about through a reduction in banks' gilt-edged investment portfolios. Investments have claimed 35-38 per cent of deposit liabilities of scheduled banks in recent years (1951-54) and represent a larger proportion than in some other countries; it is, however, hard to see how any substantial reduction of investment ratio can be affected. Though Section 24 of the Banking Companies Act lays down that banks are to maintain not less than 20 per cent of their demand and time liabilities in cash, gold or unencumbered approved securities, in actual practice scheduled banks have maintained in cash balances and gilt-edged securities about 45-48 per cent in recent years. While this might suggest that there is some scope for reduction it has to be borne in mind that in the absence of Central Bank supported purchases in the open market, banks would be reluctant to sell at a loss, while the availability of Reserve Bank (and Imperial Bank) credit against the pledge of Government securities is another factor in favour of banks continuing to hold Government securities. In fact, to increase their advances it is not necessary for banks to liquidate their investments; they could as well borrow from the Reserve Bank in greater measure against the pledge of these securities. Another factor militating against a reduction in investment levels is that banks (with other institutions) would be expected to participate in Government loan issues which are likely to be larger in view of the increasing requirements of the public sector. Thus, while the absolute level of Government security holdings cannot be expected to fall, and in fact to increase, as a ratio to deposits, some reduction is possible; in other words, a greater share of the likely increase in deposits may go into advances.

In the discussion of the possibilities of an expansion in assets, particularly of risk assets, consideration has to be paid to the adequacy of the capital funds (paid-up capital and reserves); an expansion of risk assets would have to be accompanied by an increase in capital funds of the banking system.

The above discussion, therefore, indicates that to achieve an advances expansion of at least Rs. 300 crores, a deposit expansion of over Rs. 500 crores would be called for and will perhaps be realised; if the latter is short of the required figure or if advances to the non-industrial sector are higher than Rs. 150 crores, then there would emerge an institutional gap *i.e.*, an inadequacy of bank finance within the present organisational structure.

The problem of inadequacy of bank finance thus does not appear to be one of such serious proportions as to require any radical changes in the existing machinery of credit. However, to the extent that such a gap emerges, certain measures to introduce greater flexibility in the supply of credit may have to be considered.

2. BALANCE OF PAYMENTS AND PLANNED DEVELOPMENT

The purpose of this note is to refer in very general terms to certain aspects of India's balance of payments in relation to the Second Five Year Plan. This is covered under three sections. As experience of the past provides a guide to the future, Section VI contains a brief assessment of India's balance of payments during the First Five Year Plan. Detailed information on India's payments position is furnished in the tables appended to the note.

Section VII is devoted to a tentative estimation of available foreign exchange resources for the Second Five Year Plan. Section VIII, the concluding section of the note, highlights a few balance of payments problems which are required to be studied for framing the Second Five Year Plan.

VI. BALANCE OF PAYMENTS AND THE FIRST FIVE YEAR PLAN introductory

The balance of payments can be regarded from one point of view as a means for the orderly utilisation of foreign exchange resources for the development plan. The primary aim in this case is to ensure that the imports of machinery and equipment needed for the Plan take place in appropriate quantities and at the appropriate time and that they are not hampered by financial difficulties. What this needs is a foreign exchange budget drawn up on the best information available regarding the types and quantities of capital goods that will be required as well as the total foreign exchange that will be available by way of accumulated reserves, foreign aid and grants, private capital inflow and lastly net current earnings resulting from the country's visible and invisible trade, the last item being a positive or a negative quantity. This enumeration cuts across the normal division of the balance of payments between a current and a capital account, but is more appropriate for focussing attention on the all important question of total availability of foreign exchange resources. The general effect of a development plan should be to bring about a deficit in the current account, directly because of the increased imports of producer goods and indirectly through higher investment leading to higher incomes, higher demand for imported raw materials and consumer goods and possibly a diversion from exports to domestic consumption. This approach was implicit in the outline of India's First Five Year Plan. Also in addition to the needs arising from Plan expenditure, in the light of the situation which prevailed at that time, the Planning Commission gave additional importance to food-grains imports; for the base year and the last year of the Plan, they were estimated to be of the order of Rs. 80 and Rs. 115 crores respectively. Although no estimates of expenditure were offered for the remaining years of the Plan it was visualised that about 3 million tons of foodgrains would be needed every year. As compared to this, the direct foreign exchange expenditure, *i.e.*, on producer goods for Plan projects during the whole of the Plan period was expected to be only Rs. 400 crores. Not only was the expenditure on foodgrains to be higher than on producer goods but one of the principal aims of the Plan was to "accord a high priority to lines of production which would help to reduce import requirements and increase the country's exportable surpluses". From this it may appear that the balance of payments was regarded as an objective rather than an instrument of Government policy. The inconsistency is, however, only on the surface. It is quite clear that the First Five Year Plan recognised the need to establish foreign trade on a sure footing so that in the subsequent plans when the tempo of development would be accelerated, it could be used as an effective instrument of State Policy—the idea was to sharpen the tool and keep it in readiness for future use. This distinction between the short-term and long-term roles of the balance of payments must be borne in mind for any assessment we may wish to make of its performance during the first four years of the First Plan.

On the basis of a total development expenditure of Rs. 2,069 crores, the Planning Commission estimated that there would be a current account deficit of Rs. 180 to Rs. 200 crores every year, only Rs. 50 crores of which would be met out of the sterling balances. The estimate faithfully reflected the somewhat precarious balance of payments situation which prevailed at the time. The deficit of Rs. 136.3 crores which was incurred in 1951-52 serves to illustrate the point. But the turning point came almost immediately after the first quarter of the (calendar) year 1952. There have been occasional deficits in some quarters since then but the overall position in the years 1952, 1953 and 1954 has been a surplus one as may be seen from the following table.

(Rs. Crores)												
	1952				1953				1954			
	I	2	3	4	I	2	3	4	I	2	3	4
Net Current Account	-58.1	-37	+25.4	+38.1	+16.9	-11.1	+5.2	+47.7	+20.8	-10.2	-14.5	+21.5*
Surplus(+)	} +1.7				} +58.7				} +17.6			
Deficit(-)												

*Estimate.

The reasons for this admittedly unexpected performance of the balance of payments are best examined with detailed reference to the major components of the balance of payments *viz.*, exports and imports and the major items of the invisible account. We shall also attempt a brief survey of the flow of private foreign investment not so much for explaining what has happened as to make a forecast for the remaining year of the Plan.

Exports and Imports.

As has been said earlier, the general aim of the Plan was to increase the production of commodities which would reduce the country's dependence on foreign imports as well as increase the surplus available for export. On this basis the volume of exports was expected to rise during the Plan period by 30 per cent as compared to 1948-49 and 10 per cent over 1950-51 (which was a boom year for exports). Imports, after taking into account the combined effects of rising machinery imports and increases in domestic production, were only expected to rise by 3 per cent over 1948-49 when the O.G.L. was in full operation. Table 4 attached to this note compares the volume of exports from 1950-51 up to the end of 1953-54 with the targets for exports as laid down by the Planning Commission. It will be seen that while in respect of a few items the targets have been reached or surpassed, in many others exports are running at a rate lower than that set for at the end of the Plan period by the Planning Commission. Prices on the other hand have behaved as might have been expected; they have declined below the levels prevailing in the base year. All the principal groups reached their peak levels in 1951-52. Food, Drink and Tobacco is the only group which continues to remain above the 1952-53 level which itself was considerably higher than that in 1948-49. The group has benefited from the removal of controls by the U.K. generally and lately from the boom in tea prices. As regards the other two important export commodities *viz.*, jute goods and cotton textiles, it seems that, among other causes, the short-fall in domestic output of raw jute is likely to have been a limiting factor in the case of the former. Cotton textiles, on the

other hand, were running at a reasonably satisfactory level (of 826 million yards) in 1954-55 but Japanese competition should from now on make itself felt rather strongly and it will probably be difficult to realise the target of 1,000 million yards set by the Planning Commission.

On the side of imports, the major source of miscalculation is obviously foodgrains. They have, in the last year or so, been running at an annual rate of Rs. 62 crores which may be compared with the imports of Rs. 153 crores which took place as recently as 1952-53 (Table 5). Moreover, part of this represents imports of Burmese rice for stocks and not for immediate consumption ; in a sense it had no effect on net balance of payments as there has been substitution of stocks for exchange reserves. What is perhaps more surprising is the behaviour of machinery imports (other than defence stores). They have steadily fallen from Rs. 109 crores in 1951-52 continuously to Rs. 79 crores in 1954-55. The prices of machinery have been declining which means that there may not have been much reduction in the rate of real investment in plant and equipment. Even so, machinery imports seem to be considerably below the level that should obtain in the last stages of the Plan. These two groups of articles, foodgrains and machinery, provide the explanation of why the deficits in the balance of payments so far have been so infrequent and so small. Further, in the last four years, there has been sizeable expansion in the installed capacity of a large number of miscellaneous industries, such as automobiles, electrical products, light engineering, chemicals, plastics, etc., although in several of them current production is far below installed capacity. The increase in the domestic output of these industries may also have supplanted imports to a limited extent partly through the tightening up of import quotas and licensing. While exports roughly followed the course visualised in the Plan, domestic investment particularly in the public sector specially requiring goods from abroad was sluggish. On the other hand, the increase in the production of foodgrains was responsible for a considerable saving of foreign exchange. A slight liberalisation of consumer goods imports was, in the circumstances, to be expected. This can be seen in the period subsequent to 1951-52 (Table 5).

The rate at which imports of consumer goods have been liberalised during the last two or three years would seem meagre or adequate depending on whether we take a short-term or a long-term view. Attention has been drawn to this distinction in the foregoing paragraphs. A strict control over imports and exports was one of the important postulates of the First Five Year Plan. While there would have been occasion for more liberal imports (even of less essential consumer goods) had there been any signs of inflationary pressures, there was no need to allow such imports since in the last two years the magnitude of deficit financing was considerably below expectation and the price level was either stable or declining. The conclusion seems inescapable that commercial policy during the last four years has been consistent with the principles enunciated by the Planning Commission. It is true that in the last few years Government's export policy has been subjected to some criticism, especially in regard to the speed with which export duties were adapted to changing international demand, but by and large export control has been administered with speed as well as efficiency. Similarly there has been some feeling that the advantage of falling overseas prices has not been passed on to consumers of imported goods. But the year 1953 and part of 1954 have largely been periods

in which signs of deflationary forces were noticeable in the economy. An undue liberalisation of imports would have only aggravated this pressure. In any case the only anti-inflationary imports, the Commission contemplated, were food imports. It is almost certain that it hoped to meet the secondary demand (generated by the development programme) through higher domestic production rather than through imports.

Another important respect in which the prognostications of the Commission have gone wrong is in regard to the terms of trade. It expected the terms of trade to deteriorate by 10 per cent below the level for 1948-49 during the period of the Plan. The movement till the end of March 1954 roughly corresponded to this expectation although the deterioration was probably not more than 5 per cent. Between April and December 1954, however, there was a distinct improvement of about 10 per cent so that the worsening of the earlier period was more than neutralised. It is difficult to say how long the favourable terms of trade will last.

Invisible Items.

The chief interest in the invisible account of India's balance of payments is that it contributes to the current account surplus. Quite a substantial portion of this surplus is fictitious, that is to say, it arises because our imports are recorded on a c.i.f. basis. Payments on account of transportation and insurance as presented in the official compilations so far correspondingly understate the position. On the basis of the freight survey which the Reserve Bank of India is now conducting, it appears that freight payments on private account alone may have amounted to Rs. 36 crores in 1953 *i.e.* roughly 8 per cent of c.i.f. value of imports. Insurance may have amounted to another Rs. 7 crores. To these must be added freight and insurance on Government imports paid directly by the High Commissioner in London and the India Supply Mission, Washington. Most of this information is available with us and has been incorporated in the following table. Receipts under foreign travel are similarly the result of estimates based on the tourist survey conducted by the Bank. The figures are aggregated for the first three and a half years of the Plan (April 1951- September 1954).

(Rs. Crores)

	Receipts	Payments	Net
Transportation	118.7	310.0	-191.3
Investment Income	55.6	93.9	-38.3
Foreign Travel	8.3	51.8	-43.8
Insurance	20.8	12.3	+8.5
Government (not included elsewhere)	88.7	57.8	+30.9
Miscellaneous	147.0	33.6	+113.4
Unclassified	148.8	19.7	+129.1
TOTAL	587.9	579.1	+8.8
Private Donations	72.2	20.7	+51.5
GRAND TOTAL	660.1	599.8	+60.3

The foregoing invisible account although more refined and complete than has been published so far is still far from perfect. (The item unclassified, in particular, needs to be broken down—a special sample survey is being initiated for this.) Nevertheless, it is easy to see that it has accounted for a surplus of about Rs. 60 crores in the three and a half years or an average of Rs. 19 crores per year.

The invisible account is eventually capable of yielding a larger surplus, provided adequate attention is paid to some of the items. The basic weakness of our invisible trade is in respect of transportation payments. More than Rs. 100 crores has been paid out annually to foreign shipping companies. Given freight rates and 16 composition on trade, the amount would vary with the volume of imports. In other words, a considerably larger amount would have had to be paid out if imports during the three and a half years had reached the expected level. While the freight collected by foreign carriers on Indian exports does not constitute (in the net) a drain on foreign exchange resources, the freight paid on imports does. This indicates the need for taking measures, which will gradually reduce our dependence on foreign shipping in the same way as the First Five Year Plan reduced the dependence on imported foodgrains. Expenditure of foreign tourists in India was negligible during the period as a whole but with the rapid rise in the number of tourists from 25,000 in 1952 to 35,000 in 1954 receipts under foreign travel have probably increased in the last two years. The series of measures which are being undertaken by the Ministry of Transport to encourage foreign tourism may considerably increase the income potential of this item in the coming years.

External assistance and inflow of private capital

These items, though external to the current account, are relevant to an appraisal of the behaviour of the balance of payments. External assistance utilised during the period 1951-54 was roughly of the order of Rs. 135 crores out of which the U.S. wheat loan alone accounted for Rs. 90 crores. Excluding the Wheat Loan, foreign assistance utilised during the period amounted to an annual average of Rs. 13 crores.

External Assistance 1951-54*

(Rupees crores)

	Authorised	Utilised	Unutilised
Loans	117.5	95.7	21.8
Grants	116.7	36.2	80.5
TOTAL	234.2	131.9	102.3

*Source : Five Year Plan Progress Report for 1953-54.

An important item which must be considered in relation to the movement in the sterling balances is 'private long-term capital'. Figures relating to this are mostly estimates but it is interesting to note that the 'net' increase in foreign business investment (*i.e.*, the net assets of branches of foreign firms and ordinary and preference shares and debentures held by foreigners) in the four years (1951-54) may well have amounted to Rs. 100 crores or an annual average of Rs. 25 crores.

Of this, fresh inward remittances in cash accounted for only Rs. 6 crores. The remainder comprised (i) investment in the form of goods and (ii) retained or reinvested profits. The recent survey of foreign investment reveals that for 1952 and 1953 the total profits and dividends accruing to 'firms' and 'companies' resident abroad amounted to about Rs. 26 crores and Rs. 32 crores respectively. The figures of remittances made from profits accruing during the relative years are not yet fully available. It is, therefore, difficult to find out what percentage of the profits was ploughed back in the business. But from such figures as are available, it appears that of the total accrued profits about a third, or Rs. 8-10 crores, was retained in India. On this basis the total reinvestment out of profits in the four years 1951-54 would come to Rs. 35-40 crores, the branches of foreign firms and companies probably accounting for Rs. 30 crores. The balance of the increase of Rs. 50-60 crores in 'net' investment must have been in the form of goods. The relevance of this to the Plan is that, at the minimum, investment of this order can take place automatically in the private foreign sector, provided the politico-economic climate in the country is favourable for the purpose. Quantitatively such reinvestment has been more important in the past few years than investment in the public sector financed through foreign loans and grants (the U.S. Wheat Loan is naturally not relevant in this context). Some of the actions of Government, such as the amendments to the Constitution which reserve to the legislature the power to decide the quantum of compensation in cases of acquisition of property by Government, the imposition of super-tax on all dividends paid to non-resident shareholders, the imposition of death duty, the decision to close down foreign automobile assembly plants, etc., have been adversely criticised abroad. If it is intended that private foreign capital should be allowed to contribute to the success of the Second Five Year Plan, on a larger scale than at present, there is perhaps an urgent need to make a thorough examination of the implications of these measures in relation to the question of finding resources from abroad for the next Plan.

Draft on sterling Balances

To finance the envisaged deficit on balance of payments of Rs. 180-200 crores per annum, the Plan provided for the utilisation of the sterling balances to the tune of Rs. 50 crores per annum. However, the utilisation so far has been at a lower rate, the level of sterling balances falling by Rs. 144 crores from Rs. 877 crores at the end of March 1951 to Rs. 733 crores by mid-March 1955. The point to be noted here is that in 1951-52 alone there were drawings to the extent of Rs. 165 crores, so that in the remaining three years there has actually been a net addition of Rs. 12 crores to sterling balances.

Summary of conclusion regarding Balance of Payments during the Plan period

Before proceeding to make a forecast for the year 1955-56, it may be permissible to recapitulate the factors which prevented deficits from arising in the first four years of the

Plan. The improvement in the production of foodgrains must take first place. The Plan contemplated deficits amounting to Rs. 180-200 crores a year which very nearly represents the value of 3 million tons of foodgrains. Secondly, the rate of public expenditure was substantially lower than estimates. This directly reduced Government's foreign expenditure below the optimum level. The expected inflationary consequences of a rising rate of investment did not materialise, although it is unlikely that with the existing import policy the indirect effects of this would have been adequately reflected in the balance of payments. There was some deficit financing in the last year or so but the increase in domestic production noticed in 1952 and to a smaller extent in 1953 appears to have been sufficient to neutralise its effects.

Last year of the Plan

If the foregoing analysis is correct it is obvious that the forecast cannot be made without some knowledge of the behaviour of these two factors. A considerable proportion of the rise in foodgrains production is probably of a permanent kind. Except for sugar, imports of food are not likely to figure in 1955-56. The level of capital goods imports by the Government is expected to be slightly higher than in the previous year. One thing is clear; the present rate of Government's development expenditure is far below the level envisaged in the budgets (as reflected in the rise in the floating debt) and in view of the usual time-lag the balance of payments for the remaining year will be affected more by the direct effects of the expenditure than by the indirect effects on the national income, prices, etc. It may be assumed that private imports will be at a slightly higher level than in 1954-55.

The detailed commodity-wise forecast would hardly be of any use, the general pattern of trade will be as follows.

(i) *Exports*.—A slight fall over the 1954-55 level—mostly because of a decline in prices. Tea will almost certainly fall in price. Cotton textiles may not do so well owing to increased competition from Japan.

(ii) *Imports*.—No food imports have been assumed.

Machinery imports would amount to Rs. 120 crores. The merchandise account in 1955-56 will not in that case be very different from that in 1953-54 and 1954-55. In view of the stability of the invisible account as a whole, there should be a small surplus on the current account.

Private Foreign Capital 1955-56

It was indicated earlier that in the first four years there was, on an average, a 'net' private investment from abroad of about Rs. 25 crores. A major portion of investment in the last three or four years, as is quite well known, went into the oil refineries. The total investment in the two completed oil refineries may be estimated at about Rs. 40-42 crores. The investment in the third refinery which may be completed this year is of a comparatively small order, *i.e.*, Rs. 7-8 crores.

As far as is known, no major projects with foreign participation similar to the oil refineries are under contemplation at present. Private capital of the order of about Rs. 9 crores is expected to flow into the steel plant which is being set up with German collaboration. But this will be spread over *four* years. It would seem therefore that even after taking into account the probable level of retained or reinvested profits (Rs. 8-10 crores) the *net* foreign investment in 1955-56 may not exceed Rs. 15 crores.

VII. SURVEY OF FOREIGN EXCHANGE RESOURCES FOR THE
SECOND FIVE YEAR PLAN

Possible Savings from Current Account

It is proposed to review briefly the foreign exchange resources which may be available at the commencement of the Second Five Year Plan on the basis of what can be easily estimated at present.

The first source of foreign exchange is the net balance on current account (transactions in goods and services) if it is a positive item. The following may be considered as a rough presentation of the current account on the eve of the Second Plan :

	(Rs. crores)
<i>Imports, f. o. b.:</i>	
Private	475
Government (Other than those financed by aid)	112
Total imports	587
<i>Exports, f. o. b.</i>	555
Trade balance.	-32
Invisibles (net)	+32
Balance on current account	Nil

The position is expected to be one of balance, if not a small surplus. This indicates that on the eve of the Second Plan there will be external equilibrium in the economy. In order to derive from this table an estimate of the surplus available for financing developmental imports in the Second Five Year Plan, certain adjustments have to be made. Firstly, it is assumed that roughly this pattern of payments will prevail in the next five years, if present conditions continue. Secondly, these estimates include machinery, imports (other than defence stores) of the order of Rs. 80 crores by both the public and the private sectors. Of this amount roughly half may be estimated to account for the imports of spare parts and machinery for replacement and maintenance, and the balance of Rs. 40 crores as the value of new plant and machinery required under the First Plan in both the public and private sectors. The latter may, therefore, be legitimately deducted from the present level of imports, since this will be available to finance the import of developmental goods in the Second Plan. Thirdly, as referred to in respect of the invisible account in Section VI, earnings under Tourist Expenditure in India may be expected to record progressive increases in the coming years. Similarly income from banking and insurance services rendered by Indian companies abroad, which have been showing some progress in the last two years, may show a further spurt of activity. Extra earnings under these two items may be placed on an average at Rs. 10 crores per year. The total surplus available on current account may, therefore, be placed at about Rs. 50 crores per year or a total of Rs. 250 crores for the five years of the Second Plan.

Sterling Balances.

The second source relates to that part of the sterling balances which are available to finance payments deficits. They may be estimated as under :

	(Rs. crores)
Balances as on March 18, 1955.	733·2
Less	
Minimum working balance	40·0
Currency Reserve	414·9
Provision for a possible draft on account of transactions in 1955-56	30·0
Balance left for the Second Plan period	248·3

or about Rs. 250 crores.

The chief point for consideration in this connection is the adequacy or otherwise of the present currency reserve of Rs. 415 crores, in relation to the expansion in currency which may take place during the Second Plan. Considering that there already exists a cushion in the Reserve Bank's under-valuation of gold and that even the present statutory ratio of gold (revalued) and sterling to currency circulation will be maintained until currency expands up to about Rs. 1,500 crores, the present provision may be treated as adequate. Further, if the need arises the present ratio itself may be adjusted downward through an amendment of the provision in the Reserve Bank Act.

Foreign Aid

A third source is constituted by loans and grants from foreign Governments and loans from international financial institutions. At the end of 1953-54, the balance of unutilised external assistance was about Rs. 100 crores (Rs. 231 crores minus Rs. 133 crores). Authorisations for the last year of the Plan on current indications are not likely to fall below Rs. 45 crores (TCA—Rs. 40 crores ; Colombo Plan—Rs. 5 crores ; Ford Foundation—Rs. 1 crore). Setting against this the utilisation during the last year of the Plan at Rs. 30-35 crores, the amount of foreign aid which may remain unutilised may be placed at Rs. 110 crores to Rs. 115 crores. This unutilised aid is included among the available resources on the assumption that the goods and services which have been ordered for under the respective programmes and which are not expected till the end of the First Plan will be included in the projects for the Second Plan. But if they are not to be treated as part of the requirements for the Second Plan, then the unutilised aid should not be counted as part of the available resources.

It is difficult to estimate the amount of inter-governmental loans and grants which we may get in the Second Plan period. One thing is more certain at present than at the time when the First Plan was formulated ; there is a greater realisation on the part of the creditor countries of the need for extending a larger amount of economic assistance to the under-developed countries and that too in a manner which will take into account their susceptibilities. A reasonable expectation is that external assistance is likely to be at a much higher level than

hitherto. In the First Plan period appropriations of inter-governmental grants and loans (excluding the Wheat Loan) averaged about Rs. 30 crores a year. It is not, therefore, unreasonable to expect similar aid to the extent of Rs. 45 to Rs. 50 crores in the Second Plan period which will, therefore, give a total of Rs. 225-250 crores.

As we have already repaid the bulk of our borrowings from the Fund, it is possible for us to rely for short-term borrowings (3 to 5 years) on the Fund to the extent of about Rs. 40 crores. To guard against the contingency of a relative shortage of sterling in the coming years, the possibilities of raising loans on international financial centres, like the London and Swiss markets as also borrowings from institutions like the Commonwealth Development Finance Co. need to be explored. In the same way we can also step up our borrowings from the International Bank. The loans which we should be able to raise from all these institutions may be easily placed at about Rs. 200 crores. All these sources, therefore, taken together may yield exchange resources between Rs. 900 and Rs. 950 crores, exclusive of unutilised aid. One important contingency which has to be provided for in this connection is naturally the need for emergency food imports. This may not arise unless there is a failure of monsoons for a continuous period of two years or more, as our existing food stocks are adequate to tide over a crisis in one year. A sum of Rs. 150 crores may be considered quite adequate for this purpose. In any case, the available foreign exchange resources for the Second Plan (at a very liberal estimation) will probably not exceed Rs. 1,000 crores, in the absence of a foreign aid programme of altogether new dimensions. The foreign exchange position of the Second Plan, other things being equal, will not exceed this figure. On the basis of the proportion of foreign to total expenditure in the First Plan this should sustain a total development expenditure of Rs. 5,000 crores but of course the proportion may change in either direction.

VIII. BALANCE OF PAYMENTS PROBLEMS IN THE SECOND FIVE YEAR PLAN

The preceding section contained an evaluation, in very broad terms, of the foreign exchange resources for the Second Five Year Plan in the light of the present trends, but did not cover all the possible foreign exchange resources available for the Plan. Thus, for instance, the extent to which the resources based on the net balance on current account (Source I) are capable of augmentation or diminution will depend upon : (i) whether the objectives of the Plan and certain projects included therein envisage a higher level of foreign trade through expansion in both exports and imports or whether they are intended to reduce import requirements and (ii) the influences both favourable and unfavourable emanating from abroad which may affect both the volume and prices of our exports and imports. The factors included under (ii) are at best a matter for reasonable conjecture and there should be provision, whenever the efforts are unfavourable for suitable measures to neutralise them. One possible method of anticipating and providing for the influences from abroad will be through the institution of a system of annual foreign exchange budgets and their periodical comparison with the actual position. The former [*i.e.*, (i)] raises an important balance of payments problem *vis-a-vis* the Second Plan.

Inter-dependence of investment and foreign trade

Broadly speaking, the relationship of the balance of payments to the Second Plan may be expressed in a series of problems of a policy nature. The first problem relates to the size of the foreign exchange resources which may be pressed into service for the Plan, or, to put it in an alternative form, what is the extent of the deficits on current account which may be allowed for during the Plan period? This is governed, as has already been described, by the size of the available foreign exchange reserves, supplemented by probable inflow of private capital and official loans and grants. More important than these is what can be secured through the projects in the Plan itself. Just as the increase in national income arising from a given level of investment will vary with the pattern of its distribution and the average capital output ratio of each pattern, similarly it will also depend upon the pattern of distribution of the investment between what produces export income and that producing domestic income; for a given level of investment the former, if it takes advantage of international specialization, will provide a greater level of income than the latter. In making a comparison between the income effects of both types of investment it is necessary to take into account the fluctuations inherent in the requisite kinds of export income. From the point of view of maximising income under the Second Plan it is therefore essential that due attention will have to be paid to projects with stable export possibilities. What type of major projects of this nature are suitable for inclusion in the Plan will have to be examined from all aspects.

Elements in the Plan to expand Foreign trade

This is also allied to the problem of what we propose to achieve through our Plan, particularly in respect of our economic ties with the neighbouring countries in South and South East Asia, with whom we contemplate more intimate political relationship. Any economic autarky that we may aim at, in the shape of reducing our import commitments from these countries, will, through reduction in their export income, result in disrupting these economies and arrest the progress of their development programmes. Further, it may also adversely affect the level of our current earnings from exports to these countries, since it is directly linked up with our imports from them. As foreign trade is a chief source of savings for many of these countries, expansion of trade within the region to provide greater savings should be one of the objectives of the Plan. It may be possible to ensure this through the inclusion in the Plan of a few projects designed to enhance intra-regional trade, and the conclusion of trade agreements, either on a bilateral or multilateral basis, to safeguard the mutual trade interests of the countries concerned.

Plan in real terms to absorb resources from abroad

Assessment of the size of the foreign exchange resources for the Plan will merely enable the fixation of the size of the total investment. Since the foreign exchange

resources will have to be absorbed in the shape of goods and services, the second major problem relates to the need for a prior determination as to the categories of goods which will be permitted from abroad during the Second Plan. This calls for a broad analysis of the Plan in physical terms and a policy decision regarding the goods which will be produced at home and those imported from abroad. This again involves a general determination of the priorities in the fixation of the investment pattern as between the several sectors, such as industries, transport, communications, etc. and in the industrial field between capital goods industries, consumer goods industries, medium and cottage industries, etc. based on both short-term and long-term considerations. Although import policy can regulate the flow of goods from abroad of the desired kind by fixation of ceilings for each kind, it cannot by itself, ensure that imports in each category take place automatically up to the ceiling limit. So long as there is not general identity between the kinds of foreign goods demanded at home and what is sought to be regulated from abroad through import control there will be on the one hand inadequate utilisation of foreign exchange resources and on the other pressure on prices of certain imports. And if they happen to be consumer goods required by the low-income groups, it will be undesirable to allow their prices to rise through import control.

Role of Import Policy

This brings us to the problem of the role of commercial policy during the Second Plan. During the first Plan import licensing and quantitative restrictions, which had a protective effect, were resorted to to prevent the import of goods domestically produced. This was rendered possible because the level of investment was not large and the restrictive import policy did not raise the domestic price level. In the Second Plan period, the investment expenditure is bound to be substantially larger, leading perhaps to a rise in prices. A restrictive import policy may worsen the price situation. Therefore, a thorough examination of the problem of import policy is called for in respect of its anti-inflationary effect and the conflict of this aspect with its protective aspect with special reference to commodities of common consumption which may be partly imported and partly produced at home.

Present difficulty of assessing Plan's impact on balance of payments

In view of the important policy problems which are required to be solved before the size and distribution of investment are decided upon for the Second Plan, it will be just an arbitrary exercise to do any work on the possible impact of the Plan on the balance of payments and thereby assess its feasibility in terms of adequacy of foreign resources. This will have to be undertaken when at least the major outlines of the Plan are agreed upon. There is one important problem in this connection which may have to be examined in great detail. And this relates to the effects of a rise in income on the propensity to import goods and the types of goods which may be desired to be imported. Unless this is estimated at least in general terms, it may be difficult to estimate the indirect requirements of foreign exchange for the Plan.

Need for separate estimate of foreign exchange cost of projects in both public and private sectors and an annual investment survey

There is one statistical problem, however, which requires to be stressed right from now on to estimate the direct foreign exchange cost of the Plan. Considerable preparatory work on the several projects may have to be taken on hand now and in the process it is desirable to request the technical personnel connected with the projects to estimate the overall value of the capital equipment, plant, etc. required to be imported for each of the projects and also to give a distribution of this expenditure, according to the phasing of the project, in each year of the Plan. Unless this information is built up from below, no worthwhile figures of the aggregate foreign exchange cost of the projects in the public sector of the Plan can be estimated. Information on similar lines will also have to be secured from companies and firms also for estimating the foreign exchange cost of the projects in this sector. This will merely give tentative estimates of the foreign exchange cost of the projects included in the Plan, total as well as its distribution each year, which will be different from the foreign exchange expenditure materialising each year, since the pace of progress would vary considerably for each project. For this purpose, it appears necessary that we make arrangements either in the Planning Commission or in the Reserve Bank to conduct every year commencing from April 1956, an Investment Expenditure Survey. This will facilitate the collection of data on anticipated investment for the next year as well as preliminary investment figures for the current year and the actuals for the previous year. This survey will be more or less on the model of what is being undertaken both in the U. S. and Canada. It will be carried out through the distribution of questionnaires containing three basic questions relating to expenditure on repairs and maintenance, expenditure on investment and expenditure on imports. These questionnaires would be sent to all units in the public sector undertaking development work and all firms and companies in the private sector. Information on anticipated imports and also realised imports which the Survey will secure will also facilitate the annual forecast of balance of payments referred to below. There is a paramount need for a regular survey of this type, since at present information on the progress of investment expenditure under the Plan seems to be mostly derived from budget documents and after a considerable time-lag.

Forecasts of balance of payments

A similar and allied statistical problem is that connected with the need to prepare for internal use, along with the fiscal budget each year, a foreign exchange budget, showing estimated foreign receipts and payments and the sources for financing the deficit, if any. This will become highly important because of the anticipated foreign exchange difficulties in the Second Plan period. What it calls for is a forecast of the balance of payments. Periodical comparisons of the actuals with the forecast will not only ensure a refinement of the forecasting techniques in the light of experience but also facilitate the timely initiation of counter-measures to prevent adverse developments in the payments situation.

TABLE I

Estimates of outlay and Resources—Central Government's portion of First Five Year Plan

(Rs. Crores)

	Total for 1951-54	1954-55 (RE)	1955-56 (BE)	Total	Plan figure	Differ- ence
I. Outlay on the Plan . . .	445	337	444	1226	1331	-105
(a) Revenue Account . . .	33	50	80	163		
(b) Capital Account . . .	412	287	364	1063		
II. Budgetary Resources	202	115	54	371	410	-39
(1) (a) From Revenue Account . . .	161	45	72	278	160	+118
(b) Railways . . .	75	18	18	111	170	-59
(2) Capital Account						
(a) Loan from Public . . .	233	78	56	101	36	+65
(b) Small Savings and unfunded debt . . .	151	62	59	272	270	+2
(c) Miscellaneous . . .	-30	15	-10	-25	90	-115
(3) Transfer of funds from Centre to States . . .	-122	-103	-141	-366	-316	-50
III. Gap in Resources (I—II) . . .	243	222	390	855	921	-66
IV. External Assistance . . .	132	22	72	226		
(a) Grants . . .	35	23	59	117		
(b) Loans . . .	97	-1	13	109		
V. Deficit (III—IV) . . .	111	200	318	629		
VI. Deficit met by . . .		200	318			
(i) Increase (+) in floating debt . . .	+31.6	+220	+340			
(ii) Liquidation (+) of security holdings . . .	+29.8	-8				
(iii) Withdrawal (+) from cash balances . . .	+110.9	-12	-22			

ANNEXURE TO TABLE I

Notes on Items

[The figures for 1951-54 are taken from the Planning Commission's Progress Report for 1953-54 ; therefore no explanatory notes are given here in respect of these data. What follows relates to data for 1954-55 (RE) and 1955-56 (BE)].

I(a). *Outlay on Revenue Account* : (i) This was put at Rs. 53 crores for 1954-55 (BE) by the Planning Commission. In the revised estimates, total expenditure under development heads (such as Education, Medical, Civil Works, etc.) is smaller by about Rs. 3 crores. This shortfall has been adjusted, on the assumption that the expenditure which was not incurred was in respect of new schemes.

(ii) Additional provision for development services in 1955-56 put at Rs. 30 crores (e.g., Finance Minister's speech, Part A, p. 17). This has been added to the outlay in 1954-55 (RE).

I(b). *Outlay on Capital Account* : This has been calculated as follows :—

	(Rs. Crores)	
	1954-55 (RE)	1955-56 (BE)
1. <i>Capital Account not met from Revenue (as per Budget)</i>	178.54	223.30
2. <i>Less</i> (i) Defence capital outlay	13.09	22.38
(ii) Schemes of Government Trading	58.48	29.00
(iii) Currency . . . . .	..	7.85
(iv) Commuted value of Pensions and outlay on Sterling Pensions	-6.96	-6.94
	64.61	52.29
3. <i>Direct Capital Outlay under Plan (1-2)</i>	113.93	171.01
4. <i>Loans to States for Schemes included in Centre's Plan.</i>	97.62	112.40
(i) Multipurpose Projects	58.27	54.55
(ii) Rehabilitation	10.50	14.50
(iii) Community Projects	6.92	8.02
(iv) National Extension Service	1.14	2.51
(v) Industrial Housing	2.50	1.82
(vi) Relief to Scarcity Areas	13.79	18.00
(vii) Natural Calamities and Flood Control	4.50	13.00
5. <i>Railways</i>	33.11	27.59
Total Capital Outlay	95.60	128.68
Less (i) 'Normal' Depreciation not included in Plan	30.00	35.00
(ii) Capital outlay covered in Central Budget	32.49	66.09
6. <i>Loans to others, mainly for Development</i>	42.75	53.48
7. <i>Total Central Outlay under Plan (3+4+5+6)</i>	287.41	364.48

II. (1)(a). *Resources from Centre's Revenue Account* :

This is derived by subtracting the revenue deficit from I (a), i.e., development outlay on Revenue Account.

(1) (b). *Resources of Railways* : Derived as follows :—

	1954-55 (RE)	1955-56 (BE)
(i) Net surplus	6.57	7.14
(ii) Interest on funds	5.14	4.90
(iii) 'Open Line Works Revenue'	6.62	5.68
	18.33	17.72

II. (2) (a). *Loans from Public* : Loans raised in India only for 1954-55 (RE), the amount of Rs. 25 crores transferred to States out of loan receipts has been deducted.

II. (2) (b). *Small Savings* : Exclusive of loans of Rs. 3 crores and Rs. 10 crores respectively given to States in 1954-55 (RE) and 1955-56 (BE) under scheme of sharing small savings collections.

II. (2) (c). *Miscellaneous* : Includes net receipts under items other than loans, small savings and unfunded debt, floating debt, foreign loans and grants less non-development outlay on capital account, such as State trading, defence, pension and loan to States mentioned under I(2) (a) and I(2) (b).

II. (3). Calculated as follows :

	1954-55 (RE)	1955-56 (BE)
<i>Total loans to States</i>	254.91	290.20
<i>Less</i> (i) Loans for Central Schemes	97.62	112.40
(ii) From National Plan Loan	25.00	..
(iii) From Small Savings	3.00	10.00
(iv) Ways and means advances	2.00	1.96
(v) Repayments of loans by States	24.05	25.00
<i>Net loan for financing State Plans</i>	103.24	140.84

(a) *External grants* : Indicates credit to Special Development Fund.

(b) *External Loans* : Figures taken net of repayments.

TABLE 2
Trends in Small Savings since 1948-49

(Crores of Rupees)

Year ended March	Post Office National Savings Certificates	Post Office Savings Bank Deposits	3½% Ten-Year Treasury Savings Deposits Certificates	Total (1+2+3)	Cash Certificates, Defence Savings Certificates and Defence Savings Bank Deposits	Total net Receipts (4-5)
1	2	3	4	5	6	7
1948-49 . . .	15.83	19.78	..	35.61	-5.68	29.93
1949-50 . . .	15.53	15.19	..	30.72	-4.53	26.19
1950-51 . . .	17.34	16.27	5.31	38.92	-5.48	33.44
1951-52 . . .	17.86	12.83	13.08	43.77	-5.23	38.54
1952-53 . . .	18.49	17.83	7.25	43.57	-3.52	40.05
1953-54 (Provisional)	20.29	14.26	6.47	41.02	-3.13	37.89*
Average for 1951-54	18.88	14.97	8.93	42.78	-3.96	38.82
1954-55—						
Revised estimate . . .	19.12	20.50**	5.00	52.18@	-2.18@@	50.00
April 1954—						
January 1955 (actual) . . .	15.37	13.81	4.26	40.21 †	-1.83	38.38
April 1953—						
January 1954 . . .	16.15	8.22	5.59	29.96	-2.71	27.25
1955-56—						
Budget Estimate . . .	20.00	21.00**	5.00	53.76@	-1.40@@	52.36
TOTAL 1951-56 . . .	95.76	86.42	36.80	234.30@	-15.46	218.84
Average 1951-56 . . .	19.15	17.28	7.36	46.86@	-3.09	43.77
Total April 1951- January 1955 . . .	72.01	* 58.73	31.06	168.57 †	-13.71 •	154.86

*Subsequent data (as supplied by the National Savings Commissioner) indicate that the total net receipts during 1953-54 amounted to Rs. 40.28 crores.

**Includes Defence Savings Bank Deposits.

@Includes National Plan Certificates and 15-year Annuity Certificates.

@@Excludes Defence Savings Bank Deposits.

†Includes Rs. 6.33 crores on account of the 10-year National Plan Certificates and Rs. 0.44 crore on account of the 15-year Annuities.

TABLE 3

*Consolidated Position of Scheduled Banks (Annual) 1949-54**Annual Averages*

(Amount in crores of rupees)

Year	Demand Liabilities	Time Liabilities	Total Liabilities	Total cash balances	% to total Liabilities	Excess Balances	Investments	% to total Liabilities	Total Credit*	% to total Liabilities
1949 . .	609.8	279.9	889.7	101.2	11.4	30.3	..	..	450.9	50.7
1950 . .	595.2	273.7	868.9	96.0	11.1	26.3	..	..	442.0	51.8
1951 . .	604.5	288.8	893.3	96.4	10.8	22.9	310.9	34.8	543.6	59.6
1952 . .	556.7	300.8	857.5	86.0	10.0	18.3	304.1	35.4	535.6	62.5
1953 . .	528.5	324.6	853.1	77.9	9.1	12.8	318.0	37.5	507.9	59.5
1954 . .	545.5	342.0	887.5	83.5	9.4	16.8	332.9	37.5	550.3 (24.5)	62.7

*Includes advances, inland bills purchased and discounted and money at call and short notice.

N.B.—Foreign bills purchased and discounted are shown within brackets.

TABLE 4

India's principal exports during the First Plan Period in relation to the targets announced

Commodities	Unit	1948-49	1950-51	1951-52	1952-53	1953-54	1954-55 (Annual rate based on 9 months)	Planning Commission's target for annual rate of exports by the end of the Plan
I	2	3	4	5	6	7	8	9
<i>Commodities likely to increase</i>								
Cotton piecegoods	Million yards	361	1284	428	620	769	826	1000
Jute manufactures	tons	929	651	808	706	778	871	1000
Manganese ore	Do.	309	821	1125	1410	1568	937	1000
Oils	Million gallons	15.5	29.2	21.4	34.3	7.9	21.6	41.4
Coal and coke	ooo tons	13.32	994	2801	2668	1917	1351	3000
Black pepper	ooo cwts.	1.41	308	298	248	248	260	300
Tobacco	Million lbs.	69	103	112	80	65	85	96
Coir manufactures	ooo cwts.	869	1560	1219	1282	1522	1469	1700
Woollen manufactures (carpets and rugs)	Million lbs.	8.3	14.1	11.6	7.1	9.0	9.3	16.0
<i>Commodities likely to remain constant</i>								
Tea	Million lbs.	443	442	429	427	471	479	440
Mica	ooo cwts.	340	407	408	284	250	346	340
Lac	Do.	491	662	714	688	538	539	500
<i>Commodities likely to fall</i>								
Oils	ooo tons	103.3	202.8	80.0	56.4	26.0	20.6	50.0
Art Silk piecegoods	Million yards	24.5	7.0	8.4	3.6	3.2	3.8	10.0

Source:—Export (volume) figures are taken from accounts relating to the Sea, Air and Land borne Trade of India published by the Directorate General Commercial Intelligence and Statistics and the Journal of Industry and Trade published by the Ministry of Commerce and Industry; the targets in column 9 are from the Draft First Five Year Plan Report, Vol. II.

TABLE 5
India's Principal Imports during the Plan Period

Commodities	Unit	1948-49	1950-51	1951-52	1952-53	1953-54	1954-55 (Annual rate based on 9 months)
Foodgrains	Million tons	2.4 (102)	2.1 (80)	4.8 (228)	2.9 (153)	1.4 (64)	1.0 (62)
Sugar	ooo tons	11 (1)	52 (4)	10 (1)	.. ..	28* (2)*	125* (5)*
Mineral oils	Million gallons	536 (36)	799 (55)	930 (71)	901 (77)	978 (85)	991 (86)
Machinery@	Value (Crores of Rs.)	78	91	109	86	84	79
Metals : Iron and steel	ooo tons	158 (12)	188 (14)	165 (21)	156 (20)	211 (22)	346 (26)
Others	ooo tons	141 (23)	275 (33)	94 (23)	108 (23)	97 (16)	141 (27)
Raw Jute	Lakh bales	42 (71)	19 (27)	24 (67)	13 (16)	14 (14)	10 (10)
Raw Cotton	ooo tons	227 (81)	216 (101)	217 (139)	138 (77)	116 (53)	125 (58)
Dyes	Million lbs.	15.0 (12)	14.0 (12)	15.3 (14)	7.2 (8)	15.7 (15)	15.5 (16)
Vehicles	Value (Crores of Rs.)	33	25	35	30	24	31

N.B.—Figures in brackets represent the value in crores of rupees.

*Incomplete

@Machinery imports exclude Government defence stores.

Source:—Accounts relating to the Sea, Air and Land borne Trade of India published by the Directorate General, Commercial Intelligence and Statistics.

TABLE 6
India's Overall Balance of Payments

(Rupees crores)

	1951-52	1952-53	1953-54	1954-55 (April 1954- September 1954)	Total 1951-55 (April 1951- September 1954)
<i>Imports f.o.b.</i>					
Private	588.6	390.7	409.3	240.1	1628.7
Government	262.2	169.1	118.4	50.5	600.2
TOTAL	850.8	559.8	527.7	290.6	2228.9
<i>Exports f.o.b.</i>					
Private	714.1	590.0	533.7	252.3	2090.1
Government	15.9	11.9	6.1	0.6	34.5
TOTAL	730.0	601.9	539.8	252.9	2124.6
<i>Trade Balance</i>					
Private	+125.5	+199.3	+124.4	+12.2	+461.4
Government	-246.3	-157.2	-112.3	-49.9	-565.7
TOTAL	-120.8	+42.1	+12.1	-37.7	-104.3
Invisibles (Net)	-20.7	+23.8	+31.5	+11.2	+45.8
Current Account (Net)	-141.5	+65.9	+43.6	-26.5	-58.5
Balance on Capital Account	-35.8	-25.1	-30.8	-3.3	-95.0
Errors and Omissions	-50.1	-31.2	-2.5	-8.3	-92.1
<i>Overall Balance Surplus (+) or Deficit (-)</i>	-227.4	+9.6	+10.3	38.1	-245.6

BALANCE OF PAYMENTS AND PLANNED DEVELOPMENT

Official Donations	-15.2	+10.7	+19.1	+1.8	+36.8
Official Loans	+59.6	+35.1	+1.5	+0.6	+96.8
Private Capital Movements*	-2.3	+0.9	-10.4	-3.3	-15.1
Net Changes in Foreign Exchange Reserves**	+164.9	-56.3	-20.5	+39.0	+127.1
Total Financing of Surplus (+) or Deficit(-)	-227.4	-9.6	-10.3	+38.1	+245.6

N.B.—Based on Bank's exchange control data; merchandise data in exchange control records differ from Customs figures published in Monthly Sea Borne Trade Accounts in timing, coverage and valuation.

*The inflow of private capital through reinvestment of profits and imports of goods by branches of foreign companies referred to in the Note are excluded here. Their incorporation would not affect the *net* position of the final balance each year or for the entire period.

**Increase (—).

TABLE 7
India's Imports (f.o.b.)—April 1951-March 1952

(Crores of Rupees)

Item	Sterling Area including Pakistan	Dollar Area	Rest of Non-sterling Area (Including O.E.E.C. Countries)	All Areas
1. Food	41.3	141.4	34.2	216.9
2. Jute, raw	62.8	..	..	62.8
3. Cotton, raw	16.5	71.9	48.8	137.1
4. Oils	34.8	13.2	0.1	48.1
5. Machinery	53.1	16.7	27.7	97.6
6. Vehicles	12.0	10.8	2.4	25.2
7. Others	122.5	46.2	94.4	263.0
TOTAL	343.0	300.2	207.6	850.8

Source : Exchange Control Records.

TABLE 8
India's Imports (f.o.b.)—April 1952-March 1953

(Crores of Rupees)

Item	Sterling Area including Pakistan	Dollar Area	O.E.E.C. Countries	Rest of Non-Sterling Area	All Areas
1. Food	31.4	73.6	0.9	18.4	124.2
2. Jute, raw	14.9	..	..	..	14.9
3. Cotton, raw	16.1	15.9	1.5	15.4	49.0
4. Oils	40.7	24.6	0.5	0.3	66.0
5. Machinery	48.2	14.6	21.5	3.6	87.8
6. Vehicles	8.2	10.0	1.2	0.2	19.5
7. Others	96.9	28.9	50.3	22.1	198.4
TOTAL	256.4	167.6	75.9	60.0	559.8

Source : Exchange Control Records.

TABLE 9

India's Imports (f.o.b.)—April 1953-March 1954

(Crores of Rupees)

Item	Sterling Area including Pakistan	Dollar Area	O.E.E.C. Countries	Rest of Non-sterling Area	All Areas
1. Food	34.0	15.0	2.7	5.8	57.3
2. Jute, raw	11.5	..	..	..	11.5
3. Cotton, raw	15.7	5.6	0.1	31.9	53.3
4. Oils	53.3	15.0	0.5	0.2	69.0
5. Machinery	44.2	16.8	24.2	2.0	87.0
6. Vehicles	8.2	15.6	2.1	0.1	26.0
7. Others	113.4	26.1	63.1	20.5	223.4
TOTAL	280.3	94.1	92.7	60.5	527.7

Source : Exchange Control Records.

TABLE 10

India's Importers (f.o.b.)—April-September 1954

(Crores of Rupees)

Item	Sterling Area including Pakistan	Dollar Area	O.E.E.C. Countries	Rest of Non-sterling Area	All Areas
1. Food	19.0	8.5	2.0	1.2	30.7
2. Jute, raw	4.3	..	..	..	4.3
3. Cotton, raw	9.1	9.0	..	9.3	27.4
4. Oils	34.7	2.3	0.3	0.1	37.4
5. Machinery	25.5	6.0	15.9	0.9	48.3
6. Vehicles	5.5	6.6	3.9	0.2	16.2
7. Others	62.7	14.6	34.6	14.5	126.3
TOTAL	160.8	47.0	56.7	26.2	290.6

Source : Exchange Control Records.

TABLE II
India's Exports (f. o. b.)—April 1951-March 1952
 (Crores of Rupees)

Item	Sterling Area Including Pakistan	Dollar Area	Rest of Non-sterling Area (Including O.E.E.C. countries)	All Areas
1. Jute Manufactures	105.9	85.5	41.3	232.7
2. Cotton textiles	53.0	4.0	8.9	65.9
3. Tea	69.1	10.1	9.2	88.4
4. Others	169.4	73.9	99.7	343.0
TOTAL	397.4	173.5	159.1	730.0

Source: Exchange Control Records.

TABLE 12
India's Exports (f. o. b.)—April 1952-March 1953.
 (Crores of Rupees)

Item	Sterling Area including Pakistan	Dollar Area	O.E.E.C. Countries	Rest of Non- Sterling Area	All Areas
1. Jute manufactures	42.7	60.0	10.0	24.4	137.1
2. Cotton textiles	65.7	0.6	0.5	11.6	78.5
3. Tea	58.1	10.7	3.3	5.0	77.0
4. Others	140.0	72.5	49.3	47.8	309.3
TOTAL	306.4	143.7	63.0	88.8	601.9

Source: Exchange Control Records.

TABLE 13
India's Exports (f. o. b.)—April 1953-March 1954
 (Crores of Rupees)

Item	Sterling Area including Pakistan	Dollar Area	O.E.E.C. Countries	Rest of Non- Sterling Area	All Areas
1. Jute Manufactures	33.2	39.3	7.8	31.4	111.6
2. Cotton Textiles	65.4	1.1	0.7	13.8	81.1
3. Tea	76.2	12.1	3.9	4.8	97.0
4. Others	116.5	63.0	33.1	37.5	250.1
TOTAL	291.3	115.5	45.5	87.5	539.8

Source: Exchange Control Records.

TABLE 14

India's Exports (f. o. b.)—April-September 1954

(Crores of Rupees)

Item	Sterling Area including Pakistan	Dollar Area	O.E.E.C. Countries	Rest of Non-Sterling Area	All Areas
1. Jute Manufactures	26.2	17.2	4.2	12.4	60.0
2. Cotton Textiles . . .	29.3	0.5	0.6	6.8	37.2
3. Tea	29.9	4.7	1.0	3.0	38.6
4. Others	57.4	26.5	18.6	14.8	117.1
TOTAL	142.8	48.9	24.4	37.0	252.9

Source :—Exchange Control Records.

TABLE 15

Index Numbers of Exports, Imports and Terms of Trade (1952-53=100)

EXPORTS

Year	Price				Quantity			
	Food, Drink and Tobacco	Raw Materials	Manufactured Articles	General	Food, Drink and Tobacco	Raw Materials	Manufactured Articles	General
1948-49*	78	82	91	85	96	99	101	96
1949-50*	87	87	91	90	104	91	109	101
1950-51	101	117	111	110	107	79	122	106
1951-52	111	131	161	139	106	79	94	93
1952-53	100	100	100	100	100	100	100	100
1953-54	107	99	84	94	98	74	114	99
1954-55	126	100	84	99	108	71	117	101
(April—December 1954).								
December 1954	136	99	86	103	139	96	121	118

*Estimated.

TABLE 15—*Contd.*

IMPORTS

Year	Price				Quantity			
	Food, Drink and Tobacco	Raw Mate- rials	Manu- factured Articles	Gene- ral	Food, Drink and Tobacco	Raw Mate- rials	Manu- factured Articles	Gene- ral
1948-49*	80	85	76	80	100	102	147	119
1949-50*	77	88	72	79	91	106	157	123
1950-51	77	90	85	85	83	130	122	111
1951-52	91	118	110	107	155	132	118	132
1952-53	100	100	100	100	100	100	100	100
1953-54	91	93	98	93	64	100	114	95
1954-55	77	94	102	91	63	108	129	102
(April—December 1954)								
December 1954	76	98	108	93	85	85	122	100

*Estimated.

TERMS OF TRADE

1948-49	106
1949-50	114
1950-51	129
1951-52	130
1952-53	100
1953-54	101
1954-55	109
(April—December 1954)	
December 1954	111

NOTE.—The indices of exports and imports for 1948-49 to 1951-52 presented in this table are adjusted to the base 1952-53-100, and hence would differ from those published in the Reserve Bank Bulletins which have, as base, 1948-49-100.

THE SECOND FIVE YEAR PLAN
A TENTATIVE ESTIMATE OF FOREIGN EXCHANGE RESOURCES
(Economic Division, Planning Commission)

INTRODUCTION

The object of this paper is to make an assessment, on a rough and tentative basis, of the country's earnings and requirements of Foreign Exchange during the Second Plan period, and thus of the order of short-fall, if any, of earnings as compared to requirements.

2. Two points require to be specially borne in mind in considering this paper. The first is that the various estimates given here are based on certain assumptions regarding the changes, particularly in production and rates of investment, that are likely to occur during the Second Plan period. The Second Plan is at present in a process of formulation ; and when it is finalised some of the assumptions referred to above will undoubtedly be changed.

3. The second point that should be specially taken note of is the admitted difficulty of assessing several years in advance the conditions of international demand for and supply of the goods and services entering a country's foreign trade. Since, however, this is a factor which could not be ignored in the calculation, some assumptions had inevitably to be made with regard to it.

4. The procedure adopted in this paper has been to estimate the annual average size of the different items in the country's balance of payments during the period of the Second Plan and to compare these estimates with the actual figures of the balance of payments in the year 1953-54—the latest complete financial year for which balance of payments data are available.*

I. THE BALANCE OF PAYMENTS POSITION IN 1953-54

5. India's balance of payments position on current account in 1953-54 is indicated below :—

Balance of Payments on Current Account; 1953-54

<i>Merchandise</i>	(Rs. Crores)
Exports (f.o.b.)	539·0
Imports (c.i.f.)	571·3
Merchandise balance	—32·3
<i>Invisibles (excluding official donations) Net</i>	+79·2
<i>Total balance on current account</i>	+46·9
Errors and Omissions	+0·7
	+47·6

* The use of 1953-54 as the base year is intended merely to measure the variations in earnings and payments. In estimating the likely level of trade and payments in the Second Plan, account is taken of the special factors operating in 1953-54 in the light of the trend revealed over a number of years.

6. It will be of interest to note that of the total merchandise imports of Rs. 571·3 crores in 1953-54, imports of machinery, metals, and vehicles, which are expected to be on a greatly extended scale during the Second Plan period, amounted to a total of Rs. 147 crores during the year concerned. Official donations (net) amounted to Rs. 18·7 crores during the same year.

II. ESTIMATED VARIATIONS IN THE BALANCE OF PAYMENTS ON CURRENT ACCOUNT DURING THE SECOND PLAN PERIOD

7. An attempt has been made in this Section to estimate the annual average size of the following items in the current account balance of payments during the Second Plan period, viz., (i) merchandise exports, (ii) merchandise imports *excluding* imports of machinery, metals and vehicles, and (iii) the balance of invisible transactions *excluding* official donations. The relevant estimates are presented in Statement I.

A. Merchandise Trade

8. In the first part of Statement I which relates to merchandise trade are listed the principal commodities which enter into the country's export and import trade. On the export side are enumerated 17 principal commodities which accounted for 82 per cent of the total merchandise exports in 1953-54. Similarly, on the import side are shown 20 principal commodities or commodity-groups which constituted 86 per cent of the total merchandise imports in the same year. The Statement shows the actual recorded figures of the quantity and value of the principal exports and imports during the four years, 1950-51 to 1953-54. In addition, it indicates what the size, in terms of value and in some cases also in that of quantity, of these exports and imports is estimated to be in 1960-61, as also what the annual average size of these exports and imports is expected to be during the Second Plan period. From the standpoint of estimating the foreign exchange resources it is of course the average size of exports and imports during the Plan period that is of strict relevance. In estimating the values of these exports and imports during the Second Plan period, the relevant quantities have been valued at 1953-54 prices.* Besides the estimates for the principal exports and imports, the Statement shows for "Other Exports" and "Other Imports", the actual trends in these items during the years 1950-51 to 1953-54, as well as the expected size of these items during the Second Plan period.

*The net terms of trade in recent years (1948-49-100) have been as follows :—

1949-50	107
1950-51	122
1951-52	121
1952-53	91
1953-54	91
Nov. 1954	100

(i) Merchandise Exports

9. As Statement I shows, of the 17 principal export commodities, the export values of 10 commodities are estimated, on an average per year, to be higher and those of 6 commodities to be lower during the Second Plan period as compared with the year 1953-54. These increases in export values are expected to amount to Rs. 42.6 crores, and the largest increases are likely to occur under cotton piece-goods (Rs. 30.5 crores) and tea (Rs. 5 crores). On the other hand, the decreases in export values are expected to total Rs. 19.7 crores, the largest declines being under manganese ore (Rs. 8.8 crores), hides, tanned or dressed (Rs. 3.2 crores), skins, tanned or dressed (Rs. 3.3 crores) and hides and skins, raw (Rs. 2.2 crores). So far as the principal exports are concerned, it is thus estimated that there will be a net increase of about Rs. 23 crores in export values. As for the other export commodities, it is estimated that taking account of increases and decreases under the individual commodities, the annual average rate of these exports during the Second Plan period will be more or less equal to their value in 1953-54. In sum, the annual average of all merchandise exports during the Second Plan period is expected to be greater than the total value of these exports in 1953-54 to the tune of about Rs. 23 crores.

10. The basis underlying the estimates for the larger changes in the export values of the principal commodities is indicated below :—

Cotton Piece-goods.—It is expected that domestic production of mill-made piece-goods would increase from 5,000 million yards to 5,500 million yards during the Second Plan period ; and that the bulk of the increased production would be exported. It is assumed that exports of mill-made piece-goods would increase from 702 million yards in 1953-54 to an annual average rate of 1,100 million yards during the Second Plan period, reaching a level of some 1,300 million yards in the year 1960-61. As for cotton textiles produced by hand and power-looms, it is assumed that while domestic production may increase from 1,600 million yards to 3,200 million yards during the Second Plan period, the increased production will be wholly absorbed in the domestic market. Hardly any increase in the exports of handloom piece-goods is thus expected during the Second Plan period.

Tea.—It is assumed that domestic production of tea will increase from 675 million pounds in 1955-56 to 740 million pounds in 1960-61, and domestic consumption from about 200 million pounds to 250 million pounds during the same period. An annual average export of 490 million pounds of tea has thus been estimated for the Second Plan period.

Manganese Ore.—Exports of manganese ore were abnormally high during the three years 1951-52 to 1953-54 owing to heavy stock-piling of the metal particularly by the U. S. A. Exports during these years ranged from 1.13 million tons to 1.57 million tons. With the fall in the rate of stock-piling and the re-entry to a significant extent in foreign markets of India's competitors like the Gold Coast and South Africa, it is apprehended that it may not be possible for India to sell abroad more than one million tons of manganese ore per annum during the Second Plan period.

Hides and Skins, raw and tanned or dressed.—The leather and leather goods industry is expected to register a substantial increase in production during the Second Plan period in order to meet the increased consumer demand in the country. In view of this it is expected that substantially larger quantities of hides and skins, raw and tanned, will be absorbed internally in the country's productive process, thus leaving reduced quantities of these commodities for export.

(ii) *Merchandise Imports*

11. It will be seen that no estimates are shown in Statement I of the imports during the Second Plan period of machinery, metals, and vehicles. The imports of these categories of commodities are expected to be of crucial importance under the Second Plan. An estimate of the size of these imports during the Second Plan period has been made in an indirect manner and this will be considered in the following Section.

12. Of the 16 principal import commodities, besides machinery, metals, and vehicles listed in Statement I, the import values of 8 commodities are estimated, on an average per annum, to be smaller and of 7 others to be larger during the Second Plan period as compared with the year 1953-54. The reductions in import values are estimated to amount to Rs. 53.3 crores; and the largest declines are likely to occur under grain, pulse and flour (Rs. 33.7 crores), oils (Rs. 9.3 crores) and paper and pasteboard (Rs. 4.6 crores). The increases in import values on the other hand are estimated to total Rs. 12.5 crores, the largest increases occurring under raw cotton (Rs. 4.1 crores), provisions and oilman's stores (Rs. 2.6 crores), chemicals (Rs. 1.3 crores), drugs and medicines (Rs. 1.2 crores) and sugar (Rs. 1.2 crores). In respect of the 16 principal import commodities, there is thus expected to be a net reduction in import value of about Rs. 40 crores. The total of "Other Imports", on the other hand, is estimated to register an increase of Rs. 7 crores, the increase being anticipated in view of the rise in national income and productive activity that will occur in the course of the Second Plan period. Taking together, then, all the import commodities excluding machinery, metals and vehicles, it is estimated that the total value of the imports of these commodities during the Second Plan period would, on an annual average, be smaller than their total value in 1953-54 by about Rs. 33 crores.

13. The basis underlying the estimates of the larger changes in the import values of the principal commodities is explained below :—

Grain, pulse and flour. Owing to the acute shortage of foodgrains in the country, abnormally large amounts of grains were imported in the four years, 1950-51 to 1953-54. Imports of grain, pulse and flour, in these years ranged from 1.4 million tons in 1953-54 to 4.8 million tons in 1951-52. During the Second Plan period domestic production of foodgrains is expected to rise from 66 million tons to 76 million tons, thereby ensuring self-sufficiency in foodgrains at a slightly higher level of consumption. Large imports of foodgrains are not, therefore, expected to be a feature of the Second Plan period. Nevertheless, it is estimated that in order to meet small and temporary shortages in foodgrains a total of 3 million tons of

foodgrains may have to be imported during the whole Plan period. This estimate does not provide against a widespread failure of monsoon in a particular year, or worse still two or three successive failures of monsoon—contingencies which will necessitate much higher imports.

Oils, mineral, vegetable and animal.—Mineral oils constitute the great bulk of India's total imports of oil, having amounted to 93 per cent of the total in 1953-54. The position regarding mineral oil imports will be transformed during the Second Plan period owing to the working of three oil refineries in the country. Of these two have recently gone into production, and the third is scheduled to start functioning in 1956. It is expected that when the three refineries are in full operation, the great bulk of the country's requirements of motor spirit will be met from domestic supplies. Of petroleum products, aviation spirits will, however, require to be imported to the extent of the country's needs, since this type of petroleum is not scheduled to be produced by the refineries. Of other mineral oils, substantial quantities of kerosine oil will also need to be imported, because the refineries will not be in a position to meet the full requirements of the country. In addition, small quantities of diesel oil and jute batching oil will need to be imported. Large quantities of crude petroleum will have to be imported to meet the requirements of the refineries. When in full production, the three refineries are estimated to require about 3.7 million tons of crude petroleum per year. An annual import of crude petroleum on this scale is estimated to cost Rs. 50 crores. Imports of aviation spirit, kerosine oil, diesel oil, jute batching oil and a small amount of motor spirit is estimated to cost about Rs. 25 crores. It has thus been estimated that imports of mineral oil during the Second Plan will cost Rs. 75 crores, on an average per year, as compared to an actual import of Rs. 84.5 crores in 1953-54. The imports of vegetable and animal oil are estimated to run at an average annual rate of Rs. 8 crores during the Second Plan period.

Paper and Pasteboard.—Of the total import of Rs. 11.6 crores under paper and pasteboard in 1953-54, newsprint and other types of paper accounted for as much as Rs. 11.3 crores. Allowing for the increase in the domestic production of newsprint and other types of paper, their imports are expected to amount to 800,000 cwts. and 700,000 cwts. respectively, on an average per annum, during the Second Plan period as compared to imports of 1,416,000 cwts. and 1,048,000 cwts. respectively in 1953-54.

Raw Cotton.—Domestic production of cotton is expected to increase from 42 lakh bales to 58 lakh bales during the Second Plan period. Allowing for domestic consumption of Indian cotton, there will be left 2 lakh bales (35,000 tons) of short-staple cotton for export per year. (Account has been taken of this on the export side.) On the other hand, it is expected that it will be necessary to import, on an annual average, about 7 lakh bales (1,25,000 tons) of cotton of the long-staple variety during the Second Plan period.

Provisions and Oilman's Stores.—Imports under this head are estimated to be larger by about Rs. 2.6 crores on an annual average during the Second Plan period, as a consequence of increase in consumer demand for this group of commodities.

Chemicals.—Imports of caustic soda, sulphur and sodium carbonate are the three largest items under imports of chemicals. While imports of caustic soda and sodium carbonate are expected to decline substantially in the course of the Second Plan period as a consequence of increased domestic production, the import of sulphur is estimated to increase considerably in view of the anticipated expansion in the domestic production of sulphuric acid. Imports of other chemicals besides the three mentioned are expected to be on a larger scale during the Second Plan period, as a result of the increased pace of industrial activity in the country.

Drugs and Medicines.—Taking account of the expected increase in production in the domestic drugs and pharmaceuticals industry, which may permit some savings on imports of penicillin as well as on anti-biotics through local bottling, it is estimated that total imports under this head per annum during the Second Plan period will be larger by only about Rs. 1.2 crores as compared with 1953-54.

Sugar.—The import of sugar has registered a large increase in recent years owing to increased domestic demand. In 1953-54 it amounted to 28,190 tons, and during the first 9 months of 1954-55 it was running at an annual rate of about 125,000 tons. Although domestic production of sugarcane in terms of raw gur is estimated to increase from 5.0 million tons in 1955-56 to 7.5 million tons in 1960-61, the entire domestic requirements are not likely to be met from domestic production during the Second Plan. It has thus been estimated that about 50,000 tons of sugar may be imported per year during the Second Plan period.

B. Invisible Transactions

14. As Statement I shows, the different items constituting the country's invisible transactions on current account are (1) foreign travel, (2) transportation, (3) insurance, (4) investment income, (5) donations (private), (6) Government not included elsewhere and (7) others. The last item combines the transactions designated in the Reserve Bank's statistics as "miscellaneous" and "unclassified". Statement I shows the estimates of the annual average size of the receipts, payments, and balance of transactions under the different items during the Second Plan period. (Estimates of receipts and payments have not been worked out for the heads "Government not included elsewhere" and "Others"; for these heads only the estimates of the balance of transactions have been shown.)

15. The estimates for the different heads of invisible transactions are discussed below :—

Foreign Travel.—Owing to the efforts made by the Government to promote foreign tourism in the country it is estimated that receipts from this source will amount to Rs. 4 crores on an average per annum during the Second Plan period as compared with an actual receipt of Rs. 1 crore in 1953-54. Payments on foreign travel during the Second Plan, on the other hand, are estimated to amount to Rs 11.5 crores. A net payment of Rs. 7.5 crores is thus estimated per annum for the Second Plan period.

Transportation.—The development of the country's shipping is likely to result in increased receipts on transportation during the Second Plan period. It is estimated that these receipts will amount to Rs. 35 crores per annum. On the other hand, payments to foreigners for transportation are estimated to amount to Rs. 15 crores per annum. (It should be noted, however, that the payments on account of transportation as shown in Statement I do not indicate the total payments on transportation, in view of the fact that the recorded values of merchandise imports are *inclusive* of insurance and freight charges). The net receipts under the head "transportation" in the invisible accounts are thus estimated to amount to Rs. 20 crores per annum during the Second Plan period.

Insurance.—Insurance receipts and payments are estimated to amount to Rs. 6.5 crores and Rs. 4.0 crores respectively per annum during the Second Plan period as compared with receipts and payments of Rs. 5.5 and Rs. 3.9 crores in the year 1953-54. The net receipts under this head are thus estimated to amount to Rs. 2.5 crores per annum during the Second Plan period.

Investment Income.—Payments of investment income to foreigners are expected to register a substantial increase during the Second Plan period owing to the increase in foreign investment in the country. It is estimated that these payments will amount to Rs. 35 crores per year in the Second Plan period as compared with an actual payment of Rs. 28.7 crores in 1953-54. The annual average receipts from investment income on the other hand during the Second Plan period are expected to remain more or less at the same level as in 1953-54. The net payments of investment income are estimated at Rs. 16.5 crores per annum during the Second Plan period.

Donations (Private).—Receipts and payments of private donations per annum during the Second Plan period are expected to run at the same rate as in the year 1953-54.

Government not included elsewhere.—It is estimated that net receipts under this head during the Second Plan period will amount to Rs. 9 crores per annum.

Others.—Under this item which includes a multitude of small transactions the net receipts are estimated to register a small increase during the Second Plan period.

16. Taking together all the items of invisible transactions it is thus estimated that the country's net receipts under invisibles during the Second Plan period would amount to Rs. 75.5 crores on an annual average during the Second Plan period. In other words net receipts on account of current invisibles during the Second Plan period will be on an annual average smaller by Rs. 3.2 crores than actual net receipts in 1953-54.

III. AVAILABILITY AND REQUIREMENTS OF FOREIGN EXCHANGE DURING THE SECOND PLAN PERIOD

17. It was seen in Section II that India's foreign exchange earnings from merchandise exports during the Second Plan period are estimated to be greater, on an annual average, by about Rs. 23 crores as compared with the year 1953-54. It was also seen that expenditure

on merchandise imports *excluding* imports of machinery, metals and vehicles during the Second Plan period is estimated to be smaller by about Rs. 33 crores. On the other hand, it was seen that net receipts on current invisibles are estimated to be smaller by Rs. 3.2 crores per annum during the Second Plan period. Thus, as a result of these changes, increased foreign exchange resources to the extent of about Rs. 53 crores are likely to be available per annum during the Second Plan period to finance increased imports of machinery, metals and vehicles as compared to the year 1953-54.

18. Account has also to be taken of another factor in estimating the additional availability of foreign exchange for financing increased imports of machinery, metals and vehicles in the Second Plan period. As was seen in Section I, India had a surplus balance on current account to the tune of Rs. 47 crores in 1953-54. There does not appear to be any reason for running a current account surplus of such a large amount during the Second Plan period. A part of it can safely be worked off to finance additional imports of machinery, metals and vehicles. The amount of additional foreign exchange that is likely to become available in this manner will be determined by the extent of the country's liabilities on capital account which will have to be met from the current surplus. It is estimated that on account of contractual obligations and imports of Indian currency the country may need about Rs. 22 crores per annum during the Second Plan period, thereby leaving an amount of Rs. 25 crores to finance additional imports of the categories mentioned above. Adding this sum to that of Rs. 53 crores mentioned in the preceding paragraph a total amount of Rs. 78 crores of additional foreign exchange may be expected to become available per annum during the Second Plan period to finance increased imports of machinery, metals and vehicles, as compared to the year 1953-54. In other words, imports of machinery, metals and vehicles to the extent of Rs. 225 crores per annum (as compared with Rs. 147 crores in the year 1953-54) can be financed in the Second Plan period without causing any strain on the balance of payments position.

19. Imports of machinery, metals and vehicles are expected to be on a considerably larger scale during the Second Plan period as compared with recent years. There are two principal factors which point to this conclusion. Firstly, the rate of investment will be greatly stepped up during the Second Plan period. The annual average rate of investment under the Second Plan may be of the order of Rs. 1,200 crores as compared to rate of investment of Rs. 700-750 crores in 1953-54. Secondly, the pattern of investment envisaged under the Second Plan implies considerable emphasis on industry, transport and communications, where the requirements of imported machinery would be relatively large. Taking these factors into account it is reasonable to expect that imports of machinery, metals and vehicles will rise from Rs. 147 crores in 1953-54 to an average of Rs. 350 crores during the Second Plan period or even more. The import requirements of machinery and metals for the Second Plan can be estimated in more precise terms only when the projects have been worked out in detail.

20. We have seen that machinery, metals and vehicles worth about Rs. 225 crores (Rs. 147 crores *plus* Rs. 78 crores) can be imported without causing any strain on the balance of payments. This will leave a 'gap' of Rs. 125 crores every year or of Rs. 625 crores over the

Second Plan period. This deficit will have to be financed from other sources, viz., foreign assistance and the drawing down of the country's accumulated sterling balances.

21. The foreign assets of the Reserve Bank amount at present to Rs. 730 crores. It would be possible to draw down these balances by some Rs. 150 crores or so in order to finance payments deficits without reducing our reserves to a dangerously low level. However, the estimates given above make no allowance for unforeseen contingencies, such as, successive failures of monsoons, a sharp fall in foreign demand, or an adverse movement in the terms of trade. It would be desirable, therefore, to earmark the use of reserves for such unexpected developments. On this basis it would be necessary to provide for foreign assistance to the extent of some Rs. 625 crores over the Second Plan. In short, foreign assistance of this order would be needed if machinery, metals and vehicles during the Second Plan period are to be imported at the rate of Rs. 350 crores per year.

STATEMENT I

India's Balance of Payments on Current Accounts

(Value in Rs. Crores)

	1950-51		1951-52		1952-53		1953-54		1960-61		Annual average for 5 years ending 1960-61	
	Q	V	Q	V	Q	V	Q	V	Q	V*	Q	V*
I. MERCHANDISE												
I. EXPORTS (f.o.b.)..	604.9	..	697.3	..	581.2	..	539.0	..	..	..	..	..
<i>Principal Exports†—</i>												
Tea (million lbs.).	439	79.9	429	93.5	423	80.2	467	101.6	490	106.6	490	106.6
Spices ('000 cwts.).	637	26.9	569	27.9	722	20.8	549	16.6	570	18.8	560	18.0
Tobacco (million lbs.).	98	15.2	107	16.9	81	13.9	68	11.3	70	11.6	70	11.6
Fruits & Vegetables.	..	11.0	..	13.4	..	16.6	..	13.8	..	14.0	..	14.0
Coal ('000 tons)††.	977	3.4	2,835	9.8	2,727	10.3	1,947	7.0	..	..	2,000	7.5
Mica ('000 cwts.).	407	10.0	408	13.2	284	9.0	250	8.0	330	10.5	300	9.5
Lac ('000 cwts.).	661	11.9	713	14.8	686	7.6	537	6.8	700	8.8	650	8.2
Hides & skins, raw ('000 tons).	14	9.4	12	8.2	14	5.7	11	6.1	5	2.7	7	3.9
Manganese ore ('000 tons)	821	8.0	1,125	15.7	1,448	21.8	1,568	24.3	1,000	15.5	1,000	15.5
Oils, vegetable, mineral and animal (million gallons).	29	25.7	21	22.8	34	25.1	8	6.2	11	8.5	9	6.9
Seeds ('000 tons).	206	17.3	81	8.0	57	4.7	29	2.4	**	3.6	**	3.2
Cotton, raw ('000 tons)	15	4.9	23	13.7	71	19.3	35	9.4	35	9.4	35	9.4

*Values are calculated on the basis of 1953-54 unit values.

**Not calculated.

†Exports by sea and air only.

††Exports by sea, air and land, except for the year 1950-51 for which exports are by sea and air only.

THE SECOND FIVE YEAR PLAN

STATEMENT I—contd.

(Value in Rs. Crores)

	1950-51		1951-52		1952-53		1953-54		1960-61		Annual average for 5 years ending 1960-61	
	Q	V	Q	V	Q	V	Q	V	Q	V*	Q	V*
Cotton waste ('000 tons).	65	12.4	31	7.4	63	9.6	63	9.9	70	11.0	68	10.7
Hides, tanned or dressed ('000 cwts.).	340	12.0	340	13.6	313	10.8	364	13.6	250	9.3	280	10.4
Skins, tanned or dressed ('000 cwts.).	140	13.3	180	11.3	155	9.2	166	10.8	110	7.2	130	8.5
Cotton, twist & yarn (million lbs.).	74	17.1	6	2.0	18	4.4	22	4.7	20	4.3	15	3.2
Cotton piece-goods (million yds.)	1,270	116.7	424	51.7	616	61.5	765	63.1	1,370	108.5	1,165	93.6
Mill made (million yds.)	1,210	105.8	384	42.5	561	52.7	702	53.2	1,300	97.5	1,100	83.4
Handloom (million yds.)	60	10.9	40	9.2	55	8.8	63	10.0	70	11.0	65	10.2
Jute manufactures ('000 tons).	..	114.0	807	270.0	706	128.9	778	113.9	790	115.3	775	113.2
Other Exports (Total).	..	69.9	..	89.6	..	96.8	..	89.0	..	..	..	89.0
2. IMPORTS (c.i.f.).	..	579.2	..	946.9	..	611.5	..	571.3	..	..	..	..
<i>Principal Imports†</i>												
Fruits & Vegetables	..	9.5	..	10.0	..	9.3	..	9.9	..	9.5	..	9.5
Grain, pulse and flour ('000 tons).	2,086	80.4	4,793	228.1	2,917	153.1	1,430	63.7	10	0.5	600	30.0
Provisions and Oilman's Stores.	..	5.8	..	10.8	..	5.7	..	9.4	..	12.0	..	12.0
Spices ('000 cwts.)	1,018	5.5	1,083	8.3	752	3.8	820	5.6	850	5.8	830	5.6
Oils	..	59.5	..	79.5	..	81.9	..	92.3	..	80.0	..	83.0

*Values are calculated on the basis of 1953-54 unit values.

†Imports by sea and air only.

ESTIMATE OF FOREIGN EXCHANGE RESOURCES

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STATEMENT I—contd.

(Value in Rs. Crores)

	1950-51		1951-52		1952-53		1953-54		1960-61		Annual average for 5 years ending 1960-61	
	Q	V	Q	V	Q	V	Q	V	Q	V*	Q	V*
Mineral (million gallons)	799	55.1	931	70.9	901	76.9	978	84.5	..	72.0	..	75.0
Cotton, raw ('000 tons)	215	100.8	217	139.0	138	76.7	116	52.7	130	59.0	125	56.8
Jute, raw † ('000 tons)	1	0.1	425	67.1	237	16.5	246	14.3	220	12.8	225	13.1
Chemicals	..	9.2	..	19.8	..	12.7	..	12.7	..	11.0	..	14.0
Drugs and Medicines.	..	9.9	..	15.2	..	11.3	..	12.3	..	13.0	..	13.5
Cutlery and hardware.	..	4.8	..	7.5	..	4.9	..	5.0	..	2.6	..	3.0
Dyes and colours.	..	14.6	..	19.3	..	10.4	..	18.9	..	19.0	..	20.0
Electrical goods and apparatus.	..	9.7	..	10.4	..	13.8	..	13.0	..	12.0	..	14.0
Paper and paste board ('000 cwts.)	2,189	9.9	1,828	14.0	2,129	11.7	2,540	11.6	1,300	6.0	1,500	7.0
Cotton yarns & manufactures.	..	2.4	..	6.6	..	5.0	..	3.2	..	2.7	..	3.0
Woollen yarn & manufactures.	..	1.6	..	8.2	..	6.7	..	9.9	..	8.0	..	9.0
Sugar (tons)	8,050	0.7	10,078	0.8	10,001	0.001	28,190	1.6	..	..	50,000	2.8
Machinery of all kinds.	..	92.2	..	110.7	..	87.3	..	84.9	..	..	..	..
Metals, iron and steel & manufactures thereof ('000 tons).	335	19.2	201	22.7	201	23.8	233	23.6	..	..	..	..

† Imports by sea, air and land, except for the year 1950-51 for which the imports are by sea and air only.

THE SECOND FIVE YEAR PLAN

STATEMENT I—contd.

(Value in Rs. Crores)

	1950-51		1951-52		1952-53		1953-54		1960-61		Annual average for five years ending 1960-61	
	Q	V	Q	V	Q	V	Q	V	Q	V*	Q	V*
	Metals other than iron and steel and manufactures thereof	..	27.8	..	20.9	..	19.4	..	14.5
Vehicles (excluding locomotives, etc. for Railways)	..	24.5	..	35.4	..	30.5	..	23.7	..	..	..	..
Other Imports (total)†	..	145.5	..	107.5	..	67.4	..	73.8	..	..	..	80.8
3. Balances of Trade in Merchandise (Item 1 minus Item 2)	..	+25.7	..	-249.6	..	-30.3	..	-32.3	..	..	..	..

*Values are calculated on the basis of 1953-54 unit values.

†Import by sea and air only.

STATEMENT I—concl'd.

(Value in Rs. Crores)

		1950-51	1951-52	1952-53	1953-54	Annual average for 5 years ending 1960-61
II. INVISIBLES (excluding official donations).						
1. Foreign travel	R			0.7	1.0	4.0
	P			10.3	10.5	11.5
	N			-9.6	-9.5	-7.5
2. Transportation	R			32.2	31.5	35.0
	P			20.7	11.3	15.0
	N			+11.5	+20.2	+20.0
3. Insurance	R			6.1	5.5	6.5
	P			3.7	3.9	4.0
	N			+2.4	+1.6	+2.5
4. Investment Income	R			17.2	18.2	18.5
	P			28.9	28.7	35.0
	N			-11.7	-10.5	-16.5
5. Donations—Private	R			22.0	19.0	19.0
	P			5.4	4.9	5.0
	N			+16.6	+14.1	+14.0
6. Government not included elsewhere	R			26.4	27.5	
	P			18.1	16.0	
	N			+8.3	+11.5	+9.0
7. Others	R			74.7	66.5	
	P			16.3	15.2	
	N			+58.4	+51.3	+53.0
Total (invisibles) Net		+32.3†	+61.4†	+75.9	+78.7	+74.5
III. TOTAL BALANCE ON CURRENT ACCOUNT.		+58.0	-188.2	+45.6	+46.4	
IV. ERRORS AND OMISSION		-23.5	-25.8	-11.5	+0.7	

R.—Receipts.

P.—Payments.

N.—Net.

†Inclusive of official donations.

THE SECOND FIVE YEAR PLAN PROBLEMS OF RESOURCE MOBILISATION

by

DR. B. K. MADAN

(This paper entitled 'Problems of Resource Mobilisation' does not attempt to cover the whole ground. It is more in the nature of observations on aspects of the problem which appear to me to require emphasis or call for special comment. Figures have been eschewed; finalisation of figures will require detailed consideration of assumptions and methods. Towards the end, a few general aspects of "the tentative framework" of the Second Plan are referred to.)

The general objective of the Second Plan is to bring about a definite and marked improvement in the level of living in the country.

This requires an increase in production as well as improvement in distribution, *viz.*, a reduction in inequalities of income, wealth and opportunity, with an associated increase in incomes and improvement in employment.

The realisation of these proximate objectives, in turn, depends upon a substantial and sustained increase in investment, appropriately distributed.

At the present stage of economic development of the country, rapid industrialisation with particular emphasis on the development of basic industries, must form an important part of the development programme.

(The objectives should, of course, be spelt out at greater length, but it is important to state them in a certain logical order, with a gradation of ends and means.)

2. The essence of the process of economic development is a general increase in productive efficiency. Productive efficiency is vitally related to an increase in the availability of capital, technological skill, managerial ability and administrative competence. It may be based on varying combinations of these elements; a small increase in capital combined with appropriate technical ability may often produce appreciable results.

3. By its very nature, a programme or plan of economic development presumes an extension of the public sector. For, *ex-hypothesi*, a decisive acceleration in the rate at which development tends to take place automatically, is called for. A deliberate stimulation of the rate of development requires a bold initiative on the part of the State in increasing investment in the economy. The initiative may consist in a direct increase in the scope of investments by the State, or it may take the form of inducing larger investments by private enterprise; it usually also involves regulation (directioning) of investment. In any case, an extension of the scope of the public sector is inherent in the process—whether it be a direct extension

of investments in the sector, or an elaboration of the machinery and instruments for the stimulation or regulation of the private sector. Often the machinery of stimulation of private enterprise itself involves an extension of the public sector. An example is the State Finance Corporations for extending loan assistance to private enterprise. Similarly, the extension of subsidies to private enterprise presumes an increase in the financial resources at the disposal of the State for the purpose; so that the demand for resources on the part of the public and private sectors is not necessarily competitive but may, at points, be a common problem, *e.g.*, the problem of resources available to the public sector for assistance to the private sector. (The elaboration of the apparatus of controls for the regulation of the private sector, of course, involves a more direct extension of the public sector, though the *negative* purpose here may be broadly distinguished from the *positive* purpose behind an extension of State investments.)

4. The question still remains as to how far, in the process of increasing investment in the economy, reliance should be placed on a direct increase of investment in the public sector and how far on a stimulation of investment in the private sector. The two approaches are, of course, complementary; there is scope for extension of both on a broad front; where the alternative of expansion under one or the other sector arises, it is important to ensure that the possible overlap is resolved without detriment to an expansion investment, which should remain clear and paramount as an objective above the relative scope of the two sectors; the State has regulatory powers to ensure that development in the private sector conforms to the broad policies laid down by it. It follows that any possible conflict of spheres should be resolved in conformity with the over-riding objective of an increase in investment.

5. As regards the scope of the public sector, there is, in the first place, the vast field of building up the sub-structure of economic development, in the form of the basic facilities and premises of economic development, such as are comprised in communications and transport, power, irrigation, technical training of the population, etc. The expansion of social overheads like education and health, apart from other social welfare services, may also be included in this broad category. There is here no problem of overlap, in principle. It is when we come to the superstructure of economic development itself, that the two sectors meet, and the problem of drawing a line arises. Even here, there are large areas where public or private enterprise operates for the most part by itself, and only a small area where the two operate side by side; the question, however, is not as to what the respective spheres of the two are, but what they should be for a proper fulfilment of the objectives of the Plan. The peculiar role of public enterprise in this field is related to the establishment (a) of basic industries of national importance, such as steel and fertilisers which assist in broadening the base for industrial and agricultural development, or (b) of certain capital goods industries, *e.g.*, heavy machinery, the returns from which are not immediate or certain and which, therefore, have not attracted private enterprise in the requisite degree, or (c) even of certain essential consumer goods industries which may involve large investments of resources normally beyond the unaided capacity of private enterprise. Over and above these, there remains (d) the undertaking of projects of outstanding public benefit which are not expected to be remunerative in the very short period, *e.g.*, irrigation and power projects, etc. Since, *ex-hypothesi*, the

objective of a plan or programme of development is to push the pace of economic development, it falls to the public sector to undertake development in those difficult or comparatively unremunerative parts, which fail to be developed sufficiently in the normal course, but which are nevertheless crucial to an acceleration of development.

6. In parts of this fairly large territory, there is little competition for public enterprise, and the questions that arise relate to the evolution of policies appropriate to the position of State monopolistic or semi-monopolistic enterprises (to which we refer presently); the principle of predominance of public enterprise may itself be open to little challenge. It is when we come to the part of the field of economic development in which private enterprise is *interested*, because it is remunerative (in the short or medium-term)—and this includes parts of the territory covered in the categories in the last paragraph—that difficulties of drawing a line arise. Of course, where outstanding considerations of public interest are decisive (and these are prominent where monopoly prevails), controversy has subsided, *e.g.*, generation of power and even distribution of power. It is in the remaining part of the field, therefore, that the question becomes more real.

7. The prime motives for the extension of public enterprise in this field are : (i) proper regulation of investment, *e.g.*, steel; (ii) improvement of standard of service or quality of product, *e.g.*, State road transport or milk; (iii) mingled with the motives under (ii), profits from the operation of State enterprise ; (iv) profits as such, *e.g.*, fiscal monopolies like tobacco, matches. In regard to (iii) and (iv) the issue is, why should the State not share in the profits available in certain areas of economic enterprise, particularly if at the same time it is possible to combine this objective with purposes like those listed under (iii). What is the scope for such extension of State enterprise? Under what conditions and policies is it possible to realise this objective to a reasonable extent?

8. From the point of view of the subject of this paper, these questions are of particular importance. It is not proposed to answer them in the span of this brief paper, but only to mention, in the following paragraphs, a few considerations bearing on proper answers to these questions being obtained.

9. First, there is the *raison d'être* of public enterprise mentioned above, *viz.*, an effort to widen the base, deepen the foundations and extend the boundaries of economic development through forms of investment and activity which do not interest private enterprise, or interest it sufficiently, but which are nevertheless important to achieving a balanced and durable development. This area must claim first priority in the use of such resources, as are available for the extension of public enterprise. This area has, in fact, furnished the main field of operations of public enterprise to date.

10. Secondly, related partly to the non-fiscal character of the main urges for extension of public enterprise, the tradition of public enterprise in this country as in other countries with non-collectivist economies—with notable exceptions—has been to run it on a non-profit basis; its main motive is always held up to be public service and profit for public

use has not been acknowledged to be a significant constituent of public purpose. It is difficult yet to visualise Central and State ministers, say, in charge of railways and State transport counting among the signally successful features of stewardship of their respective portfolios their ability to tax the (third class) railway traveller and the bus passenger for the benefit of general revenues (or the general tax-payer). In a recent State Assembly debate the minister in charge of State transport stoutly denied that he ever aimed to make profits out of the State transport services. Actually, even where an activity is normally competitive, owing to the considerable scale of governmental operations, if the State intervenes, the enterprise assumes a public character and is endowed with public purposes and responsibilities besides profits. In the result, its ability to produce profits appears almost to detract from its fulfilment of other public responsibilities. The Taxation Enquiry Commission has urged a basic change in this tradition and attitude. Until this change comes about—and it can be brought about in respect of some of the existing enterprises—a wide extension of the sphere of public enterprise will not result in significant accession to resources.

11. Thirdly, it appears necessary to secure firm recognition of another principle of operation of public enterprise, if it is to have a chance of success in producing profits. It is the principle of operation on the basis of commercial standards and commercial methods. It is primarily because public enterprise is not regarded on this basis, neither by the employer (Government) who “must set an example as a model employer”, nor by the employee, who considers himself a State servant, or Government functionary, nor by the consumer, who is more conscious of high prices if a product is turned out by Government, nor by the general tax payer who is averse to risk taking and criticises losses which would go unobserved in private enterprise,—that it finds it difficult to run at a profit, if to run at all. Clear recognition of the commercial basis of working and dissociation with ordinary governmental practices regarding conditions of employment and work and promotion are necessary. High wages for the employed and much wider employment cannot both be had at the same time. It is also because of “model” conditions of employment in State services and the resulting wide chasm between the State-employed and those not so employed (including those in commercial employment) that complaints regarding the manner of functioning of State employees in public enterprises gain so much point. A careful consideration of the methods and procedures of working of public enterprise—apart from forms of organisation and management—is necessary to ensure successful extension of the sphere of State enterprise with a view to increase in resources. Public enterprise hitherto has been extended mainly to areas which have conformed to conditions of standardised operation and stable demand (for product or service), mainly owing to comparative inelasticity of Government methods of operation. If public enterprise is to make a bold bid into areas where versatility of response to diversity of economic circumstance, including variability of demand, is of prime importance to success, its methods need fundamental review and re-adjustment.

12. Fourthly, where extension of public enterprise into an existing area of development is made avowedly for the purpose of adding to resources, the alternative of higher taxation (say, through excise) should be carefully investigated. In general, the possibilities of adding

to resources through a revision of price policies of existing enterprises appear to be greater than through new enterprises, and such revision would be necessary in order to enable public enterprises in general to run at a profit. Public opinion is likely to be as opposed to new enterprises making profits as it is in respect of the old enterprises, unless the new enterprises are in the field of primarily profit-making concerns, *i.e.*, fiscal monopolies where profit will be easily recognised as the hall-mark of efficiency. Even in this area, given the fact that costs of governmental operation and distribution will not be lower than under private enterprise, the main possibility of increasing profits may lie in increasing the margin of profit above cost which a Government monopoly would make possible. This would entail higher prices, and the possibility, in the alternative, of higher taxation, deserves serious consideration. Trading and distribution require a highly specialised skill and though public enterprise should not indefinitely be deterred by the inadequacy of personnel with the necessary training for this work, in view of the great demands for training facilities for a variety of economic tasks for the implementation of the Second Plan, State trading should, for the present, stand low in the scale of priorities. A start in the way of increasing the contribution of public enterprise to revenues should, meanwhile, be made by making larger profits out of existing enterprises.

13. In the light of the above, it appears that principal reliance for the mobilisation of domestic resources—and these must supply the main part of resources for the plan—will have to be placed on taxation and, to a lesser extent, on borrowing. And here we come up against some stubborn facts. The ratio of tax revenues to national income has continued much the same, despite the tax effort at the Central and State levels. The Taxation Enquiry Commission went into the question at length and I will not attempt to restate its analysis. It appears that a great deal of extension of new taxes was necessary to *maintain* this ratio owing to the considerable shrinkage in the relative position of old taxes, particularly those related to land and agriculture. The automatic capacity of our tax system may not be relied upon, therefore, to produce revenues commensurate with the growth of the economy. For that matter, of course, we may take into account such adaptations in the scope, form and pitch of taxes as are required to make the coverage of the tax system conform to the changing composition of national income. But such adaptations by themselves, will not go far toward increasing the ratio of taxes to national income. For this purpose, a deliberate effort to increase the pitch and real coverage of taxation is necessary. In the field of direct taxation, for example, the rates of taxation recommended by the Taxation Enquiry Commission and the widening of coverage through lowering of exemption limit, are the utmost that we can look for the period of the next plan. These together should bring about an appreciable, but by no means considerable expansion. An extension of the *real* coverage of direct taxation (including estate duties) is a problem of administration, and there may yet be a rich reward for the intensification of enforcement efforts. In the field of indirect taxation, the recent changes have further emphasised the shift in the tax system toward the emergence of Central Excise (taxes on domestic consumption) as the mainstay of Indian revenues in the future. Here again, the taxes have been levied mainly on the products of organised con-

sumer goods industries which are domestically consumed. If the shift toward producer goods industries on the one hand, and labour-intensive cottage industries on the other takes place, the elasticity of this source as such would be more limited than if the course of developments allowed an increase in the domestic consumption of products of organised consumer goods industries.

14. We are coming to the point where the issue is inescapable ; the mass of consumption is by the mass of the people ; given the optimum rates of taxation (from the revenue point of view) on articles consumed by the few, further revenue (and the proportion of revenue to national income) can be raised by taxation of articles consumed by the many. Further taxation of such articles—kerosene, matches, etc.—will raise their prices; it would be intended to have that effect. At present, articles “which are essential to the life of the community” are exempt under Article 286(3) of the Constitution from sales taxes levied by States. The Taxation Enquiry Commission drew pointed attention to the bearing of the question of taxation of essentials on the whole issue of the task of the tax system in relation to the development programme. The Commission states the crux of the case for removing a hurdle in the way of expansion of tax receipts and increasing the obstinate ratio of taxes to national income: “It appears important, in this connection, to put in fundamental terms the problem posed by Article 286(3) of the Constitution in respect of articles essential to the life of the community. The issue posed by the financing of economic development and expansion of social services through some contribution—direct or indirect—by the mass of the population is this : Is a little more of activity for improving public health or education, or for strengthening the base of agriculture through minor irrigation works or better techniques, more of an essential to the life of the community or the whole of the present consumption of each of a number of commodities? Is every bit of that consumption necessarily equally essential? In any case, if it becomes a choice of alternatives, the question would be whether a little less consumption in one form or the other is not a worthwhile sacrifice for the fruits of economic and social development. If the answer is that it is, the exemption of essentials from taxation is illogical. Given the order of the development plans, if tax resources should fall seriously short and inflation should result, it may involve an even larger cut in current consumption standards of the weakest sections of the community than a systematic scheme of taxation of essentials, to the extent necessary. Limitation of taxation affords no guarantee against a rise in prices occasioned by failure to finance development plans through normal means.”

15. Perhaps, I may be permitted to conclude my brief observations on this aspect of the subject with two other quotations from the Report of the Taxation Enquiry Commission, which directly lead on to the next point I make in this paper.

“On the whole, the kind of tax system which would be best adapted to meet the requirements of the Indian economy, having regard to the development programme and the resources

required for it, appears to be one which would increase the resources for investment available to the public sector with as small a diminution as practicable of investment in the private sector, and which, therefore, is accompanied by the largest practicable restraint on consumption by all classes. Restraint on the consumption of higher-income groups must, of course, be greater than in respect of low income groups."

"The task is so to adapt the tax system as to enable the maximum practicable rate of investment in the public sector to be attained, consistent with maintaining and strengthening the incentives to the private sector to step up its own rate of investment."

16. The raising of tax resources to the maximum for the use of the public sector leads to the question of the adequacy of resources left to the private sector for the financing of its own development. The Taxation Enquiry Commission states that it paid particular attention to this aspect of the question, and a detailed study of its proposals indicates the various incentives to investment and savings in the economy recommended by it. Over and above these, the biggest single factor which should more than compensate for any deleterious effects of heavy taxation on the activity of the private sector will be the large public expenditures that will go to generate additional incomes widely diffused over the economy and thereby to sustain the demand for and prices of the products of private enterprise.

17. Apart from the question of availability of resources, the important issue of the technique of planning in relation to the private sector arises. In what sense will the Second Plan be a plan for the whole economy? In relation to the public sector, the scale and distribution of investment are *directly* determined by administrative decision. In regard to the private sector, the planning of investments—an increase in its scale and the distribution of investments—has to be (indirectly) induced by a system of incentives and checks, subsidies and tax differentials, credit and trade policies. This is the part of the Plan which would require particularly careful preparation with a view to designing a comprehensive system of fiscal, financial, credit, trade and other physical control devices integrated into the plan, for the purpose of securing maximum conformity on the part of the private sector to the objectives and targets of the Plan. Subject to the over-riding importance of conditions of demand, and price and cost factors, it is possible, I believe, to devise a reasonably satisfactory apparatus of direction to secure some degree of directioning of investments in the private sector. It has been mentioned in the last paragraph how economic development should operate to sustain demand and, thereby, stimulate the expansion of the private sector.

18. We come now to the important question of the order of magnitude of the next plan. I have avoided giving any figures in this paper, though at the present stage of our deliberations we should come down to figures in many matters. I shall content myself, however, with referring to broad ratios of magnitude and at this stage, with mentioning a few factors which may be taken into account in determining the order of magnitude of the Second Plan.

19. The auspices for the inauguration of the Second Plan are undoubtedly much better from the point of view of stepping up public expenditures with a view to stimulating economic development. We appear to be ready for a fresh bound of industrial development—costs, prices, raw material supplies, etc. seem to represent a favourable conjuncture of circumstances for industrial expansion.

20. The most favourable of the factors in the present situation, however, is the exceptional turn in food and other agricultural production as a result of a succession of good harvests. What is more, this has followed a succession of rather poor harvests, which goes to magnify the rate of improvement in the First Five-Year Plan. The agricultural sector is the largest sector of the national economy. If the performance in respect of the factors of permanent improvement in the agricultural economy, which may be expected to continue and improve, is counterbalanced by some worsening on the weather front, and only a small further net improvement, on the average, should occur in agricultural production, the rest of the economy would have to show a large measure of increase in production, indeed, to maintain the overall targets of increase in production. A somewhat poorer performance in agriculture than what is presumed would also restrict the scale of investment expenditures that is practicable without resulting in inflationary pressures. If these pressures appear to any significant extent, the order of performance in real terms would be marked down while it may be maintained in money terms, even if no other complicating consequences occur.

21. In so far as the main expenditures contemplated under the "tentative framework" are in fields other than those which lead to an expansion of output of consumer goods—and the main part of expenditures under the plan are in respect of lines of development which do not increase the supply of consumer goods, *e. g.*, transport, power, producers' goods and construction—the Second Plan is charged with a large inflationary potential. In particular, to take an illustration, the absence of any provision for increase in the domestic consumption of factory-produced cotton textiles appears to be somewhat unrealistic.

22. It appears, in general, that an investment to the extent of double its amount in the First Five Year Plan should be feasible, with a good effort. Attempts at a larger measure of increase may come up against difficulties in implementation. To the extent marked inflation occurs, achievement may suffer in real terms. The quality of achievement, too, is liable to fall as expenditure is incurred to fulfil targets without the requisite combination of factors of production coming forth in adequate quantities.

23. A clear picture of the adequacy of foreign exchange financing of the plan is not yet available. Any difficulties in that sector will point more decisively to a marking down of the total order of magnitude of the Plan. A considerably larger measure of foreign aid than can be foreseen may, however, alter the picture in that respect as well as in respect of the feasibility of the whole plan.

24. Having said this it seems necessary to add that the tentative plan-frame figures are much more modest than some of the earlier discussions indicated they might be, and the analyses of the sources of financing, etc. are on the whole realistic. Both appear to be, however, still somewhat too optimistic and to require thorough scrutiny of their detailed basis.

25. As regards the constituent elements of the tentative plan I wish to confine comment at this stage to a feature which has already been briefly adverted to, namely, the apparent lack of balance in industrial growth, which would comprise at one end of a very considerable expansion of the production of producers' goods and at the other end of the products of small-scale cottage industries. It is stated that once the problem of employment has been brought under control, not only could a more sizeable development be permitted in factory consumer goods industries, but use of modernisation devices in cottage industries could also be permitted. The rigid terms in which the likely process of industrial growth is cast, the presumed complementarity in growth of heavy basic industries on the one hand and light capital-economising industries at the other end, with presumed stagnation of organised consumer goods industries except for export, require some reconsideration and revision.

26. It seems, too, that in some ways one of the weakest, because most difficult, parts of the tentative plan-frame relates to the development of cottage industries. Granted the full theoretical case for their speedy development, the techniques of securing such development in coordination with the organised counterparts of such industries, not entirely through physical regulation but based to an increasing extent on improvement in efficiency in production and marketing, require the most careful examination from the technical, economic and administrative angles. This would be required *before* the Plan is finalised.

NOTE ON TARGETS AND ALLOCATION OF RESOURCES FOR THE SECOND FIVE YEAR PLAN

by

DR. S. R. SEN

Prof. Mahalanobis envisages in his plan-frame a net investment in the public as well as private sector of Rs. 5,600 crores, Reserve Bank and Dr. Raj Rs. 6,000 crores, Prof. Muranjan Rs. 5,200 crores and Prof. Balakrishna envisages a development expenditure of Rs. 3,500 crores in the public sector only for the Second Five Year Plan. We have also an estimate of investment by the Federation of Indian Chambers of Commerce and Industries of the order of Rs. 7,200 crores, the comparable part of which is likely to be roughly Rs. 6,000 crores. The relative share of agriculture and irrigation varies in these different plan-frames from 16% to 17.1%, of industry 21.2% to 30.1%, of power 5.4% to 8.9%, of transport and communication 16.1% to 27.8% and housing, social services, Rehabilitation etc. 20.7% to 43.5% (Please see Appendix). It is not clear how far these estimates are based on a forecast of effective demand as distinct from an assessment of requirements and how far technical possibilities and inter-industry supply and demand correlations have been taken into account. In some cases the financial estimates given seem to be under-estimates compared to the physical targets proposed and require careful scrutiny.

2. It appears to me, however, that if the investment programme is of the order of Rs. 6,000 crores for the Second Plan, we need not perhaps be unduly worried that there will be a serious inflation which will require very drastic physical controls and serious institutional and social changes. What is important in this context is not only the total volume of investment envisaged but how it is related to the existing level of investment, employment and money supply and what is more important, what are the various types of investment envisaged and how is the investment programme going to be phased. We may recall in this context that between August 1939 and August 1945 the total money supply in the country went up by over 6 times from Rs. 320 crores to Rs. 1,955 crores. A large part of the wartime investment was on non-productive items. Yet, the index number of wholesale prices (which though defective is unfortunately the only relevant index available) rose only by 2½ times by 1945 and even subsequently in spite of various dislocations in the economic life of the country the peak level was never more than 4½ times. A six-time increase in money supply no doubt created a number of serious problems but these problems could be met without making drastic institutional and social changes in the country. For the Second Five Year Plan we may be starting with a money supply of the order of about Rs. 1,850 crores and a situation when costs and incomes will be probably more or less adjusted to prices. In fact at the moment not only has the inflationary pressure subsided but there is actually a

recessionary trend. Hence if in the Second Five Year Plan we have an investment of the order of Rs. 6,000 crores and the addition to the money supply is of the order of only Rs. 1,500 to Rs. 1,750 crores as estimated by Dr. Raj, money supply will be less than double. Moreover unlike in war time, a large part of the proposed investment will be on schemes of production. I would, therefore, submit that there is no reason for being unnecessarily concerned with the idea that an investment of the order of Rs. 6,000 crores will mean inflation and that we shall have necessarily to take all sorts of drastic measures against it. I admit that this is based on rather crude analysis but I would venture to suggest that the main conclusion which emerges is not very unrealistic. I should perhaps also clarify that I am not against institutional and social changes which may be desirable from other considerations but my point is that unless the order of investment is stepped up substantially, any drastic institutional change may not be really necessary for the limited objective of the achievement of the planned targets of production. I agree that from financial and administrative considerations it may be difficult to start with a much higher basic programme of investment but we should nevertheless create conditions so that the basic plan becomes really the minimum and we can and do take the fullest advantage of every opportunity to press our investment to the farthest limit possible.

3. To my mind, it does not really matter very much whether the basic investment envisaged is a few hundred crores higher or lower *so long as* we take care to keep our plan elastic and to press our investment to the utmost limit. Our basic plan should no doubt start with as balanced a picture as possible between heavy industries, large-scale light industries, small-scale industries, agriculture, etc., so that the additional production in one sector is readily absorbed by the purchasing power generated in other sectors, but as the implementation of the Plan proceeds, there will necessarily be certain changes in the demand and supply situation and in so far as it can be done without cutting down any of the physical targets proposed in the basic plan, the investment pattern should be changed to suit the new conditions which may emerge from time to time.

4. When the situation changes, there are two ways of adjustment to the new situation, one is by selective restriction and the other by selective expansion. I would submit that our policy should be to avoid restriction as far as possible and rely mainly on selective expansion. This may be too obvious a point to harp upon but I think it is nevertheless necessary to do so because recently we got a suggestion from a very responsible person that we should restrict our fertiliser programme because already there is an agricultural surplus and prices are falling.

5. In this connection I may draw attention to the suggestion made at para. 20 of my note on "Price Policy for the Second Five Year Plan". In addition to a basic investment programme of Rs. 6,000 crores or any other figure that may be agreed upon, we should have a supplementary programme, of which a substantial part, say 40 percent may be on early maturing production schemes, *e.g.*, fertiliser distribution, minor irrigation, fisheries' development, textiles production, etc., 20 percent may be on late maturing production schemes, *e.g.*, cattle breeding, major irrigation, heavy industries, etc., and 40 per cent may be on schemes of economic and social overheads, *e.g.*, research, education, health, transport,

soil conservation, etc. We should press with our programme of basic investment to the maximum until the "inflation point" is reached. As soon as the "inflation point" is reached we should take no doubt the usual anti-inflationary measures as a first step but we should simultaneously expand our investment on early maturing production schemes included in the supplementary list. As soon as the increased out-put from these schemes comes to the market, prices will in due course tend to sag and that will be the time to step up expenditure on schemes of economic and social overheads and late maturing production schemes from the supplementary list. It is only when our expenditure on economic and social overheads, etc., cannot be expanded fast enough due to various bottlenecks and prices tend to reach the "deflation point" that the usual anti-deflationary measures should be put into action. We should go on expanding our investment on social and economic overheads until the "inflation point" is reached.

6. It is by alternating in this manner between supplementary schemes of early maturing production type and schemes of social and economic overheads (or late maturing production type) *over and above* the investment envisaged in the basic plan that we would be able to deploy our resources most effectively, push investment to the maximum extent possible and ensure the quickest rate of progress. While in the basic plan—late maturing production schemes, especially heavy industries, should have a very important role, in the supplementary plan—the early maturing production schemes and schemes of economic and social overheads will have an important strategic part to play.

7. I would, therefore, suggest that the plan-frame should comprise two broad parts (a) basic and (b) supplementary. Each part should have three groups—(i) early maturing production schemes, (ii) late maturing production schemes and (iii) schemes of economic and social overheads. Wherever possible the flexible part of a scheme should be also indicated. The basic plan should include all essential schemes and most of the major and/or inflexible projects. Heavy industries should have relatively greater *pre-ponderance* in the basic plan—although there should be a reasonable proportion of early maturing production schemes and schemes of economic and social overheads as well. In particular such schemes as will help break various bottlenecks which may stand in the way of implementing the supplementary part of the plan, e.g., training of technical personnel, expansion of transport facilities at important points, etc., should be given high priority in the basic plan itself. The supplementary plan should on the other hand have a preponderance of early maturing production schemes and schemes of economic and social overheads and the schemes included should be of a type as would allow a large degree of flexibility.

APPENDIX

(Rs. crores)

Second Five Year Plan (1956-57 to 1960-61)							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Prof. Mahalanobis	Reserve Bank of India	Dr. K. N. Raj, Delhi School of Economics	Prof. R. Balakrishna, Madras University.	Prof. S. K. Muranjan	Federation of Indian Chambers of Commerce and Industry	First Five Year Plan (1951-52 to 1955-56)
I. PUBLIC AND PRIVATE SECTORS							
A. Net Investment of which:	5,600	6,000*	6,000	..	5,200	7,200**	3,000
(i) Public Sector	3,400	3,500	4,000	..	..	..	1,800(a)
(ii) Private Sector	2,200	2,500	2,000	..	..	..	1,200
B. Break-up.							
I (i) Agriculture, Irrigation & Community Development.	950 (17.1)	..	..	..	..	1,200(b) (16.0)	
(ii) Power	500 (8.9)	..	..	..	..	400 (5.4)	
I. (i) and (ii)	1,450 (26.0)	1,120 (18.7)	..	..	..	1,600 (21.4)	
II. Industry	1,400 (25.0)	1,270 (21.2)	..	..	..	2,250 (30.1)	
III. Transport and Communication.	900 (16.1)	1,000 (16.6)	..	..	..	2,075 (27.8)	
IV. Construction, Social Services, Rehabilitation, etc.	1,350 (24.0)	2,610(c) (43.5)	..	..	..	1,550 (20.7)	
V. Stocks	500 (8.9)	..	..	..	..	..
TOTAL (I to V)	5,600 (100.0)	6,000 (100.0)				7,475(d) (100.0)	

*Includes some non-investment expenditure also, and therefore cannot be equated wholly to net investment.

**Part comparable to the estimates given in cols. (2), (3), (4) and (6) is roughly of the order of Rs. 6,000 crores.

(a) Takes into account the revision subsequently made.

(b) Includes figures for village industries.

(c) Is composed of as under :—

	(Rs. crores)
<i>Public Sector.</i>	
Social Services and Miscellaneous (Education, Health and Rehabilitation)	860
<i>Private Sector</i>	
Urban Housing	750
Rural Investment (Housing & other)	1,000
TOTAL	2,610

(d) Includes about Rs. 300 crores for replacement of outlays in industry and transport ; the net investment being thus of the order of Rs. 7,200 crores.

TARGETS AND ALLOCATION OF RESOURCES

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
II: PUBLIC SECTOR ONLY							
A. <i>Development Expenditure.</i>	4,300	3,500	..	3,500(e)	2,249 (f)
B <i>Break-up.</i>							
I. (i) Agriculture, Irrigation & Community Development.	950 (22.1)	..	..	..	..	..	..
(ii) Power	450 (10.5)	..	..	..	..	..	..
I. (i) & (ii)	1,400 (32.6)	1,120(g) (32.0)	..	995 (28.4)	..	..	991 (g) (44.1)
II. Industry	1,100 (25.6)	620 (17.7)	..	875 (25.0)	..	..	178 (7.9)
III. Transport and Communication.	950 (22.1)	900 (25.7)	..	780 (22.3)	..	..	536 (23.8)
IV. Construction, Social Services, Rehabilitation	750 (17.4)	860 (24.6)	..	850 (24.3)	..	..	544 (24.2)
V. Stocks	100 (2.3)	..	..	0.0 (0.0)	..	..	0.0 (0.0)
Total (I to V).	4,300 (100.0)	3,500 (100.0)	..	3,500 (100.0)	..	..	2,249 (100.0)

(e) As indicated in the Taxation Enquiry Commission's Report.

(f) Takes into account the revision (of the order of Rs. 180 crores) subsequently made.

(g) Break-up is indicated below :-

	(Rs. crores)	Second Five Year Plan
Agriculture (incl. minor irrigation)	273	420
Community Development	101	
Major Irrigation projects	214	700
Multipurpose projects (Irrigation and Power)	256	
Power Projects only	147	
TOTAL	991	1,120

A NOTE ON DEFICIT FINANCING

by

DR. A. K. DAS GUPTA

Where labour is fully employed and the object of planning is only to expand the capital base of the economy, planning must necessarily entail curtailment of current consumption. Resources are given, and if investment is to be increased, consumption must be reduced. If public investment in such an economy is financed by taxation or voluntary savings of the public, consumption is directly curtailed and there is no rise of prices. If it is financed through budget deficit, prices rise, and those whose money incomes do not rise proportionately are forced to reduce consumption. If, however, the curtailment of consumption on the part of this section is balanced by increased consumption on the part of those whose money incomes increase more than in proportion to the rise of prices, the policy of investment is frustrated. Resources are drawn back to consumption goods industries, and the original dose of investment turns out to be waste, unless the construction for which it is designed is completed. This is the orthodox economist's objection to deficit financing.

2. If, on the other hand, there is unemployed labour in the economy along with excess capacity in the consumption goods sector, investment can be increased simultaneously with an increase in consumption. Unemployed resources are used, and production increases all along the line. If in such an economy an additional dose of public investment is financed through budget deficit, total expenditure on consumption is increased, and production of consumption goods is also stimulated. And in so far as the surplus capacity in the consumption goods sector is sufficient to fully absorb the unemployed labour, no rise of prices occurs. Even if in the process of realisation of full employment, full capacity is reached in certain sectors or at certain stages and prices tend to rise, the process can be allowed so long as the money rate of wages can be held intact. This is the model which Keynes has made familiar and in the context of which modern economists prescribe deficit financing.

3. In between we can contemplate a model of an economy in which there is surplus labour but no surplus capacity in capital resources. The problem here is clearly very much more complicated than in either of the above models. We have to choose between two courses. We can leave aside the question of employment for the time being, concentrate on investment at the expense of consumption, as in the first model, and start absorbing the unemployed only after surplus capacity in the form of new capital goods is created as a result of the completion of investment process. Or alternatively, we can take up employment straightaway, keep up the level of current consumption and push investment through deficit financing. The first procedure has the advantage that it does not raise prices. However, the problem of unemployment

remains unsolved and hence one of the major objectives of planning remains unfulfilled. Further any substantial curtailment of current consumption may not be a practicable proposition, particularly when the level of income in the economy is low. The second procedure, on the other hand, does add to the volume of employment, but in doing that it tends to raise the level of prices. More labour is employed upon a given stock of capital which is already working at full capacity in the consumption goods sector. The result is diminishing return and rise of prices.

4. The model to which Indian economy is a close approximation is this third model. Not that reserve capacity is non-existent. But it is deficient relative to surplus labour, particularly when account is taken of 'disguised' unemployment. Rapid absorption of unemployed labour in our economy will certainly come up against severe bottlenecks. The position is further complicated by the fact that, in so far as the real wage rate is already too low, we cannot allow prices of consumption goods to go up except within narrow limits without money wage rates going up, too. However, if the absorption of the unemployed is one of the major objectives of our Plan, then surely we cannot avoid facing this problem. Savings, in so far as they are voluntary, must be mobilised, and institutional facilities are to be provided for that. But no special incentive for the curtailment of consumption is called for. Nor is taxation to be made too rigorous. For taxation not only reduces consumption but also private investment and is, therefore, unfavourable for employment. Deficit financing is the method by which we can reconcile the twin objective of capital formation and employment.

Now, as we have seen, the effectiveness of deficit financing depends upon how far money rate of wages can be prevented from rising. Up to a point deficit financing may be considered as safe. Reserve capacities do exist in certain sectors, and so long as these are exploited there is no fear. But we do not know where precisely the extra money income that will be generated by an additional dose of deficit-financed investment will impinge and how quickly the bottlenecks will appear. Once prices of wage goods start rising, money wages will follow suit, if only because real wages are about the minimum permissible. The way out is the institution of controls on the lines of war time controls.

5. What, then, is the limit to deficit financing? In Keynes' model—a model that is relevant to advanced economies, the limit is indicated by the criterion of money wage rate. In our model, the criterion that suggests itself is cost of living. From this latter point of view the scope of deficit financing is indicated by the following considerations:

(a) Surplus capacity at strategic points, *i.e.*, to say in industries which are relevant to the workers' budget.

(b) Time lag between the earning and spending of money income. This latter requires some explanation. Hitherto in our analysis we have assumed that current expenditure on consumption is done out of current income. In fact, however, an individual spends his income only after an interval. Money income is earned today and it is spent some time after. It is, therefore, past income that influences current expenditure. The existence

of a time lag facilitates deficit financing. The time lag varies with different groups of consumers according as they are wage earners, salary earners or, say dividend earners. Nevertheless, given the time lag, in so far as the extent of deficit financing is matched with the increase in output of consumption goods during the interval, there is no rise in prices. However, even allowing for these considerations the scope for deficit financing within the limits of constant prices is restricted. And if our target concerning employment exceeds what is warranted by this limit, then we have to invoke controls. And once the stage demanding controls sets in, there is no economic criterion in terms of which we can judge the limit of deficit financing ; the limit is set by administrative considerations. If at all in such circumstances any objective criterion is sought, black markets would perhaps provide that test.

DEFICIT FINANCING AND INDIAN ECONOMIC DEVELOPMENT

by

PROF. B. R. SHENOY

SUMMARY

The term deficit financing has been used in this paper in the Indian sense of covering over-all budget deficits by drawing down the cash balances of the government or by borrowing from the Reserve Bank, and not in the Western sense of loan financing of the deficits. Allowance, however, must be made for the variations in the government debt held by the Reserve Bank and by the commercial banks to arrive at a correct measure of the total net deficit financing effected.

2. The scope for economic development of under-developed economies through deficit spending was limited. A distinction must be made between the problems of unemployment in industrial economies and the problems of under-employment in under-developed economies. A mistaken analogy between the two has been responsible for much confusion of thought and erroneous policy approach in under-developed economies. In the case of industrial economies, it was a question of mobilising savings which lie idle; in the case of under-developed economies, it was a question of scarcity of savings. Deficit financing cannot create real resources. Under certain circumstances, it may help to mobilise such resources. The value of deficit financing lies in preventing deflation or unemployment of real resources. Under-employment in under-developed economies was conceivably a result of investment falling short of the demographic rate. Production was not possible with labour alone. Under-developed economies had a shortage of all the needs of production other than unskilled labour. Unemployment in industrial economies, by contrast, co-existed with unemployment of the complimentary real resources of production.

3. The theory of deficit financing for economic development of under-developed economies seems to be that, when the increased production was ready for the market, the initial inflation would get eliminated. The problem of deficit financing was, thus, believed to be merely a problem of preventing an undue price rise during the intervening period.

4. But there was always a time lag between investment, its completion, and the resulting increase in output. Much economic disturbance may occur during the interval. As wages would be paid by the week or the month the rise in the prices of consumer goods will probably take place almost immediately. The time interval was the crux of the problem and the rise in consumer prices the starting point of the trouble. It would be incorrect to suppose

that inflation would be "liquidated" when the "compensatory" increase in the output becomes available on the completion of the investment. The increase in the output will be accompanied by an increase in income, the financial counterpart of increased production. This is the same thing as saying that the initial inflation will have been absorbed by higher wages and prices, and, short of a process of deflation, there would be no reversal to the earlier price level.

5. Inflationary financing of economic development (through deficit budgets) would be self-defeating. It would affect adversely the availability of real resources for economic development from other sources as a result of misdirection of investment in non-essential trades and real estate, and misdirection of savings in foreign exchange and in gold hoards. The pattern of distribution of income would tend to be away from the socialistic pattern.

6. The consequences of inflation cannot be bottled up by price controls. To think so is to expect that a people in want could be induced or coerced not to spend the money put into their pockets. Controls do not create savings. Price controls and rationing are merely a device for an equitable distribution of scarce consumer goods.

7. This is not to say that no scope exists for deficit financing. In fact, some deficit financing may be essential for economic growth with stability. In under-developed economies the necessity for deficit financing was underlined by the urgency that the limited supply of real resources had to be put to their best use. But, precisely because of the scarcity of real resources, such deficit financing must stop severely short of inflation, as inflation will affect the overall availability of real resources for economic development.

8. Non-inflationary deficit financing was of two types. The first was represented by the purchase, by the Government of India, against its cash balances, of sterling from the Reserve Bank for use in the public sector. Here we have a case of payments deficits originating in the public sector being balanced by equivalent budget deficits. When, however, payments deficits originated in the private sector, it would not be legitimate to match them by budget deficits; such payments deficits will have been already matched by equivalent creation of bank credit. To engage in deficit financing equivalent to the payments deficits originating in the private sector would be clearly inflationary. The same applied to payments deficits resulting from crop failures and inflationary pressures. Contrary to the widely held belief it was thus not safe to engage in deficit financing to match all situations of payments deficits. Its safety depended on where the deficits originated and how they originated.

9. The second type of non-inflationary deficit financing was that indicated by the Bernstein Fund Mission Report and related to the cash balances of the public. The demand for money increased together with, and at least in proportion to, the increase in output. Such increase in the cash balances represented savings, the equivalent real resources being present

in the economy somewhere. These resources may be appropriated, by credit creation or by deficit financing. To the extent they may be acquired for the public sector, there would exist room for equivalent deficit financing.

10. The total non-inflationary deficit financing would be, thus, limited to the sterling reserves and the cash balance resources acquired for the public sector. The order of magnitude may be Rs. 180-235 crores for the five-year period, or Rs. 35-47 crores per year.

11. The fall in the prices of agricultural commodities during the past one year presents a difficult price problem. The prevailing price situation is a complex one and there was need for caution against too ready acceptance of the view that a solution may be found in fiscal measures. The price decline is neither universal nor uniform. The prices of some major commodities have moved in opposite directions. The cost of living index has declined only slightly, by comparison.

12. The problems of the commodities affected need individual consideration. Adoption of simple monetary measures would aggravate the problem of export commodities, the world prices of which have fallen, especially in the context of a rigid exchange rate. Monetary measures, the effects of which were all pervasive, were no solution to relative over-production. Some limited scope, however, may exist for deficit financing of the second type examined above.

13. The question of whether a given amount of deficit financing was inflationary had to be judged by reference to the credit created by the Reserve Bank and by the commercial banks, in relation to the rate of increase in investment and output. The available data indicated that the net deficit financing of recent years, though it averaged only about Rs. 50 crores per year, had been inflationary. This experience lends support to our estimate of the safe order of magnitude of deficit financing.

I. DEFINITION OF DEFICIT FINANCING

14. The term deficit financing has been employed to describe dissimilar concepts. In the United States loan financing of the excess of governmental outlays (including capital expenditure) over revenue receipts is generally referred to as deficit financing. In India we would see no deficit financing when the budget gap is covered by loans. We recognise a budget deficit when current revenues, the proceeds of loans from the public, including commercial banks, small savings, and other receipts and funds at the disposal of the government fall short of, in the aggregate, the total disbursements of the government (including capital outlays). The financing of the uncovered gap, by drawing down the cash balances of the government or by borrowing from the Reserve Bank, is called deficit financing in India.

15. It is important, at the outset, to be clear about the content of the term, as the possibilities and consequences of deficit spending in the U.S. sense cannot be applied, without due modifications, to deficit spending in the Indian sense. Such spending would be, for instance, non-inflationary when the loans are subscribed from, and, in any case, do not exceed, the genuine savings of the public. It would do no more than substitute public expenditure for private expenditure or activate idle savings. On the other hand, deficit financing in the Indian sense would tend to be inflationary as soon as its magnitude exceeded the available resources, including the savings of the public held in the form of cash balances. Much discussion in the U.S.* on the potentialities of compensatory governmental spending as a corrective to a slump in private investment seems to relate to the U.S., not the Indian, concept of the term. In what follows we shall use the term deficit financing in the Indian sense.

16. Two modifications, however, would be called for. Reserve Bank subscriptions to government debt, or conversion into new loans of the redeemable debt held by the Bank, are, in effect, concealed government borrowing from the Bank. In the absence of these transactions, the budget gap, and the deficit financing (as defined above) would be larger. Such transactions should be, therefore, added to the budget gaps as shown in the budget statistics to arrive at a correct picture of the deficit financing effected. The same applied to commercial bank subscription to government loans, or conversion of redeemable government loans held by them, as commercial banks may match government debt in their portfolios by created money, their assets and liabilities moving up by the amount of the debt.

II. ANALOGY BETWEEN INDUSTRIAL AND UNDER-DEVELOPED ECONOMIES

17. A distinction must be made between the problems of unemployment in industrial economies, and the problems of under-employment in under-developed economies. A mistaken analogy between the two has been responsible for much confusion of thought and erroneous policy approach in under-developed economies. In the one case it was a problem of re-instating labour, equipment and the materials of production back again into employment, or of absorbing the natural growth in the labour force into employment. In either case real resources (*i.e.*, savings, whether viewed in financial terms or in terms of their physical counterpart, namely, labour, equipment and materials of production) existed in a form which will permit speedy expansion of production when propitious circumstances may reappear. The presumption here is that the overall rate of saving and investment were above the demographic rate, or the rate essential to maintain production and per capita income undiminished. The problem was one of devising ways and means of activating savings or re-employing the idle resources of production.

18. The problem of under-developed countries, such as India, was one of growth from economic stagnation. Savings were low and the rate of investment was, probably, no more than the

**e.g.*, the articles by J.H. Williams and J.M. Clark which are reproduced in *Readings in Business Cycle Theory*, London, 1950.

demographic rate so that in a background of a growing population the standard of living could be maintained only with some difficulty. The problem here was increasing the rate of investment so as to accelerate efficiency and output faster than the population growth. It would be incorrect to suppose that such economies offered abundant domestic resources and that development was merely a matter of providing finance. The only thing abundant was unskilled labour, and, probably also, scope for profitable investment.

19. But Labour alone cannot increase output. Even the simplest form of investment in the construction of contour bunds, roads or minor dams required some capital. The *shramadan* workers, who may offer their labour free, bring their own food with them and sleep in the open, had still to be equipped with some implements, however simple, and engineers, foremen, and group leaders had to be found to plan, organize and supervise their construction. At some stage there may be need for some little masonry, cement, timber or steel. Such equipment and materials had to be "saved" from some other use or consumption industry. It is not possible to conceive of production without some saving, and inadequacy of savings was among the central problems of under-developed economies.

20. The remedies suggested for unemployment in industrial countries have varied. In the twenties the emphasis was on central bank policy, the cyclical slump in investment being sought to be corrected by changes in the volume of money and the rate of interest. The Great Depression led to emphasis on open market operations as the prime lever of policy. Deficit spending was first advocated as a remedy by Keynes in 1934. It was conceived as a logical sequel to central bank policy and the two were to operate in unison for inducing investment, the open market operations functioning *via* a lowering of the rate of interest and government borrowing acting directly on the idle deposits. The deficit spending would taper and vanish as the multiplied and cumulative effect of spending produced the necessary leverage and economic activity climbed back to normal. The mechanism, also visualised a budget surplus and reversed open market operations as a stabilising factor in a boom.

21. The effectiveness of this device in re-vitalising investment activity has been doubted. It would be misleading to stress the analogy between unemployment in industrial countries and under-employment in under-developed countries and seek a solution to the problems of the latter in the remedies prescribed for the former. Deficit spending, with or without the concomitant central bank policy, cannot create savings, though, under certain circumstances, it had a part to play in the economic development of under-developed countries. When, however, on top of the long-term problems of economic development there get super-imposed the problems of cyclical unemployment in the organised sector of under-developed economies, the pump-priming and compensatory spending devices may be of value to correct such unemployment. Otherwise the two problems were fundamentally distinct and the remedy applicable to the one may not apply to the other.

III. THE THEORY OF DEFICIT FINANCING

22. The authors of the Bombay Plan argued that, since created money as only "meant to increase the productive capacity of the nation", in the long run, it would be "of a self-liquidating character". In fact, as a result of the expanded output, at the end of the 15-year period of the Plan, "the general level of prices would, in all probability, be lower than at the beginning of the Plan". The problem of inflationary finance was, in the main, believed to be a problem of keeping prices within limits pending completion of the projects. Accordingly they saw no danger in providing 34 per cent of a total finance of Rs. 10,000 crores in created money.

23. The Planning Commission would prefer to steer clear of inflation and, with that end, would restrict the amount of deficit financing to the releases from the sterling balances. But if inflation should develop they would rely on physical controls for holding in check the cost of living indices, the underlying concept being, probably, that, once the additional production commenced flowing into the market, inflation would be eliminated.

24. Some have compared deficit financing for development to war financing. The latter resulted in inflation because it did not yield "an increase in production for current consumption" whereas "deficit financing now of a development plan" would "lead to a compensatory increase in production" in the future, though, during the intervening period, a price rise was inevitable. But, as had been attempted in time of war, the rise in prices could be held in check by a skilful use of controls and allocations. Such deficit financing, coupled with controls, could be usefully brought into service in the early phase of the Plan (Prof. D.R. Gadgil)*.

25. Let us assume that there exists a considerable labour force engaged in agriculture which is under-employed and whose contribution to agricultural output is exceptionally small, and that these marginal workers are transferred to the construction of dams, roads or other investments, the requisite finance being provided by budget deficits. Such transfer, by assumption, would not involve any appreciable diminution in agricultural output. The transferred workers would be paid wages at least at the rate of their earnings in agriculture. As agricultural output had not fallen, the income of those left behind on the farms will not diminish. The total income of the community would, therefore, rise by the wages paid to the transferred workers.

26. There was always a time lag between investment (whether in the construction of wells, roads, or factories), its completion, and the resulting increase in output. Much economic disturbance may occur during the interval. The currently available supply of consumer goods

(* Professor Gadgil, however, is of the view that "if much higher resources are required for a development plan than those at present available (and this problem is undisputed) it would be much better to adopt an entirely fresh approach towards the problem and to try and obtain resources in a more direct manner". One wonders whether obtaining resources in a "more direct manner" has features in common with the physical planning of the communist pattern.

being unchanged, the rise in money incomes would cause a rise in the prices of consumer goods. The time interval was the crux of the problem and the rise in consumer prices, the starting point of the trouble. Wages being paid by the week or the month prices will rise immediately upon the commencement of the projects. The price rise will be all pervasive and will not remain confined to the immediate place of location of the projects.

27. The tempo of inflation would depend upon the magnitude of the deficit financing and will continue with the progress of it. The question arises whether, on the completion of the new investment, the initial inflation would get "liquidated" by the "compensatory" increase in output. Even supposing that, after an interval of one or two years, the new investment adds to production annually an amount equivalent to the investment financed by budget deficits, no such cancelling of inflation is tenable. As a financial counterpart to the increased output there will simultaneously accrue a corresponding increase in the income of those who, directly or indirectly participated in it. This is about the same thing as saying that the initial inflation will have been absorbed by the community in higher prices, higher money wages and profits, and higher cash balances. Short of a process of deflation, there would be no reversal to the initial price level.

28. It follows that any attempt to continue deficit financing beyond this point, would be inflationary like the initial deficit financing and for the same reasons. A part of the increased income will accrue to the state as taxes, a part may be set aside against depreciation, and a part, left after provision for increased consumption, may be saved. The depreciation and the savings would be invested through the usual channels. There would be nothing in the current situation to suggest that the continuance of deficit financing after the new investment comes into production would not be inflationary.

29. Inflationary financing of economic development through budget deficits would be self-defeating. Its dangers would, probably, manifest earlier in under-developed economies than in industrial economies. The average income of the low-income groups in under-developed economies being close to the margin of subsistence, the inequitable incidence of inflationary finance may prove to be socially explosive. It would tend to produce a pattern of income distribution, contrary to the socialistic. From the standpoint of social security, the incidence of further inflation on the real incomes of the constable* in the Police Forces and of the *Jawan* in the Defence Services should be borne in mind. This aspect of the matter must not be dismissed lightly under the thought that dearness allowances would take care of the inequity of inflation. Probably the greatest enemy of the Kuomintang in China was the printing press.

30. These socio-political considerations apart, inflationary finance would impede economic development by creating other demands on the available real resources. It induces a misdirection of savings and investment in non-essential (luxury) trades to meet the inflationary

*The salary and allowances of a constable in the Police Forces, I understand, varied between Rs. 86 and Rs. 100 p.m.

demand for them, and in real estate, in urban building property, in foreign exchanges and in gold, as a result of the efforts of the savers to protect their savings from rising prices. It may discourage current savings, when, as in India, the rate of interest was kept artificially low. In the sphere of external payments, inflation accentuated the payments difficulties especially when the exchange rate was rigid. It produced a pressure for imports of consumer goods or of materials and equipment for the production of consumer goods, and reduced exports.

IV. PRICE CONTROLS AND ECONOMIC DEVELOPMENT

31. The question arises whether these distortions and wastages may be successfully held in abeyance by a skilful use of controls. As our own experience and the post-war experience of a number of other countries had shown tightening of import restrictions was no remedy to the payments pressures caused by inflation. The inflationary purchasing power, when denied of import goods, worked on exports. Exports declined and the payments problem persisted.

32. Price controls may not be effective as it is not legitimate to expect that a people in want could be induced or coerced not to spend the money put into their pockets. Inflation was all pervasive. If the flow of money in one sector of the economy was restricted by price controls and rationing—the question of the success of such measures apart—the flow of money in other sectors, where no such restrictions prevailed, will increase and there will result a compensatory rise in prices in these other sectors. The general price-level would thus reflect the inflationary pressures. Controls, if successful, will have affected only relative prices.

33. It has been argued that if “the supply and distribution of foodgrains, and other essential commodities such as cloth and gur or sugar, could be so organized as to meet the minimum requirements of the population”, the dangers of deficit financing would be correspondingly mitigated. If, as a result of these measures, the impact of the larger money incomes fell on non-essential commodities “which matter less from the point of view of the cost of living” of the masses (*Planning Commission Report*, p. 61) this was a matter of relative indifference from the wider social standpoint as only a minority of the well-to-do were thereby affected.

34. Actually, however, things may work out differently. Under the stress of reduced profits the output of the essential commodities, the prices of which were controlled, would decline and scarcities will increase; on the other hand, the output of non-essentials, where higher profits would prevail, would increase. This would defeat the purpose of controls. The control of the prices of foodgrains and of a few other commodities of popular consumption cannot control the cost of living in general. For this it was necessary that the bulk or the whole of the consumer goods entering into the index should be subjected to control. These considerations, together with the problems of black markets, which will emerge under ineffective controls, would suggest an extension of controls over the entire consumption sector.

But this would raise, in a vast country like India, stupendous administrative problems and would involve a diversion of personnel, greatly needed for implementing development, into administering the complex machinery of controls. Even so the cause of economic development will not be advanced, as price and exchange controls do not create savings. Price controls and rationing are merely a device of distributing equitably scarce commodities, such equity, however, depending upon controls and rationing being nation-wide.

35. It is, no doubt, possible to increase savings and investment by a squeeze, through allocations, of the supply of equipment and materials to the consumption trades. But, under the urge of efficiency and of the necessity to avoid waste, this must soon lead to regimentation of the entire economy, universal controls and allocations. The resulting organization of the economy would be indistinguishable from communism.

36. Inflation appeared when development was carried out in the face of a serious shortage of resources, and controls were no remedy to the situation. Controls cannot make up for an overall shortage of real resources. Whatever may be the importance of controls in a war-time emergency, it was unsuited for long-term economic development. The problem confronting India was not a problem of a sudden spurt of large investment for a year or two, but a programme of expansion extending over a generation or more. As a practical matter, a people in want cannot be expected meekly to suffer the hardships of rationing and price controls for prolonged or indefinite periods. The essence of the matter was that a people as a whole cannot be compelled to save, by the monetary device, more than what they were willing to do voluntarily. The situation was different under communism. There the approach was physical, as distinguished from the monetary and free-enterprise approach. Resources required for development were acquired by regimentation and the reduced output of consumer goods, which would ensue, was rationed out. Regimentation decided, in advance, how much will be saved, not individual choices. Serious difficulties arise when we attempt to mix these two approaches.

V. NON-INFLATIONARY DEFICIT FINANCING

37. This is not to say that there was no room whatever for deficit financing. In fact, deficit financing in a certain measure, depending upon circumstances, may be essential for economic stability in under-developed, as in industrial, countries. In the absence of such financing, there may set in unemployment and a reduction in output. But it would not cause inflation. It would do no more than provide the appropriate money supply to finance a growing output at stable prices. The first essential for successful non-inflationary deficit financing was the absence of inflationary pressures. Deficit financing in any measure would aggravate economic instability if inflationary pressures already prevailed. Given a stable economic background, there may exist scope for two types of non-inflationary deficit financing.

38. An example of the first was the purchase, by the Government of India against its Cash Balances, of sterling from the Reserve Bank to finance imports of equipment for the public sector of the Plan.* The assets and liabilities of the Reserve Bank would decline by the amount of the sterling purchased, and the volume of money in circulation would remain unaffected. If sterling was purchased against *ad hoc* Treasury Bills (as was done, in another context, in July 1948) the effect would be the same, except that there would be, then, no change in the assets and liabilities of the Bank. Deficit financing (as represented by the drawing down of the Cash Balances) would match the payments deficits (as represented by the drawing down of the sterling resources). It would be non-inflationary.

39. When payments deficits originate in the private sector sterling in the reserves will be paid for by equivalent funds with the public. This did not, however, always involve deflation. In the early post-war years such transactions may represent a cancelling out of the forces of latent inflation. Sterling may be acquired against the 'excess wealth' of the community held as reserves for expansion by private industrial firms, or against excess liquidity, both being the legacy of the war. The volume of money in circulation would be unaffected. But the economy would have grown in stability by the wiping out of latent inflation. To engage in deficit financing to the extent of such payments deficits would be clearly inflationary (as this would add to the monetary circulation).

40. Ordinarily, when investments in the private sector are financed from current savings, the foreign exchange required for such investments should be available either as a result of increased exports or reduced imports made possible by the saving activity. But situations may arise when exchange reserves may have to be drawn upon for the use of the private sector. To the extent of such purchase, there would be room for credit creation by the commercial banks in favour of the industry requiring external finance. In such a situation the necessary money supply (to finance increased output at stable prices) having been already created, it would be inflationary for the state to engage in equivalent deficit financing. Deficit financing would be inflationary, too, when the payments deficits resulted from crop failures, natural calamities or inflationary pressures. It is, thus, not possible to lay down a general rule that deficit financing may be safely resorted to to the extent of the payments deficits without fear of inflationary consequences. This depended upon where the deficit originated and the causes of it.

41. The Planning Commission, "so far as it is possible to visualise now", has placed the "safe upper limit to deficit financing" (*The First Five Year Plan*, p. 61) over the five year period at Rs. 290 crores, the amount of the releases from India's sterling balances. The discussion above would seem to suggest that, if deficit financing must be non-inflationary, this figure would have to be adjusted to match that part of the releases which would be utilised for the public sector. For the rest, finance would have to be provided by the commercial banks in the form of credit created in favour of private enterprise.

42. Deficit financing and credit creation do not bring into existence real resources which are not there. They are only a device of acquiring the resources which exist in the economy somewhere. The question of deficit financing and the question of credit creation by the banks related, in the present context, to the question of who will gain possession of the foreign exchange reserves. When the latter are used for the public sector deficit financing would take place, and when used by the private sector, banks would create credit.

✓43. The second type of non-inflationary deficit financing is that indicated by the Bernstein Fund Mission Report and relates to the cash balances of the public. Here the purpose is to mobilise, for economic development, real resources (savings) held by the public in the form of cash balances. As production, employment and income would grow, the community will require a gradual increase in the money supply. This would be at least in proportion to the increase in production *plus* the amounts that may be required as the self-contained village economies produced more and more for the market and cash transactions took the place of barter. Viewing the phenomenon from the side of the individual, an individual's total real income would be exchanged, a part for consumption, a part for saving, and a part for cash balances. If money supply did not keep pace with this demand, deflation may well result. Precisely because of the shortage of real resources in under-developed economies, it was important to ensure that economic development, for which real resources existed, was not impeded by lack of finance. The finance for acquiring the real resources represented by the cash balances may be provided through deficit financing. But precisely because of these considerations such deficit financing should stop severely short of inflation. As in the case of the use of sterling reserves part of the real resources represented by the cash balances of the public would be appropriated by the private sector; the necessary finance would be, then, provided by the commercial banks. As individual real incomes increased, the cash balances tended to grow and the scope for credit creation or deficit financing would increase as well.

44. With the increased investment activity of the state and the relative expansion of the public sector, the volume of deficit financing to match the cash balance resources invested in state undertakings would have to grow. But it is difficult to assess the exact amount of the deficit financing permissible under this head. This will depend upon the rate of growth of output and the preference of the public for cash balances. As in the case of credit creation by the banking system, the amount is a matter of judgment. The paramount consideration, however, should be that the total of the bank credit and the deficit financing do not exceed the real resources equivalent to the cash balances. Any excess creation of money would lead to inflation, which would be self-defeating as it would adversely react on the preference of the public for cash balances, besides affecting the availability of real resources from other sources.

45. While the two categories of non-inflationary deficit financing may be easily defined, there is no formula by which we may determine the safe or the necessary amount of deficit financing that may be undertaken in the near future. This is a matter of judgment, the appropriate magnitude being arrived at through trial and error. The rate of increase in the Indian national output and the cash balance habits of the community, which together would

determine the safe amount of deficit financing, are not themselves statistically precise magnitudes. We do not have a comprehensive production index, and the changes in the liquidity preference of the community are a matter for conjecture. It is possible, however, to indicate the order of magnitudes involved. The Bernstein Fund Mission estimated non-inflationary deficit financing together with credit creation by the banking system as balancing the increase in the cash balance requirements of the public at Rs. 33-1/3 crores per year for the last three years of the First Five Year Plan. Assuming constant prices, we may place it at a round figure of Rs. 35—40 crores per annum for the next Five Year Plan. Though this is only a conjecture it reflects safe enough magnitudes for a budget of the Plan. What part of this amount would constitute deficit financing and what part credit creation by the banking system would depend upon the ratio in which the increase in the cash balance real resources of the public would be divided between the public and the private sectors.

46. To the amount of the deficit financing under this head must be added the sterling releases acquired for the public sector to arrive at the total figure of the deficit financing that might be safely undertaken. The total amount of the sterling releases during the five-year period has been placed at Rs. 100—150 crores by the Plan Frame. Part of this would have to be allocated to the private sector and will be matched by equivalent credit creation by the banking system. If we may assume a division of the cash balance resources and the sterling releases between the public and the private sectors, respectively, in the ratio of 2 : 1, the order of magnitude of the aggregate deficit financing would be Rs. 180—235 crores for the five years, or an annual rate of Rs. 35—47 crores.

VI. DEFICIT FINANCING AND THE RECENT FALL IN AGRICULTURAL PRICES

47. The sharp fall in agricultural prices during the past one year (the agricultural price index declining from 382 in 1953-54 to 301 at the close of February 1955) has raised the question whether the dangers of deficit financing and credit creation are not now merely academic talk. In the view of the Planning Commission, the criterion of the "scope for deficit financing at any particular time" rests in "the trends in the cost of living indices". The theory is that when the "costs of living are high, increased purchasing power injected into the system is apt to lead to increased demand for the basic commodities of consumption and push up costs of living still further" (*First Five Year Plan*, p. 61). By implication, when the cost of living indices take a down-turn, this may be deemed a safe enough signal for deficit financing. If the amount of deficit financing is appropriately adjusted, increased investment and production will have been financed without inflationary consequences and the community will have, besides, the advantages of economic and price stability. Though the cost of living indices do not reflect the sharp fall in agricultural prices, and in some of the larger cities the index is more or less steady, the over-all trend of the urban cost of living as indicated by the all-India index shows a down-trend from 102 in April 1954 to 97 in December 1954.

48. The prevailing price situation in India generally was a complex one and there was need for caution against too ready acceptance of the view that a solution may be found in fiscal or monetary measures. The fall in agricultural prices was by no means universal or uniform. It was heaviest in pulses, cereals and gur, among foodgrains, in oilseeds, among industrial raw materials, and in blackpepper, among the miscellaneous group. Some agricultural prices, *e.g.*, tea, coffee, raw hides and lac, which were export goods, and raw jute, among import goods, had risen almost as high as some other agricultural prices had fallen. The prices of manufactures were comparatively steady. Relatively to February 1954 the index in the last week of February 1955 recorded an increase of 1.8 per cent. In a background of dissimilar movements of prices even among major commodities, it may not be safe to apply simple monetary remedies. The effect of changes in money supply being all pervasive, there may ensue contrary consequences and the net overall price situation that may result from the monetary measures that may be adopted may not be less complex and difficult than the initial price situation. As an upward price movement might disturb the international price relationships of commodities, this may present new export problems. Our cost structure may also go out of equilibrium with the cost structure of competing countries, if the cost of living index, which was already high, should move higher as a result of currency expansion.

49. In the case of oilseeds, oil and cotton, the fall in prices is related to the international price trends and an artificial price rise in India might add to the export difficulties of these commodities, especially under a rigid exchange rate which needed to be adjusted for past inflation. In the case of some other commodities, principally cereals, pulses and gur, the fall in prices may be due to the output exceeding the capacity of the domestic market either because of favourable seasonal factors or as reflecting the various measures of agricultural improvements. In the case of some foodgrains this presented a complicated problem, both immediate and long-term, and a solution may lie in permitting exports of the surpluses over home needs. In the case of some commodities, their special situation may call for a policy of temporary price support. Price support policies, however, had to be formulated with great caution as they often led economies down a slippery inclined plane of inflation. The problems confronting individual commodities needed close study.

50. This is not to say that deficit financing had no part whatever to play towards a solution of the price problem. When agricultural output increases, even as output in the other sectors of the economy may increase, the total real income of the community will increase. If there was no relative over-production, the increased output would be marketed at current prices either in the home or in foreign markets. Part of the increase in real income will be consumed, part will be saved and invested, and a part will be held in the form of larger cash balances than hitherto. The increased output corresponding to the larger cash balances (or the equivalent real resources obtained from the home or foreign markets in exchange for the output) may be matched by deficit financing or by credit creation. This would prevent a general fall in prices and, therefore, a fall in agricultural prices, which may otherwise ensue from an increase in total output. But deficit financing of economic development was no solution to price-problems resulting from individual over-production, export difficulties attributable to quality

and domestic costs, or exchange over-valuation. It may aggravate the difficulties confronting these commodities. A price decline in one sector of the economy was no indication that the flow of savings was being accelerated. It provided no excuse for a speeding up of the programmes of economic development. This analysis indicated the importance of economic rationalisation designed to ensure that the major economic variables were harmoniously related to one another.

VII. DEFICIT FINANCING OF THE RECENT PAST

51. The question arises whether the deficit financing effected in recent years was inflationary or non-inflationary. The total deficit financing from 15 August 1947 to 31 March 1954 amounted to Rs. 681 crores. About Rs. 252 crores of this amount represented the purchase of sterling from the Reserve Bank against *ad hoc* Treasury Bills and did not involve the issue of money in circulation. Excluding this sum and allowance being made for the variations in the public debt holdings of scheduled banks, the net deficit financing of the period averaged about Rs. 50 crores per annum.

52. The following statistics reveal the inflationary impact of this deficit financing.

Deficit Financing, Prices and Money Supply

(Rupees Crores)

Year	Budget Deficit (—) or Surplus(+)	Government debt with R.B.I. (Increase —, Decrease +)	Deficit Financing	Money Supply	Wholesale Price Index (August 1939=100)
1947-48	—110·68	—51·49	—162·17	19·65*	308·2
1948-49	—81·67	—65·99	—147·66	18·84	376·2
1949-50	—43·80	—22·52	—66·32	18·65	385·4
1950-51	+12·44	—69·89	—57·45	18·34	409·7
1951-52	+0·91	+19·10	+20·01	17·73	434·6
1952-53	—63·54	+20·75	—42·79	16·83	380·6
1953-54	—48·29	+58·48	+10·19	17·15	397·5

*Estimated.

Between 1947-48 and 1953-54, the Wholesale Price Index rose from 308 in the former year to 435 in 1951-52 and stood at 393 in 1953-54. Part of the rise in the Index may be due to the activation of latent inflation. But its effect could not have lasted beyond the early part of this period. The amount of the latent inflation in India was, in any case, small. It is significant

that, notwithstanding the moderate amount of the deficit financing, prices continued to rise until 1951-52 and were about 29 per cent higher at the end of the period relatively to the beginning of the period. This experience lends support to our estimate of the safe magnitude of the deficit financing for the next Five Year Plan.

VIII. CONCLUSIONS

53. The conclusions emerging from this discussion may be briefly indicated :—

(1) The problems of under-employment in under-developed economies differed, in fundamental respects, from the problems of unemployment in industrial economies. Deficit spending in the sense, principally, of loan financing of revenue deficits, may be a remedy in the case of the latter. Deficit financing, in the sense of central bank financing of budget deficits, was only of limited applicability in the case of the former. To stress the analogy between the two economies would be misleading. The problem of the under-developed economies was a problem of a shortage of real resources for which inflationary credit creation was no substitute.

An estimate of the availability of real resources for economic development depended upon the reliability of the estimates of domestic savings and of the flow of foreign savings. Such an estimate was essential as a guide to policy.

(2) The concept of the initial inflationary impact of deficit financing being "liquidated" by a "compensatory" increase in output resulting on the maturity of the investment was not economically tenable as the increase in the output would simultaneously create a commensurate increase in money incomes. Short of deflation there was no question of a reversal of prices to the original level.

A time lag between investment and the resulting increase in output was the crux of the problem.

(3) Price controls and rationing were not a reliable device of preventing a price rise resulting from inflationary deficit financing. Price controls may aggravate the problem of scarcity through shifting resources from essential trades to non-essential trades. Price controls and rationing did not create savings.

(4) Inflationary finance of economic development through deficit budgets was self-defeating. On balance such finance impeded overall economic development through the distortion and wastages it produced. Net deficit financing since Independence, which averaged about Rs. 50 crores per annum, was inflationary in character.

(5) The scope for deficit financing was limited by the amounts of the sterling reserves which may be appropriated for the public sector. Deficit financing to match all other cases of payments deficits would be inflationary. The second type of non-inflationary deficit financing

related to the appropriation of the real resources represented by the cash balances of the public. Here also only a part of the resources could be acquired for the public sector by deficit financing. As in the case of the sterling releases, the other part had to be left for the use of the private sector, the necessary finance in the latter case being provided by the commercial banks.

Deficit financing, whether of the first type or of the second, did not create real resources. It was only a device of acquiring real resources which existed in the economy somewhere. The order of magnitude of the non-inflationary deficit financing in the prevailing Indian context was Rs. 180—235 crores for the five years, or Rs. 35—47 crores per year.

(6) The character of the recent price trends, of which a sharp fall in the prices of some agricultural commodities was a dominant feature, did not indicate deficit financing as a remedy. The cases of individual groups of commodities had to be examined separately. Deficit financing was no solution to export difficulties, to exchange over-valuation, or to relative over-production.

(7) Economic rationalisation to ensure that the major economic variables were harmoniously related to one another, was an essential preliminary to a plan of economic development.

EXPANSION OF TAX REVENUES

by

DR. D. T. LAKDAWALA

The question of the role of taxation in the programme of planning and economic development can be approached in two different ways : (a) *Treasury*.—From the viewpoint of the Treasury, economic development requires larger public expenditure, both real and transfer. The State has to raise resources corresponding to this overall expenditure. It would be legitimate for the State to raise some of the essential resources by deficit financing. To the extent that deficit financing is counteracted by balance of payments deficit not financed out of inter-Governmental loans, it need not result in currency or credit expansion. To finance increased production or to meet the needs of the increasing monetized sector at current price levels, an increase in money supply would be essential. To the extent that deficit financing results in increased production of the type required by utilisation of idle resources, or to the extent that demand can be controlled to coincide with the production, deficit financing would be legitimate. In the case of an under-developed country, there would be serious limitations to the extent to which unused resources could be utilized in this manner. While a large amount of resources would be idle in such countries, their mobilisation would largely depend on creation of complementary factors or organisation—both essentially long-term problems not capable of easy solution through deficit financing. Borrowing either at home or abroad, the second source of meeting expenditure, may more or less be taken as autonomous, its size being not easily amenable to the possible variations in public policy. Tax policies will, therefore, be called upon to perform the role of raising the residuary resources for the State. Since the private sector is also expected to play an essential role in the Plan and to fulfil its own targets, both taxation and borrowing will have to be so used as not to put any obstacles in the way of the fulfilment of its targets. Further, since taxation is one of the effective general methods known to make the private sector behave in compliance with State policy, it will have to be more positively used as a weapon of planning. This directly takes us to the second viewpoint. (b) *Community*.—To make an appreciable impact on the pace of economic development and put it on a keel where the process may become self-generating a much larger amount of investment, private and public, and social expenditure on education and health, is essential. This amount will be much greater than the normal savings. To the extent that any such excess of investment could utilise idle resources or lead to more effective utilisation of resources in use, it could be legitimately financed by deficit financing, due care being taken to keep or create the balance between production and consumption goods. As for the rest, the Government would have to see that savings increased to fill the gap. Taxation would be a powerful weapon in the armoury of the State to ensure the desired objective.

2. From the viewpoint of both these considerations, there is an urgent need for an intensive exploitation of tax resources. It is obvious that the size of public expenditure in the

Second Five Year Plan will be much greater than that in the First. From the various indications that are available, the developmental expenditure of the State may be placed at Rs. 3,500 crores for the Second Five Year Plan. The Finance Minister estimated the total investment for the Second Five Year Plan at Rs. 5,000—6,000 crores. Since the public sector is expected to play a more important role in future, public investment will account for more than half the total investment. To this has to be added the likely additional expenditure on education, health, etc., mainly investment in human capital Rs. 500 crores. Approximately an additional average annual expenditure of Rs. 300 crores over 1953-54 will be entailed in the Second Five Year Plan. While the present size of the sterling balances and the stage of our economy may not make the deficit economy of the present order—*viz.*, Rs. 208 crores in 1954-55 and Rs. 318 crores in 1955-56—a matter of alarm, sustained deficits of this order over another five-year period are not advisable. In any case, an increase in this magnitude is out of question. A large increase in the combined proceeds of the net borrowings of the Government and foreign aid is not likely. At the present level of taxation, tax revenues are not likely to increase much more than in proportion to increases in income. To work out the exact effects of an increase in Government expenditure, it would be necessary to work out the effects on national output, the way in which this additional income would be distributed, and the pattern of expenditure out of this income. In the absence, however, of detailed information on this matter the experience since 1939 may be taken as likely to repeat itself. Throughout this eventful era it was found that Government revenues as a percentage of national income did not increase, in spite of the fact that the period witnessed sharp increases in tax rates. Of course, the experience was not representative in many ways. An increase in money income due largely to changes in prices does not affect tax revenues from commodities taxed at specific rates; a change in real income would. Land revenue, inelastic and long-fixed, played a more important part in 1939 than at present. On the other hand, the increase in money incomes during 1939-1954 was accompanied by greater inequalities in income and wealth distribution which affect tax proceeds favourably. Calculations of income-elasticity of tax revenues must not take changes in tax rates into account and quite a part of the observed increase in revenue during this period was due to changes in rates. On the whole, there is reason to believe that the elasticity of tax revenues in response to changes in incomes would not be significantly larger than unity. Granting an average increase of 7 per cent in national income over the period, this would mean an increase of nearly Rs. 50 crores a year. One would, therefore, be faced with the necessity of additional taxation to increase the tax revenues of Rs. 700 crores by Rs. 200 crores, *i.e.*, an additional 30 per cent. Investment reasonings would have lead, more or less, to the same conclusion. The present national savings and investment to be increased to a level of 11 per cent by 1960-61 from the average of 7% in 1955-56. In addition, social expenditure will have to be somewhat increased during the five year period. Since, not more than Rs. 300 crores of this could be obtained through increase in private saving, the rest would have to be found through increase in taxes or other such methods.

3. Thus put, the question broadly is of expanding the tax revenues of the Government as a percentage of national income by less than 2 per cent. The problem need not be viewed as an annual one. For one thing, the expenditure figures that we have taken are for the period

as a whole and they are likely to be less in the initial period. Further, as already pointed out, the economy is in a position now to take in a little more deficit financing than it might be later on. It is easier to suggest a heavier rate of taxation, once the administration and people have got adjusted to new rates and taxes. For instance, since the estate duty has been imposed only last year and officers are not accustomed to the complicated task of estate valuation, the two needed tax reforms in this direction, *viz.*, the lowering of the present high exemption limit and an increase in estate duty rates have to wait for some time. Once people begin to feel sure of the likely benefits of public expenditure, an increase in income or commodity taxation is likely to encounter less resistance. In devising a tax system for the future, care also has to be taken to ensure that not only a larger proportion of the national income comes to the Exchequer, but also to see that this proportion increases with increases in income, and that the elements of flexibility and built-in flexibility are great, because the future five year plans are likely to require a very large increment of the additional output to be re-invested.

4. The Report of the Taxation Enquiry Commission has paid a great heed to increasing tax revenues and making them more elastic. Many of their recommendations on the major prevalent taxes have been framed with this viewpoint. To bring in more persons within the orbit of income taxation, it has been recommended that the exemption level should be decreased from Rs. 4,200 to Rs. 3,000. The income-tax rates have to be increased. As there is not much scope for rises in top income-brackets, only those on the medium ones could be substantially increased. Simultaneously, a system of compulsory deposits and special surcharges at varying rates up to 11.2 per cent have been recommended. Regarding estate duties, lowering of the exemption level and increases in rates throughout have been suggested. Corporation taxes and customs duties are the two major fields where no substantial tax increases are suggested. The extension and increases of Central excises have been recommended in several directions. In the State and local sphere, some sort of specific surcharges on land revenue to make up for regional disparities or as a means of adjustment to prices, the amalgamation of agricultural and non-agricultural income-taxes or at least a surcharge on agricultural incomes which takes non-agricultural incomes into account, better coverage of the general sales tax, the enforcement of betterment levies and an increase in other minor taxes have been proposed.

While these are very important recommendations designed to extend the tax system both in range and depth, the Taxation Enquiry Commission has not given any attention to the problem of quantifying the effects of recommendations, sometimes not even the recommendations themselves.* Probably, they were handicapped due to the absence of a more detailed knowledge about the size and nature of the Plan and the likely demand for consumption goods. It would have been, however, helpful if the Commission had worked out these figures on

*The only major exception to this remark is the field of Central excises, where it was estimated that as a result of the implementation of their recommendations, the receipts would increase by 40-45 per cent i.e. approximately Rs. 40 crores. On a very rough examination, it seems that the net effect of fully accepting the recommended changes, some of which obviously would take time, would be to increase revenues by Rs. 100 crores a year.

the basis of two or three likely models. This at least would have given some idea of the dimension of expansion possibilities. It is difficult for an individual research worker in a short time to work this out even on the basis of guess estimates. All that can, therefore, be attempted here is to draw attention to some general considerations that may limit the expansion of tax revenues.

5. From the viewpoint of increases in tax revenues, the tax system will have to be broadly divided into two parts : taxes on income and wealth, and taxes on commodities. The former can be levied at progressive rates, and have therefore substantial income-elasticity. Because, however, of the likely effects on private savings and still more investment and risk-bearing, the scope for their increase is limited. The Indian Taxation Enquiry Commission have indicated the scope fairly completely. There are, however, no such limitations to increases in commodity taxation needed to finance economic development in a progressive economy. Increased incomes are likely to result in increased demand for consumption goods. To the extent these can be provided for, there is no harm in resorting to deficit financing. If they cannot be, the usual popular argument against commodity taxation that it will lead to restriction of consumption and thereby hardship on the consumers, dealers and producers is not relevant. The increases in supplies of consumers' goods will also be an integral part of the plan, and the disequilibrium between the demand and supply will have to be met by differential rates of taxes. These tax rates will mean larger revenues. Since in almost all relevant spheres the Plan will provide for an increase in production, no aggregate hardship will be entailed. In the initial period of the Plan, not all people will equally be affected by State expenditure, some will benefit enormously, and some not at all. To the extent that the former sections could be located, attempts should be made through taxes like the betterment levy to even out the benefits. It will not always be possible to adjust taxes and benefits, and thus the inequity will arise that some persons, who have not obtained any direct advantage out of the Plan, will have to bear its costs. This is, however, inevitable in the first phase of the Plan. Later on, as the Plan gathers momentum, the direct and indirect benefits will get more widespread and almost all important sections of the people will benefit. At that stage, if a few classes like fixed income-earners are found not to have derived any benefit at all, a suitable public subsidy or salary revision policy may be necessary. In any case, the hardships of some groups are the consequence of the necessary priorities and imperfections of planning in the first few years. Taxes on commodities are not an additional restraint or hardship on these groups. They would only be a weapon to make planning effective.

Commodity taxation, however, has the following severe limitations, some of them general and some specific to Indian circumstances : (i) Income taxation can be easily made progressive, while commodity taxation even with a heavy rate of taxation on luxuries cannot be made progressive. Thus, the sacrifice imposed through commodity taxes will be less equitably distributed. Since, however, we presume that the maximum income tax is already imposed, this comparison does not help. (ii) A large sector of the Indian economy (35%) is non-monetised, and changes in rates of taxation may have to let this sector go scot-free, thus imposing proportionately greater burdens on the monetised sector. To the extent,

however, the rural masses are the beneficiaries, the defect will be an advantage. If necessary, an increase in land revenue can cure this defect largely. In any case, it is difficult to ensure that the non-monetised sector is made to pay by any other devices without first monetising it. (iii) Central excise duties, which are the most manageable form of commodity taxation, can only be easily imposed on factories and factory production constitutes only 6-7 per cent of national income. This is not really a severe limitation as, where lucrative, excises have also been levied on non-factory production. Further, the general sales tax can be imposed at differential and heavy rates on selected commodities. The power to levy the sales tax, however, belongs to the States. The tax may not, therefore, be levied at uniform rates throughout India.

The two really important and inter-linked questions are :—(i) Whether the limitations are so severe that they would make a small addition to the percentage of savings to national income and impose an unbearable strain on the classes that are made to bear the burden and reduce their standard of consumption, and (ii) whether there are any more effective methods of extending the limits. Probably, on a correct appraisal of the situation, while one must admit that the limitations exist, they do not rule out a plan of the contemplated size, and many of them may recede on an increase in the size of the Plan. To the second question, since there are other specific papers on the subject, it is not necessary to dilate at length. Inflationary finance can certainly not be considered as a more equitable method of distribution of sacrifice. The only advantage is that it is unconscious to a degree. State trading because of its more direct control may mean greater revenue in a period of inflation and monetary disequilibrium. But if such a situation is not visualised, State trading may not make any significant difference to the tax revenues and the decision between State and private trading will have to be made on other much more important considerations of technical efficiency, amenability to control, etc.

INCOME-TAX EVASION

(*Gokhale Institute of Politics and Economics*)

In 1953-54, 2145 Companies and other Concerns assessible at Company Rates had shown total incomes of over one lakh. The details are given in the table below :

Grade of Total Income (Rs.)	No. of assesseees	Total Income Assessed (Rs.)	Demand Payable Total (Rs.)	Net Income (Rs.)
1,00,001—1,50,000	449	5,47,88,188	2,36,57,041	3,11,31,147
1,50,001—2,00,000	261	4,49,95,265	1,91,17,879	2,58,77,386
2,00,001—2,50,000	174	3,90,44,733	1,70,16,261	2,20,28,472
2,50,001—3,00,000	141	3,87,36,952	1,66,27,663	2,21,09,089
3,00,001—3,50,000	94	3,03,47,683	1,28,74,224	1,74,73,459
3,50,001—4,00,000	80	2,97,94,051	1,32,58,826	1,65,35,225
4,00,001—4,50,000	65	2,73,80,257	1,16,02,550	1,57,77,707
4,50,001—5,00,000	66	3,11,85,063	1,32,78,988	1,79,06,075
Over 5,00,000	775	1,74,58,33,911	76,71,24,420	97,87,09,491
TOTAL	2105	2,04,21,06,103	89,45,57,852	1,14,75,48,051

N. B.—Statement No. 5 of the Central Board of Revenue, All-India Income-tax Revenue Statistics.

The most recent consideration of the question of tax leakages has been studied by the Taxation Enquiry Commission, which says:

“ It is not possible to estimate accurately the extent of the leakage of revenue in the past. It is observed from statistics in connection with the ‘ Disclosure Drive ’ that income as originally included in the returns sent to the Income-tax Department by assesseees who made disclosures was grossly understated, the difference between the income as originally returned and that disclosed later to the Department being, on the average, as much as 600 per cent. Such other statistics as have been made available to us by the Central Board of Revenue also give evidence of the fact that evasion is prevalent on a considerable scale. When it is remembered that these statistics are of attempted evasion, which has been detected by the Income-tax Department, and allowance is made for the fact that the Income-tax

Department is ill-equipped in the matter of trained staff to cope adequately with the problem of evasion, the quantum of the evasion which actually takes place and goes undetected could rightly be estimated at a very high figure indeed."

It adds

"Leakage in revenue may occur through a deliberate distortion of facts relating to an assessment after the liability has been incurred, or by so arranging one's affairs before the liability is incurred as to prevent its occurrence or to reduce the incidence of the tax within the framework of the existing legislation. The former set of transactions is usually referred to as 'evasion' and the latter as 'avoidance'. 'Avoidance' ordinarily arises from drafting defects in the tax legislation. Both avoidance and evasion result in loss of revenue to Government, but the former has a colour of legality about it."

and

"Among the numerous devices employed for tax evasion may be mentioned the : (i) omission to report taxable income, (ii) fraudulent changes in account books, (iii) maintenance of multiple sets of account books, (iv) opening of bank accounts under assumed names, (v) securing of contracts in the name of dummies or figureheads, and (vi) keeping transactions out of account books. Illustrations of tax avoidance are the use of the device of creating corporate institutions to escape liability to personal super-tax, the use of charitable trusts for the same purpose, the constitution of trusts and family partnerships and the transfer of income-earning assets to one's wife and children for fractioning income for tax purposes."

Knowledgeable sources generally place methods of tax evasion under two heads, "in the books" and "outside the books". They are also inclined to hold that these practices are indulged in very largely. Some of the methods "in the books" for the inflating of expenditure, so as to leave a lower taxable income, are : (i) Debiting of personal expenses to the Company through the maintenance of a guest house, (ii) Bogus entries in pay rolls, even cooks, music teachers, bearers, household servants, etc., being debited to the Company, (iii) Inflated travelling expenses, by charging to the Company journeys done for personal reasons, including sometimes even pilgrimages, (iv) Station Expenses, being the entries for the cost of non-existent staff for loading and unloading goods, (v) Inflated bills for stores, not actually received, (vi) Maintenance of personal cars at the cost of the Company, (vii) Entertainment allowances, (viii) Selling to subsidiaries cheaply and diverting profit to them, the subsidiaries being made up of relatives or benamies, (ix) Buying goods of lower quality and getting bills and ostensibly paying for goods of higher quality, (x) Undervaluing stocks, (xi) Showing higher consumption of stores and raw materials, (xii) Showing lump sum grants for secret expenses.

In all these matters, the auditors, even when honest, are helpless. They have to go by the vouchers and cannot inquire into them. In special circumstances such as item No. (xii) they sometimes ask for a resolution of the Board but once the Board has confirmed the expenditure, they have to take it for granted.

Of methods "outside the books", some are: (i) Recovering secret commissions on all purchases and sales; (ii) Getting lump sum payments in cash, being share of profits made up from subsidiaries or merchants to whom goods are sold, or from whom goods are bought, at special rates; (iii) Speculating in raw material, taking the profit oneself, if successful and putting the loss in the books of the Company, if not; (iv) Creating subsidiaries of relatives or benami holders (often in reality servants) for all incidental purposes, letting these make the profits that would otherwise have added to income; (v) taking back in cash a share of the higher salary or commission allowed to servant or agent.

Taking the details in the table, and assuming a 25 per cent margin of complete absence of tax evasion—a very high margin according to most knowledgeable people—the total income assessed ought, even on a very conservative basis, to be increased by forty to fifty crores.

To this might be added the reductions due to avoidance, quite widely spread from all accounts and the cause of much loss of revenue, especially in the higher income brackets. The figure of lowered income under this head is at the very least not likely to be less than 20 crores, though of course, it may well be several times that figure.

Again, there is the reduction of income due to specially extravagant terms granted to relatives and friends in salaries, allowances, etc. Any estimate of the total effect of this can only be extremely tentative. On a very conservative basis, it is not likely to be less than five crores.

Assessed income then, may, at the very lowest, be said to be reduced by 75 to 65 crores.

VII. POLIYC AND INSTITUTIONAL IMPLICATIONS

POLICY DECISIONS IN PLAN-MAKING

by

PROF. D. R. GADGIL

This brief note is intended to raise issues chiefly of policy in relation both to the objectives and the general framework of the Plan. I start from the assumption that it is intended to undertake a bold plan, a plan that will significantly affect in less than a decade the total national product, the living conditions of the poorest and the existing socio-economic structure. I also assume, without setting down and quantitative calculations, that a bold plan will call for the greatest possible effort on the part of everybody. What are the possible factors which would determine or dictate the limits of such effort, especially, on the part of the State ?

One may begin with consideration of resources. An evaluation of resources available to the State in financial terms appears a necessary preliminary step. The usual resources available to governments as from tax revenues, small savings, borrowings from the public have definite limitations. The possibility of expansion of receipts through taxation have been examined fully very recently by the Taxation Commission. It would not be necessary or helpful to go over the ground again and the limits indicated by the Taxation Commission may be taken as indicating the maximum effort that is immediately possible. The only issue here that may still be open is the reconciliation of the objective of maximising tax revenue with that of offering adequate incentives for the working of the private enterprise sector. Decisions of policy in relation to the Second Five Year Plan may also affect the possibilities of small savings and public borrowings. The possible variations are, however, not likely to be significantly large. Anyway, it is not expected that State receipts through taxation and borrowings will, even when stretched to the utmost, enable undertaking a bold plan. Receipts from other possible resources, such as sterling balances and foreign aid of all kinds, may also be assumed not to contribute materially towards undertaking a bold plan.

This appears to leave only two sources either or both of which may be drawn upon for financing a bold plan. These are : (1) extension of the sphere of the public sector ; (2) deficit financing. The extension of the public sector if it is to help significantly to finance the Second Five Year Plan must be planned and undertaken at the beginning of the plan period. Therefore, the possibilities of the extension must be examined as a matter of basic policy almost immediately. There may be a number of valid reasons for including in the public sector economic activities which are left entirely in the private sector today such as banking, insurance, foreign trade, internal trade in specific commodities, large-scale machines industry, etc. (Whatever the other justifications, from the point of view of financing the Plan the main justification has to be its making available larger capital resources for investment in the plan period than if the activities were left in the private sector.) Surpluses originating in these

activities when in private hands may not be fully available for investment because of leakages through increased consumption, use in speculation, etc. Diffusion of the potential surpluses through commissions and many other types of payments to partners, relatives, etc. may also be reflected in increased consumption or speculative activity, etc. Also, such surpluses as become available may not be amenable to directed investment. Further, control over production or distribution in specific fields may enable tax-like measures to be undertaken with ease, certainty and with low cost which would not be possible if the activity is left in private hands. It is on these lines of reasoning that an extension of the public sector in specific directions can be held to lead to an increase of resources available for investment under the plan. This question, therefore, merits close attention over the whole field at the earliest stage with decisions to be reached before the final plan is formulated.

In relation to deficit financing the main problem is that of determining the extent of the maximum effort. It does not appear to be disputed that deficit financing may start an inflationary trend which, if unchecked, could be highly regressive in its effects and may ultimately prove self-defeating. Therefore, the possibilities of deficit financing are linked closely with the effectiveness of control measures. With a very large sector open to private enterprise, deficit financing is bound to bring about a transfer of resources from the fixed income and salary-earning and wage-earning classes to entrepreneurs. This must increase concentration of wealth in society further and significantly affect the balance of socio-economic power. It is for consideration what steps can be taken by the State to counter this effect. Secondly, deficit financing is bound, to the extent that it affects prices, to cut into the consumption standards of the poorer classes. What steps are possible to see that consumption standards of these classes and others who are vulnerable are not affected? Finally, if uncontrolled, deficit financing may lead to changes in relative prices which may obstruct the working of the plan. Also, with even a mild inflationary rise of prices a sellers' market may be created and general shortage of commodities may be experienced. This will make necessary physical controls and specific allocations for carrying out the plan. All these and other types of movements, likely to be started by deficit financing have to be thought of and provided against. At least, a preliminary examination of the question does not suggest that deficit financing can be undertaken to any significant extent without a regulatory regime such as existed in the United Kingdom during the period 1940-46. The possibility of the State enforcing this is a question which must be brought up at the policy level at the earliest possible time.

Turning to the more concrete aspects of planning, the investment programme has to be planned carefully as between agriculture, industry, social and economic overheads, and within the industrial field as between light and heavy industry, consumers' goods, producers' goods industry, etc. There are, no doubt, some considerations which appear to emphasise investments with quick returns. A long run point of view, however, would indicate preference for investment in heavy and basic industries. In economic overheads such as the power and transport systems, in measure irrigation works etc., such preference could appear meaningful only in a plan oriented to a long period. A long-period plan appears also to be dictated by the need to phase technical progress in many industries and to minimise the

unemployment effects of planned development. In all the larger consumption industries, a common plan for producers with varying equipments and techniques has to be evolved. This also can be done meaningfully as only over a 20—25-year period. The basic structure of the plan has, therefore, to be thought of in broad terms for a fairly long period ahead. The Second Five Year Plan can then be drawn in as only the opening phase of this long-term plan. It is extremely important for the general framework to determine immediately whether the Second Five Year Plan will be so considered or will be chiefly self-contained as the First Five Year Plan.

The First Five Year Plan put forward the idea of a common production plan for machine and hand industry. No common production plan has, however, yet been evolved in any sphere. A bold plan implies detailed targets of consumption goods availabilities. These have to be planned with a view to economic utilization of existing resources, special emphasis on employment and progressive advance in techniques. For proper execution, this will involve detailed production programmes, leading perhaps to some standardization of consumers' goods and also control over allocation of resources and distribution of products. Considerable direct control over production programmes and distribution methods of machine industry and a better organisation through cooperative or similar channels of purchase, sale and finance activities of handicrafts are prerequisites of the drawing up and operation of a common production plan. This will be further emphasised if the policy is adopted of fixing a related price structure for consumer goods produced by the various types of agencies.

In relation to agriculture, the response of the Central Ministries to recommendations of the Rural Credit Survey Committee indicates acceptance of a large programme for credit, marketing, warehousing, etc. Many of the concepts thus accepted could be applied also to the small industry sector. However, in relation to agriculture, two questions which have been under discussion for some time, have yet to be settled. These are agricultural prices support and crop planning. Even if it may be possible to defer consideration of the second, the first must be decided upon in principle at an early stage. If the operation of the Second Five Year Plan is not to be held up by price fluctuations, some device by which a too great rise or too great fall in the agricultural price level is not permitted must be evolved. An agricultural price support policy can no doubt be linked to a net work of warehousing and marketing organisation and could be made effective with certain minimum stocks held and carried over by the State. This would also ensure protection to the food position as against an unfavourable year. But decisions on these points have yet to be reached in principle, and this must be done before details of the Second Five Year Plan can be worked out.

Control over consumption has two aspects. Firstly, it is related to the protection and, if possible, improvement of the standard of living of the poorest classes. Especially where a sellers' market develops protection may become urgent and could perhaps only be given through controlled distribution, at least to a limited extent. Improvement of the standard of living of the most disadvantaged could also not be attempted through mere fiscal, monetary or public expenditure policies. It would require specific measures, including those of offering

employment and distributing goods, in specific locations to specific classes. The other aspect of control of consumption is related to consumption of those of the comparatively well-to-do whose incomes increase. This will involve control over imports, over production of types of consumer goods, over activities such as private residential house building, over facilities offered by public services such as airways, or over distribution of goods such as petrol. It is obvious that planned investment could not take place unless possible leakages in every direction are stopped, as far as possible. All this, however, involves undertaking by government of active policy which may be difficult to enforce and which may not prove popular unless its full implications were very widely made known and recognized.

A talk of a socialistic pattern of society will raise more directly in the context of the Second Five Year Plan, problems of distributive justice. The wide acceptance of the concept of a ceiling on land holdings will raise questions of a ceiling to maximum holdings of the means of production in other spheres and of a ceiling to incomes. It is suspected that concentration of wealth and economic power has increased in the private enterprise sector during the First Five Year Plan ; that the inequalities in India are today uncommonly large is patent. What policies to correct these are to be adopted in the Second Five Year Plan must again in principle be discussed immediately before details of the Plan are formulated.

Finally, a bold plan would require insulation of the domestic economy to a much larger extent than today. It may mean greater control and more systematic control over foreign trade and activities of foreign investors and foreign private companies. It would also require close attention to the problem of increasing greatly the efficiency of the public sector in economic activity and to the problem of obtaining enthusiastic public participation in the processes of planning and executing the Plan. The last is much more than a matter of propaganda or publicity technique. It involves, what perhaps is the most crucial decision of all, how and by what steps the socio-economic structure and the balance of power in it are to change and how this change is to be made visible and real to the people.

The purpose of this note has been to bring out the more obvious and the more important issues of policy on which government opinion or action is unclear today. A bold plan can only be visualized after basic decisions in connection with at least the issues raised in this note are faced and decided upon ; or, rather only when these decisions are made could we proceed to say how bold the plan would be or whether it will at all be bold or not.

Increasing attention is now being paid towards the problems of the scale and pattern of effort in the Second Plan. There are three approaches : (1) The method and type of efforts pursued in the First Plan may be continued with marginal adjustments here and there. (2) The Second Plan may be patterned on the model of the experience of the Soviet Union. (3) The Second Plan may be formulated on the basis of an approach which emphasises the institutional and other organisational base which already exists in the economy and which works out a rate and pattern of effort after fully taking into consideration the working of the economic mechanism of the country. Experience of other countries can be utilised provided we modify it in the light of our conditions.

2. It is suggested that the important lessons of the First Plan are : (1) Observed results do not show correlation with planned efforts. (2) While national income is stated to have gone up, savings do not show any appreciable rise. The generally assumed correlation between income and savings do not appear to hold true. The assumption that when once incomes are increased, savings go up and hence the cumulative process is started is not valid in India. (3) The economy as it is constituted does not have resilience to go through unassisted either during periods of short-fall in food or during periods of excess. (4) While national income has gone up, employment has not proportionately increased. Thus, the assumed correlation between income and employment holds true only within limits. The economy has thus the twin problems of achieving a high rate of growth of incomes and a high rate of growth in employment. (5) The working of the Plan has revealed that the analysis behind the formulation of the Plan was *ad hoc* and could not take note of the forces which bring about development in the Indian economy. (6) Finally, we now find ourselves in a situation in which we are not definite whether the economy is expanding, whether such expansion has cumulation behind it and whether it is expanding in the right direction. All this leads to the conclusion that the first approach, however appropriate for the First Plan needs to be changed for another which is more suitable. The second approach which emphasises heavy industry, a greater extent of regulation and regimentation and utilises the coefficients and relationships as derived from Soviet experience is far removed from the realities of the Indian situation than the first. Further, it does not at all take into account the peculiarities of the Indian economic scene. Moreover, here the physical targets are estimated without stating clearly the institutional and ideological implications. It appears to be

out of tune with the prevailing climate of opinion in India. The only alternative is to adopt an approach which places cardinal emphasis on the elements of strength and weakness in the Indian structure and which draws up a Plan best suited to our conditions. It is the objective of the present paper to outline such an approach. There are several related issues which, for the sake of convenience, are dealt with separately. For example, the paper on '*Investment Pattern in the Second Five Year Plan*' (Paper No. 4, Section III) deals with one such problem. We deal with some of the other problems in appendices to this paper as under :—

- I. Problem of Increasing the Rate of Procurement of Marketable Surplus.
- II. Measures to Utilise Idle or Under-utilised Labour Power.
- III. Measures for Built-in Flexibility.
- IV. A Positive Policy for Employment.
- V. Policy towards Labour Welfare Measures.

The objective of this paper is to enquire into the possibilities of raising the rate of effort during the period of the Second Plan. In considering the possibilities, we must take into account the nature of the difficulties that had to be faced during the period of the First Plan. It is also sought to indicate the nature of the adjustments in the institutional pattern which become necessary if the bolder plan is to be worked through.

2. A bolder plan implies the stepping up of the rate of plough-back of resources in investment; in other words, the proportion of savings to national income must be raised. At present, the savings ratio is approximately between 5% to 7%. If we can raise it to about 10%, we would have increased our scale of effort by more than 50%. On the other hand, we should see that the increased savings are utilised in those forms which enable us continuously to step up the rate of effort at each stage. Another aspect of the problem is to work out an inventory of under-utilised or unutilised resources in men and material and to devise appropriate technological and organisational measures and combine them in such a way that the total national income is raised. While these measures are being attempted, a bolder plan would require corresponding efforts to prevent or check a rise in the rate of growth of demand on resources for consumption and the utilisation of resources on unproductive investment. Simultaneously, the plan must provide for as large a rate of increase in employment as possible.

3. Let us take up each of these problems step by step. How to raise the rate of savings? Now, the different units undertaking investment in the economy are : agencies of the Government, industrial and public utility units of the private sector and private individuals. The total Government expenditure on economic development may be split up into different categories on the following basis : (i) Items of expenditure which are output yielding, the output having a marketable value. Here, a further category of division according to the gestation periods may be drawn up. (ii) Items of expenditure which are welfare yielding. (iii) Items of expenditure which are welfare yielding, but may lead to output at a later stage. In general, a broad division of Governmental investment between productive and unproductive can be made. If the proportion of productive investment to total investment is higher, then other

things being given, the rate of growth will also be higher. The implication is that a bolder plan would require a low ratio of direct investment on unproductive items. We are not suggesting that unproductive investment should not be undertaken at all, but as we shall indicate later, different forms of organisation should be evolved with a view to increasing the quantum of welfare yielding services, but at the same time involving less units of scarce input. Assuming that productive investment would dominate Government plans, there is the further problem of how to choose among these investments and what should be the price policy to follow. It is suggested that both in the choice of investment as well as in the methods of operation, the central policy should be to maximise the ratio of net revenue to capital. The net revenue is the surplus available after all expenses which vary with the scale of output are made good. A high net revenue ratio would mean more of resources available for plough-back. For this, each unit of Government should work as a commercial concern. The principle of maximisation of net revenue, given the environment, should apply. This does involve a change in the managerial and administrative set-up. It is suggested that the Government take the assistance of the private sector in the field. The maximisation of profits is not an ideal to be looked down on its own, particularly when these profits are required for ploughing back. If both the State units and private units follow a similar policy, then it would be easy to find out the reasons for the differences in the level of efficiency and mistakes can soon be rectified. In so far as private industrial units are concerned, the principle that is actually followed is one of maximisation of net revenue, but then the question to be asked is whether all that could be ploughed back is being done. To a considerable extent, the resources for reinvestment are provided from within the firms. The general policy of the Government should be to enable as much maximisation of the rate of reinvestment as is desirable. This should be looked upon as an independent objective desired for economic development irrespective of ideological considerations. The State may, however, regulate the direction of reinvestment by a system of appropriate taxes and subsidies. A point which may be mentioned here is that an under-developed economy of the type of India depends for its growth at this stage not merely on the nature of the activity conducted by large-scale units. The predominant form of organisation for a long time to come would continue to be one of small private companies, limited or unlimited. The quantitative importance of this may be limited, but under conditions facing India, these units can perform a more effective role than what they are doing at present. The problem is not merely one of comparison between large-scale and small-scale units. It is a question of providing appropriate incentives by which small units tend to grow at a faster rate. This requires a new approach from the point of view of Company Law, Industrial Legislation and tax administration. It is submitted that we are giving too much importance to largeness as an ideal by itself. A multitude of small firms is the strongest source of growth in an economy. The problem of capital and organisation should not be looked at from the aggregate viewpoint. It should be looked at primarily from the point of view of units which compose the structure as such:

4. There is no doubt that a policy of profit maximisation or net revenue maximisation followed at each level would lead to an increased rate of investment. What about raising the rate of savings of private individuals? It is suggested that the Government should not

object if in a policy of appropriate mobilisation, more is available to the general pool of savings, though it may not directly take the form of contribution to the tax revenue as such. What is required is a general tax on expenditure with discriminatory rates on particular types of expenditure. There is no reason why an appropriate system cannot be worked out to suit Indian conditions.* The tax incidence may be made to vary depending upon the contribution of individuals towards various types of investment, both Government and private.

5. Is it possible to raise the rate of savings through greater emphasis on taxation and on borrowing programmes? To take the former first, the question is whether the tax system as such is not weighing too heavily in the case of the urban sector and not so heavily in the case of the rural sector. The problem is not one of differences in the living standards between the two sectors. On account of the vastness of the rural sector, appropriate types of taxes must be devised which tend to get some contribution from these areas. In this context, more can be achieved through the price system than through the orthodox tax machinery. The general character of the products consumed by the vast majority of the rural sector is fairly well known. If a network of State trading institutions can be built up and appropriate policies are followed, the economy being divided into different regions, it should be possible to get more from the rural areas than what we are at present getting. The central problem for a long time to come in this field will be one of how we can get a larger extent of real marketable surplus than what we are getting now. This is mainly a problem of organisation and the extent by which we can step up the rate of investment would ultimately depend upon how we are able to devise appropriate organisational changes. (*Vide Appendix I on "Problem of Increasing the Rate of Procurement of Marketable Surplus"*.)

6. In so far as borrowing programmes are concerned, there is considerable scope for de-standardisation. Regional planning boards can be set up whose main function should be to mobilise savings available within the different regions and to utilise a part of these savings for investment which directly benefits the regions. The rate of interest may be made to depend upon the productivity of the investments. In some cases, the contribution of the people in the sector may not be on a cash basis. It may be on an effort basis and it should be possible to take the responsibility for maintaining the workers during the period of the work, at the same time offering additional advantages in the form of pieces of land and other productive assets when once the projects are completed. This type of system would be an alternative to forced labour. If regional planning authorities can be set up in different parts of the country, their work being co-ordinated with the work of the Community Projects and National Extension Services, it should be possible to tap a considerable portion of under-utilised labour power in the rural areas through a system of voluntary loans of various types of effort and contributions in kind. What is necessary is that the results of the efforts should in the first place have some significance for the individuals concerned who make the contribution. A number of local projects can be devised. The regional planning authorities should

* A detailed discussion of how the tax weapon can be utilised to bring about appropriate allocation adjustments in the economy is given in *Towards an Optimal Tax Policy in a Retrogressive Economy*, Journal of the University of Bombay, July 1954.

have a multitude of schemes in each of the regions. At each stage, it should be possible to take some of the above.

7. We have referred earlier to the need for a reduction of outlay on unproductive items by the Government authorities. After all, a significant portion of developmental expenditure by the Governments on these items is on roads, health services, housing, education and social welfare. Most of these services can be performed at low cost provided the under-utilised labour and skill resources of the public are utilised in these fields through a system of appropriate social incentives. More attention than hitherto is to be given to activities which involve the application of individual initiative in fields in which there are no monetary returns. The problem is one of devising appropriate methods by which the young and the old of the country can devote part of their working time or leisure for activities which, while they involve some exertion on their part, would lead to more proportionate returns to the community. If a spirit of voluntary work could be created and it pervades the different parts of the country, it would be possible to economise on expenditure which is primarily unproductive and which does not contribute to material output. The resources directly available for capital formation could be augmented in this field. (*Vide Appendix II on "Measures to Utilise Idle or Under-utilised Labour Power"*).

8. A more important problem facing the economic planners is that concerning the mobilisation of surplus labour power in rural areas and their transformation into fields of activity which would lead to capital formation. The crucial question which determines the employment potential here is the quantity of potentially available marketable surplus of food and other wage goods. The quantity of marketable surplus in its turn depends upon the level of production and the extent of internal requirements in the farms. In the short run, whenever, there is a sudden expansion in output, the internal requirements being more or less constant, the problem for the farmers is the disposal of the produce. If, however, we have appropriate institutional devices to mobilise the marketable surplus and utilise it in the form of additional employment of labour power, periods of excess production of food would be transformed into periods of rapid capital formation. The lack of an appropriate credit system, insufficiency of innovators, the lack of managerial capacity, inability of the system to make quick adjustments, all these are coming in the way of such a transformation. There is no doubt that a part of the excess production will have to be retained as buffer stocks, but provided short-term productive opportunities exist and these opportunities tend to be self-liquidating, initiative will be taken either by the State or by the private authorities to utilise the food and surplus labour power in appropriate productive channels. The main problem here is one of organisation. The economic system as it is constituted in India to-day gets into difficulties when there is a little short-fall in food production and also when there is a little excess. A little less or a little more creates serious problems. This is because corresponding changes in the rest of the economy are not taking place in such a way that the incidence of excess or shortage is absorbed in the most productive manner possible. More attention than hitherto should be given to working out a system of appropriate organisational arrangements so that periods of surplus production are automatically converted into periods of boom. If the suggestion

is accepted, then measures for built-in flexibility have to be worked out. (*Vide Appendix III on "Measures for Built-in Flexibility".*)

9. This leads us on to the problem of employment. For some time to come, this is going to be the most important economic problem facing the planners. A positive employment policy for the economy has to be based on an appreciation of the working of the economic mechanism in India. The Government of India has set up a target of 12 million jobs. It is not known how this target was fixed. On the basis of the analysis outlined above, we can say that expansion in employment requires efforts towards mobilisation of the marketable surplus of wage goods and corresponding activities in the rest of the economy. It is not appropriate to view the problem of employment as being capable of solution only on the basis of long-term measures. As unemployment is most acute among the educated urban middle classes, whose services when properly channelised can become the greatest source of strength to the economy, we must provide a quick solution to the problem. The current situation in the economy is such that such a solution can be found (*Vide Appendix IV on "A Positive Policy for Employment".*)

10. Another problem related to the above is that of devising an appropriate policy towards labour both in respect of welfare measures as well as wage rates. Here again, a new approach is called for in the interests of rapid capital formation as well as of the need to provide a larger volume of employment. (This is discussed in Appendix V on "*Policy towards Labour Welfare Measures*".)

11. Finally, a few words about incentives. In an economy which wants to develop fast and in which the public sector takes an active role, it is natural that wide differences in living standards would be objected to. This is so particularly when we want to mobilise the incipient labour power or skill power in the vast majority of the population. But then, the crucial question here is whether the objection is to differences in living standards or to differences in ownership of wealth. These two should not be confused. What society naturally objects to is the conspicuous differences in living standards which appear more glaring in an economy in which the rich were, as it were, merely islands in an ocean of poverty. If, however, the resources available with the richer groups, or those who are relatively better off, get utilised in the form of capital formation beneficial to the community, there should be no difficulty whatsoever. Such a suggestion would imply a considerable set of restriction on the pattern of consumption as well as investment of the relatively better off groups. The more such restrictions take a voluntary form, the better the atmosphere will be from the point of view of the community. This fits in with the basic philosophy of Gandhiji and Vinobha Bhave, a philosophy which the Congress has accepted. The issue is vital because on the successful resolution of this dispute will depend the future of mixed economy. It is in this context that the role of the private sector should be visualised. More can be achieved here through a system of appropriate leadership and a programme of conferences and individual meetings. It would be beyond the scope of economics to discuss the implications of these suggestions, but there is no reason why we should lose hope in this respect. The greatest need of the hour in the country to-day is that of social innovation. This is primarily the task of leadership; looking at the past history of the country, there is no reason why we should despair on this score.

APPENDIX I

Problem of Increasing the Rate of Procurement of Marketable Surplus

As pointed out in the text, the central problem in the economy for a long time to come will be that of obtaining from the rural sector as large a quantity of marketable surplus of food as possible. The lower the cost of marketable surplus in terms of the alternative commodities that have to be given in exchange for it, the higher the possible rate of development. The requirements of food of the food producers would depend upon : (1) The internal consumption requirements which in turn depend upon the produce necessary to pay to the labour and other services necessary for the manufacture of the given output, and that necessary for the maintenance of the dependants. These two items, however, get mixed up. Given the state of technique and organisation, there is, however, a minimum requirement in terms of what is necessary for the labourers and which is necessary for the performance of the given amount of work. The rest would be outlay on unproductive consumption, or more appropriately on unreproductive consumption. (2) Requirements for hoarding and stock : This depends upon the size of internal requirements and the possible variations in it. It also depends upon the state of expectations regarding the availability of foodgrains, expectations about rainfall and so on. A part of most of the hoarding, therefore, bears a constant proportion to output, whereas another part fluctuates depending upon the state of expectations. (3) The residue is that which is available for disposal on the market. This depends upon the cash requirements of the farmers for carrying out their operations, the standard of living in terms of the non-food goods to which they are accustomed, the requirements in terms of accessories for agricultural production and finally, the requirements in terms of outlay on capital formation or sudden bursts of conspicuous and social expenditure on consumption. It is not correct to assume that a larger aggregate produce must always imply a larger absolute quantity of marketable surplus. Very often, expansion of output may be brought about on marginal farms and by intensive or extensive cultivation which yields no surplus whatsoever. Even though the total output of the economy is increasing, the quantity marketed may increase very slowly, or may not do so at all, or may even decrease.

2. The crucial task is how to increase the quantity of food that is marketed. In an economy which is becoming increasingly conscious of consumer goods (other than food) and other items of expenditure, there will be a tendency towards an increase in the quantity that is marketed. The substitution of the money habit in place of the barter habit will strengthen the tendency. These are, however, long-term forces, but how to increase the absolute quantity of surplus that is marketed under short-term periods of one to five years ? Normally, the quantity that is marketed would be to a small extent dependent upon the absolute requirements of non-food

goods. To the extent that the prices of the latter can be slightly raised, the quantity marketed may increase. This may be done either by an increase in total production, *i.e.*, by exhausting the possibilities of production available to the farmers and/or by reducing the internal requirements and thus introducing some form of abstinence and/or by reducing the amount that is hoarded. Under market conditions, the prices of the goods which the farmers buy can be raised provided there is a central network of trading organisations. This can be done either through a network of State distribution agencies or through co-operative societies. The second alternative is to introduce monopoly purchases of marketable surplus of grains. The price offered to the farmers may be lower than what they would have got otherwise. There may be, however, a guarantee that the prices will not go below a particular minimum so that during periods of excess production, the farmers need not suffer a shrinkage in incomes. In an economy subject to fluctuations in output due to seasonal conditions, such a measure may introduce a greater extent of certainty and may actually be welcomed by the farmers. If we adopt this course, we would be procuring more of marketable surplus than we would be doing otherwise.

3. The two alternatives suggested above are not mutually exclusive courses of action. It is possible to combine both. After all, the requirements of consumption goods by the farmers are well known, and it is possible to ascertain through trial and error how far savings can be introduced. The State can introduce both distribution agencies who sell consumer and other goods to the farmers and buy the food produced by the farmers. The tertiary sector can thus be enabled to play a central role in capital formation. Further, a number of other measures can be devised. The State can be prepared to offer loans to the farmers in exchange for supplies of foodgrains. Another measure is to encourage the consumption of goods other than cereals in short supply, that is, to bring about a balanced diet. This too can be brought about through price adjustments. The network of distribution agencies suggested will help to popularise non-food goods among the farmers and will gradually introduce the idea of a higher standard of living in their minds. There can be a number of other functions which the distribution agencies can perform. The important point here is filling up of certain organisational deficiencies. As stated in the text, it is not proper to assume that the food problem has been solved once and for all. The problem of procuring adequate quantities of food is important not merely from the point of view of subsistence requirements, but also from the point of view of providing employment. If the State can directly get access to marketable surplus of food, it can utilise the powers of credit control to bring into fruition the desired schemes of capital formation.

As regards hoarding, when once the public come to know that there is an assured supply of foodgrains, the incidence can be reduced. Under a free enterprise market economy, part of the price paid for food during period of shortages or expected shortages is like premium paid for surrendering liquidity preference. It is only conditions of assured supply of food for a fairly long period that will overcome the preference for hoarding. The problem is institutional as also psychological.

APPENDIX II

Measures to Utilise Idle or Under-utilised Labour Power

Different calculations have been made about the extent of completely or partially idle labour power in the economy. A part of the idleness is due to seasonal conditions. A major part is due to absence of economic opportunities. A part is also due to lack of balance within the structure. If we give up the conventional assumptions regarding preference between leisure and work, a considerable surplus of potentially available labour power in skilled, technical and manual fields will become available. The question is how best to harness these resources towards desirable channels.

2. In the first place, an inventory of different types of surplus labour power according to categories has to be worked out. In the second place, we must find out what types of incentives or institutional arrangements are necessary to harness the above. Some part of the labour power can be harnessed only through monetary incentives in the form of money wages or a system of taxes and subsidies. If a discriminatory wage policy is followed a given portion of the idle labour power in different rural areas can be harnessed provided further that the projects are spectacular in character from the point of view of the units and are expected to yield quick results which have some correspondence to the efforts. Some part of the labour power can be harnessed through incentives in kind. If the Government can directly get access to marketable surplus of food and other requisits of labour, a pool of these commodities can be built up in different regions and policies of employment expansion can be stimulated. A part of the labour power can be utilised through incentives in the form of attractions of a rising social status. The Government can introduce a system of rewards and prizes, the responsibility for their distribution being made dependent upon enquiries at the regional level. A good portion of the resources going towards unproductive consumption and unproductive investment can be diverted towards socially desirable fields provided a systematic policy in this regard is worked out. Centralisation here would not be an advantage. A part of the labour force can be mobilised through community welfare incentives. Here, the persons who perform the work have other alternative sources of income, but they are prepared to work more because they believe that the region or the community for whose welfare they are striving satisfies their ideals. Here again, the problem is one of working out the potentialities in different regions. Finally, a part of the labour power can be mobilised provided such mobilisation takes a mass form. Here, whereas one individual may be unwilling, when once enthusiasm is created in the group, a considerable amount of work can be done. This is a function of leadership and appropriate utilisation of the springs of local patriotism which lie dormant in the rural parts of India is a task for the leadership to perform.

3. A final word about the types of fields to which the labour power channelled in the above manner has to be diverted. It would be best if the method of utilisation of labour power which involves considerable money burden and hence a real burden, is utilised for fields which tend to become self-financing. Output that is produced must be marketable ; then alone will the process become cumulative. It would not be appropriate to utilise money

incentives for mobilising the labour power which is diverted for welfare yielding purposes. In this connection, it may be pointed out that the system of incentives that is evolved should concentrate on creating within the economy a nucleus of leadership, both in social and in economic fields. Whereas leadership in the economic field is mostly self-financing, and more often than not, more than self-financing, and is undertaken with the clear objective of economic rewards, leadership in social reform and allied fields does not have the above advantage. Social innovation which brings about adjustments in the social structure (propaganda for reduction in unproductive consumption, changes in the consumption pattern, changes in the pattern of unproductive investments, introduction of the idea of birth control, introduction of a greater extent of mobility, etc.) is, therefore, as important and as vital as economic innovation. In fact, the contours within which economic innovations function are set by the tempo of social innovation. In our country, unfortunately, sufficient importance has not been given to this and there is no positive incentive in the system which favours the emergence of leadership in social reforms as such. Adequate attention should, therefore, be given to the encouragement of social innovations.

APPENDIX III

Measures for Built-in Flexibility

Over a period of years, it has been noted that agricultural output, particularly of food, is subject to wide fluctuations owing to the vagaries of the monsoon. There are years when an increase in total production by a particular extent, given the internal consumption requirements which do not substantially change year by year, lead to a more than proportionate variation in the quantities of marketable surplus of food. A principle similar to that of acceleration is in operation here. This explains why there is a sudden and steep variation in the price level of food. In a similar way, a decrease in output leads to a more than proportionate decline in marketable surplus, and hence, causes a significant pressure on the price level. Thus, even marginal variations in production either way have a more than proportionate effect on the price level. The question is : Is it not possible to evolve such organisation in the economy so that periods of excess production automatically generate a boom in capital formation, thus enabling the stepping up of the trend of growth of agricultural and other output ? It should also be possible to build up buffer stocks during these periods so that the incidence of general shortage during periods of decline in production can be minimised. When once it is accepted that for a long period to come fluctuations in agricultural output are inevitable, it should be possible to evolve such institutional arrangements that they lead to certain desirable results in the economy.

2. Let us first take the case wherein there is a sudden expansion in output of food. There is bound to be a certain lag before the increased output leads to a reduction in wholesale prices and then in retail prices. A fall in retail prices in food should, under autonomous conditions, lead to a decline in money wage rates. This is because, given the level of money wage rates, a

fall in the prices of food, the expenditure on which is the largest portion in the budget of a working class family, will make the workers better off in real terms. Assuming that a fall in money wage rates takes place, the employers find that, other conditions being given, conditions are propitious for an expansion in the level of industrial and other activity, and hence in the volume of employment. Such an expansion is conditional upon the prevalence of an optimistic state of expectations and the availability of adequate credit. There are thus a number of links before we can assume that a sudden increase in the output of food would automatically lead to an increase in the volume of employment, and hence in the rate of capital formation. The analysis of the different conditions under which the movement from one step to another step can be facilitated and speeded up provides a key to the discovery of measures which help to bring about an increase in the volume of employment under the present conditions. The central question here is one of evolving those links in the chain which lead to the above results. In the absence of these links, a sudden expansion in output is dissipated either in the form of variations in the standards of consumption of food by farm producers and/or variations in the standards of consumption of employed workers, their dependants and other groups. This, it is feared, has been the actual state of the country when looked at from the historical point of view. Periods of over-supply of food did not have corresponding repercussions on employment and rate of capital formation. The additional food was just utilised for raising the standards of consumption or for spreading it out evenly. Now that we have a planned economy, it is necessary to adjust the organisational framework in the economy in such a way that periods of agricultural expansion are converted into periods of high rate of capital formation.

3. The crucial question is why the links do not automatically get themselves established. Why should a country which suffers from food shortage be not in a position to go forward under conditions of excess production of food? Let us first assume that fluctuations in agricultural output occur around a stationary trend in output. Here the problem is to utilise the excess supply of food to provide employment in a number of short-term schemes. The emphasis is on short-term schemes because we are not certain that the increase in output is of a permanent character. If each region is equipped with a number of short-term schemes which are to be put into operation when once there is an excess supply of food and if these short-term schemes are keyed to expansion in agricultural output or in industries ancillary to it, then the stationary trend will be converted into a steadily growing trend. This is one of the best things that can happen to an economy. There is no automatic process by which this is accomplished, because the problem is not merely one of availability of additional food but of its accessibility to different enterprising units and the existence of a number of short-term schemes within the range of activity of these units. It is difficult to expect these conditions to be fulfilled autonomously. That is why the natural recourse is for fluctuations in output to take the form of fluctuations in the standards of consumption. These fluctuations in the standards of consumption do not lead to corresponding fluctuations in the level of general activity as happens in the case of advanced countries. In order that the short-term schemes may be automatically taken up, there should be a unified agency in each of the regions which is provided with requisite credit facilities and is in a position to mobilise the surplus of food. We have of course assumed that there is no problem of shortage of labour which in the case of India at least is in plentiful supply. The deficiency here is both one of lack of flexibility in credit arrangements

and also that of dearth of either investment opportunities from the overall point of view as is revealed to particular units and/or of a suitable number of enterprising or innovating units.

4. In the alternative, a rise in agricultural output leading to a fall in wholesale prices and then in retail prices must lead to a fall in money wages. Now, this is a condition which is difficult to be fulfilled in an economy in which in most of the organised industries, the trade union pressure is pretty strong. There is no doubt that some sort of a situation akin to that of money illusion is at work here. Wage rates are in the short-run inflexible downwards. The emphasis is on the short term because the increased output is of a short-run character and unless corresponding measures are taken quickly to mobilise it by the provision of fruitful employment at each point of time the economy would be working at a level of activity which is less than the optimum permissible and feasible. Even assuming that wage rates are somewhat flexible, expansion would depend upon the existence of a number of entrepreneurs and innovators who would think in terms of automatic schemes of new expansion under these conditions. The deficiency here again is either that of credit and/or of lack of appropriate entrepreneurial or managerial capacity. The question all along is one of converting a stationary trend in output to that of growing trend.

5. Let us take a case wherein the agricultural output is fluctuating over a rising trend. Here, the conditions are more propitious for expansion. It should be possible for the trend rates to be further raised provided appropriate institutional arrangements are made. The same deficiencies discussed earlier operate here too.

6. Ultimately, the problem is one of sufficient flexibility in the institutional arrangements confronting the agricultural sector. If the fluctuations are in a rising trend, the problem is one of expanding the institutional arrangements so that the economy can at each unit of time work at the ceiling set by the limits of capacity. This is how the ceiling itself can continuously be raised. The optimum performance in each unit of time itself contributes towards the raising of the trend and hence of the possible ceiling. In the case of India, the sector external to the farming sector does not show sufficient resilience during periods in which there is excess production in the farming sector.

7. What about the case wherein the output fluctuates downwards? In the above paragraphs there is nothing to prevent in the economy from building up stocks, these stocks not being merely maintained for purposes of meeting emergent needs by the farmers, but themselves being continuously utilised for raising the trend rate itself. The agricultural sector in India must operate in such a way that out of its own boot straps it lifts itself upwards. This requires a new approach towards the problem of fluctuations in an under-developed economy like that of India. The problem is not one of stabilisation of prices or of incomes. It is one of converting trends in excess production into forms of capital formation, short-term or long-term. This is the central cyclical problem for which the measures of built-in flexibility suggested in the earlier paragraphs are designed to provide a solution. The problems peculiar to each country require solutions which fit in accordance with the requirements of the countries concerned. To take over solutions valid in developed countries would be like utilisation of non-Euclidian geometry in a Euclidian world. The entire approach towards agricultural planning requires a drastic revision.

APPENDIX IV

A Positive Policy for Employment

1. At any unit of time, the volume of employment (E) that can be potentially offered in the non-wage goods sector is equal to the quantity of marketable surplus of wage-goods (M) divided by the average real wage rate (W) in terms of consumption of wage-goods. Given M, if W is higher, then E, the volume of potential employment that can be offered is less than what it would have been if W was lower. Thus E varies inversely with W. Given W, an increase in M will lead to an increase in E. Thus E increases directly with M.

2. After all, the magnitude of actual employment is not always equal to the potential limits determined as above. Here, we have to introduce the factors concerning demand for labour as well as the impact of monetary forces.

3. Let us take the latter first. M is the difference between output of wage-goods (O_w) and internal consumption demand for wage-goods (C_w). An increase in M may or may not mean an increase in C_w . The marketable surplus, therefore, is not a direct function of O. An increase in C_w takes place when the actual C is less than the amount which individuals desire to consume. Thus, there is an equilibrium relationship between any given amount of O_w and C_w . This relationship will be given by :

1. the extent of unsatisfied demand for wage-goods ;
2. variations in the number of dependants ; and
3. the average consumption of the latter.

A substantial increase in O_w would tend to increase M more than proportionately. This is obvious because there is a maximum limit to C_w in any short period.

4. Let us assume that O_w has increased and that an equilibrium relationship between C_w and O_w has been attained. Obviously, the market price of wage-goods, given other conditions, would tend to be reduced. But an increase in M will not take place if it is expected that the prices of wage-goods would tend to rise at a latter date. The price expectations might affect the activities of producers or of the middlemen.

Thus, there is what may be called a hoarding trap. Let us, however, pass over this trap and examine what happens later on. If the prices of wage-goods are reduced, then the money value of a given quantity of M would have gone down. It is not certain that the total quantity of money incomes accruing to the wage-goods producers will increase, decrease or remain the same. Suppose the price of wage-goods comes down, would there be an increase in employment ?

5. There is no automatic tendency towards an increase in employment with a decrease in the price of wage-goods. This depends upon whether the money-wage rate is also reduced. If the money wage rate is not reduced, then, unless new employment can be offered at a discriminatory money wage rate total employment will not increase. A

reduction in money-wage rates depends on the prevalence of a certain extent of flexibility in wage rates. Assuming that money wages are reduced, the employers find themselves with certain augmented margins. This, among other things, should encourage expansion. Such a condition will obtain only provided the employers in general are utilising their plants to less than the limits of capacity. This means that there must be excess capacity which can be utilised in the short period. If capacity is not fully utilised, then a stepping up of the employment consequent upon a reduction in money wages will depend upon the attitude of the employers.

6. Suppose there are minimum-wage laws or the already employed body of labour force refuses to countenance a reduction in money-wages. Expansion in employment now depends upon the employers' capacity to bring about a system of differential wage rates. The new workers will get less than the already employed workers. The policy of a closed shop under conditions of excess capacity can only lead to loss of total employment. Industries or firms in which restrictions are less rigid will expand.

7. What about a permanent increase in employment? This depends upon the state of long-term expectations. Utilisation of labour force in the construction of capital assets which have a fairly long period of existence would depend upon the employers' expectations as to whether the reduced level of wage rates will continue to operate in the economy and upon the period for which it will do so. We can straight away make the following propositions.

- (1) To the extent that the reduction in money wage rates is considered to be enduring, other conditions being given, there will be a tendency towards the starting of new establishments.
- (2) The expectations regarding the period during which the new level of wage rates is going to operate will determine the choice of investments. The longer the period during which the new level is expected to persist, the longer the time-horizon of the employers.
- (3) To the extent that conditions of uncertainty heavily surround the future of employers' activities as such, any reduction in money wage rates will not show itself in the form of an improvement in the level of capacity. It is in this sense that uncertainty about activities of the private sector comes in the way of long-term expectations.

8. Thus, it is not at all certain that a reduction in money wages is automatically reflected in the form of a larger volume of employment. If there is no utilisable excess capacity in the short period and if expansion of capacity depends upon long-term decisions and if the state of long-term expectations is adverse, a reduction in money wages will not show itself in the form of an increase in employment.

9. Suppose the increase in M is of a transitory character and so also the reduction in money-wages. Obviously, an increase in employment would now depend upon the availability of excess capacity in the short period.

10. Leaving out long-term factors, suppose there is increase in M and it is believed that this increase is transitory. Suppose further that decisions will now be undertaken on the basis of rational calculations. We can say that the ability of the State to increase directly the volume of employment will depend upon the total extent of employment yielding productive opportunities, in other words, upon the extent of available short-term schemes. These short-term schemes should be profitable from the overall point of view at the new level of wage rates.

11. In a private enterprise economy or in a mixed economy, the links are more tenuous. An increase in O need not necessarily mean an increase in M . An increase in M need not necessarily mean a fall in the prices of wage-goods. A fall in the prices of wage-goods need not necessarily mean a fall in money wages. A fall in money wages need not necessarily imply a fuller utilisation of capacity. Thus, there are a good number of slips between the cup and the lip.

12. Our entire analysis has proceeded on the assumption that there is some sort of continuity of economic decisions. To the extent that a further decision depends upon a state of long-term expectations, no increase in employment will follow as a result of a fall in money wages. In an enterprise economy, it is not merely the potential availability of M that matters, but also the availability of credit. If credit supply is inelastic, then an increase in M may or may not be followed by an increase in employment. The supply of credit depends upon the banking practices and conditions governing distribution of capital which itself depends upon the potential creditworthiness of the borrowing parties. In an economy in which there is continuous growth, a substantial increase in M , given other conditions, will lead to an increased credit supply, because not merely would more credit be demanded, but more of it would be forthcoming. If, on the other hand, conditions of continuous growth do not obtain, then there is no guarantee that the needs will be satisfied. Hence, there is no increase in employment. The problem of credit supply is, therefore, qualitative as well as quantitative.

13. There is no doubt that an increase in output of wage-goods would immediately show itself in the form of increased demand for all types of goods available within the wage-goods of the rural sector. Given profitable opportunities of further employment, the employment expansion can be had here, but if potential opportunities are meagre, then there is no relief to employment. The crucial factor is the availability of short-term productive opportunities. The lower the rate of interest, the greater the range of such opportunities actually available. A dear money policy under conditions of abundant M will not help provide a solution to the unemployment problem.

14. Would not a fall in money wages lead to reduced demand? There is no doubt that under Keynesian conditions, this should be so. Under conditions of under-development equilibrium, a fall in money wages accompanying a fall in prices of wage-goods, which arises as a result of increased output of wage-goods, does not lead to a worsening of the conditions of workers. It, however, enables the increased M to be reflected in the form of increasing overall employment.

15. As a result of the above discussion the following policy conclusions can be derived

in regard to the current situation in India :—

- I. (a) The increased marketable surplus must be reflected in the form of low food prices and low money wages.
 - (b) There should be liberalisation of conditions governing credit expansion.
 - (c) The state of long-term expectations must be rendered favourable from the point of view of the private sector.
- II. In the alternative, the State can itself directly get access to the marketable surplus thus short-circuiting the market mechanism and expand employment by utilising labour on a number of short-term or medium-term schemes. The initiative may even be left to the local rural agencies.

16. A positive policy of employment expansion must be based on an awareness of the working of the economic mechanism in an under-developed economy like that of India. The Government of India has formulated plans for expansion of employment opportunities by about 12 million jobs. If the analysis in the text and in the Appendix is correct this target is only the statement of a wish and not a planned target. Expansion of employment in our economy requires efforts of a particular character of which there is little evidence in what is being done. It is not correct to consider the unemployment problem as being remediable by only long-term measures. As shown above the problem is capable of solution here and now, if we are clear of the working of the economic mechanism in the present conditions of the country.

APPENDIX V

Policy Towards Labour Welfare Measures

An important point of difference between the process of economic development of newly industrialising countries like that of India and that of currently advanced countries during the periods when they industrialised, is the increasing importance that is given in the former countries towards a number of labour welfare measures. The modern social conscience will not tolerate an iniquitous policy regarding labour. The question, however, is whether the welfare measures can be so timed and patterned that their impact on the rate of growth as well as on the pattern of growth can be transformed into the best desired type.

2. In India, particularly in the post-independence period, a number of measures have been undertaken to improve the lot of the workers and strengthen their bargaining position *vis-a-vis* the employers. The form that these measures have taken cannot be said to be the best under the circumstances. The central difficulty here is that the welfare commitments have been imposed on individual undertakings or groups of undertakings and the burden of these commitments is made to be dependent upon the strength of the labour force employed in these units. Further, a number of measures have been taken to prevent retrenchment without notice or without appropriate pay adjustments. The method for settling labour-capital disputes has resulted into a polarisation of the views between labour and capital on each of

the issues. These tendencies have cumulatively placed an additional premium on the employment of capital-intensive methods. If the burden of labour welfare measures is transferred to the State itself, the contribution from the different parties being taken through a system of general or discriminatory taxes, the special prejudices against the utilisation of labour-intensive equipment can be overcome to some extent. The general pattern of policy in these issues may correspond to that which is being followed in the U.K. The Planning Commission or the Labour Ministry can send a team to the U.K. to make an intensive study of the methods of evolving a welfare state as in operation in the U.K. and to enquire into the appropriate modifications that can be made under Indian conditions. There is some truth in the statement that the labour welfare policy of the Government is indeliberately causing difficulties to labour itself. Further, while the interests of the employed labour force are being cared for, those of the employable but unemployed labour force are not being looked after.

3. Another difficulty is that the method of settlement of labour-capital disputes has led to considerable uncertainty regarding the process of accumulation of reserves within firms. In India as in advanced countries, the process of internal accumulation has an important role to play in capital formation. To some extent, unproductive utilisation of funds either in consumption or in investment, can be prevented if appropriate adjustments are made in the labour policy.

4. A reference has been made earlier to the need for safeguarding the interests of the unemployed workers. In advanced countries, where a well developed employment market already exists, standardisation of wage rates and methods of settling issues associated with labour, do not have a corrosive effect on growth. In the case of India, however, the need is to evolve a policy suited to a country with heterogenous labour groups and types of employment opportunities. A policy of de-standardisation which would, within limits, permit considerable wage differentials between regions and between groups of workers, would lead to a fuller extent of utilisation of economic opportunities.

5. What about the wage policy? It is obvious that, given fixed wages, a fall in the prices of consumer goods would lead to a rise in the real income of the workers. The unemployed workers, however, may be willing to offer themselves for employment at lower real wages. The employed workers may not object to the procedure provided the reduction in their standard of living takes the form of higher prices of goods which they buy rather than that of a reduction in their pay packets. There is considerable scope for utilising the technique of indirect taxation or credit expansion to bring about a larger volume of employment and thus satisfy the labour interests without affecting their sensibilities. There is no doubt that the wage rates in India have tended to be inflexible downwards. An alternative measure would be to permit differentials in wage rates and to follow, as stated earlier, a policy of destandardisation.

6. There is no doubt that the measures suggested above would help to increase the indirect contribution from the employed workers towards economic development. But, then, under what conditions would the workers acquiesce in the above strategy? The question here is the extent by which the consumption standards of the relatively well-to-do group in the economy can be regulated. This is the problem of incentives and is not incapable of solution.

INSTITUTIONAL IMPLICATIONS OF A BOLDER PLAN WITH SPECIAL REFERENCE TO CHINA'S EXPERIENCE

by

DR. B. N. GANGULI

What are the institutional implications of a process of economic development which would transform India's low-level economy into an expanding, high level economy within a short period of time ? It is proposed to answer this question in broad concrete terms in the course of this paper.

It is commonly said that the hard core of unemployment in India is structural in character. All that this means is that the broad aim of planning must be to remove the structural defects of our economy which inhibit progress and to provide incentives which stimulate structural changes favouring progress. At this point planning becomes interlinked with institutional change, *i.e.*, transforming such socio-economic institutions as are incompatible with technological progress and creating new institutions through which a country can adapt itself to technological change and also adopt it as an instrument of welfare.

It is clear, however, that we cannot discuss the institutional changes involved unless we know the character of essential structural changes in our economy.

There is common agreement in the country that wide diffusion of industrial activity in the rural areas will redress the present unbalance of our economy and exert a steadying influence on the national industry as a whole. For this purpose location of industries has to be rationally planned to conform to a pattern of self-accelerating economic development which the country needs to achieve a rapid increase in the standard of living, as well as a balanced tempo of development in the country as a whole. The elements of the new economic structure which has to be built up may be defined as follows.

(1) We have to imagine an economy resting on the interdependence of agriculture and industry and ramifying into a number of economic regions.

(2) We have to start from the idea of an India divided into distinct economic regions and not into artificial administrative divisions. If States have to be recognized for ethnic, linguistic and socio-political reasons, there must be inter-State planning machinery for tackling the basic economic problems of an economic region which cuts across the political boundaries of two or more States.

(3) Each region will be required to aim at optimum utilization of its economic resources. Each will have a *distinctive* economic base and will specialise in those branches of production in which it enjoys differential advantages.

(4) It follows that the existing structure of trade and distribution which is irrational in many ways must change.

(5) Each region must have not only a *distinctive*, but also a *sufficiently wide*, base of economic life. The emphasis should be on regional balance rather than *specialisation*. This would involve encouragement, within limits, of centrifugal tendencies of economic development designed to level up the standard of living in different parts of the country through diversification of production.

(6) If the above propositions are accepted several basic policy decisions would follow :—

(a) There must be, as far as possible, an even distribution of small, medium-sized and light industries throughout the country. Hydro-electric development, development of transport and general diffusion of an atmosphere of industrial pursuits will tend to create this pattern.

(b) Heavy industries must be located at strategic points in the economy. To begin with, the same policy should be followed in respect of light industries as well.

(c) Each region must be encouraged to have a sound raw material base and power base—an objective which is capable of being achieved within a decade in view of large-scale hydro-electric development.

(d) Broadbased industrialisation contemplated here would involve necessary changes in the demographic structure and in the economic organisation. Most of the economic activities subsumed under industrialisation depend upon a *social environment in which population gets locally concentrated at certain nodal points along well-developed lines of transportation*. Policy implications of this may be stated as follows:

- (i) Development of transportation on the basis of regional planning, high priority being given to those lines of communication which will strengthen the growth of nuclei of industrial activity in the countryside.
- (ii) Development of nuclei of industrial activity in the rural areas on the basis of establishment of small townships having a sound and stable agro-industrial base. In a purely agricultural region population is much too dispersed for the economical distribution of water, or electricity or oil and social services. As soon as a working force is organised on the basis of minimum concentration in small townships the unit cost of basic adjuncts of production and basic services will be reduced and the community will begin to reap economic benefits associated with communication.

A nuclear township must be located in each Community Development Block. This will ensure proper dovetailing of industrial and agricultural production at nuclear points in

our economy. There will be natural development of argo-industries. Small plants located in these townships will strengthen the basis of cottage industries operating on a family basis in the villages. They will also supply raw materials, intermediate products and servicing and repair-facilities. They may by the products of cottage manufacture and undertake further processing and finishing of these products for sale in the local market or even in wider markets. Besides, processing of local agricultural raw materials and food products, including fruits, will be a useful line of activity. It is also possible to imagine the development of mechanised workshops and small mechanised units which can develop on the basis of decentralisation of processes of large-scale industries not far from the nuclear townships or on the basis of manufacturing particular parts or components of these industries. The pattern of industrial development in these townships cannot be uniform all over the country and will depend upon local resources and potentialities.

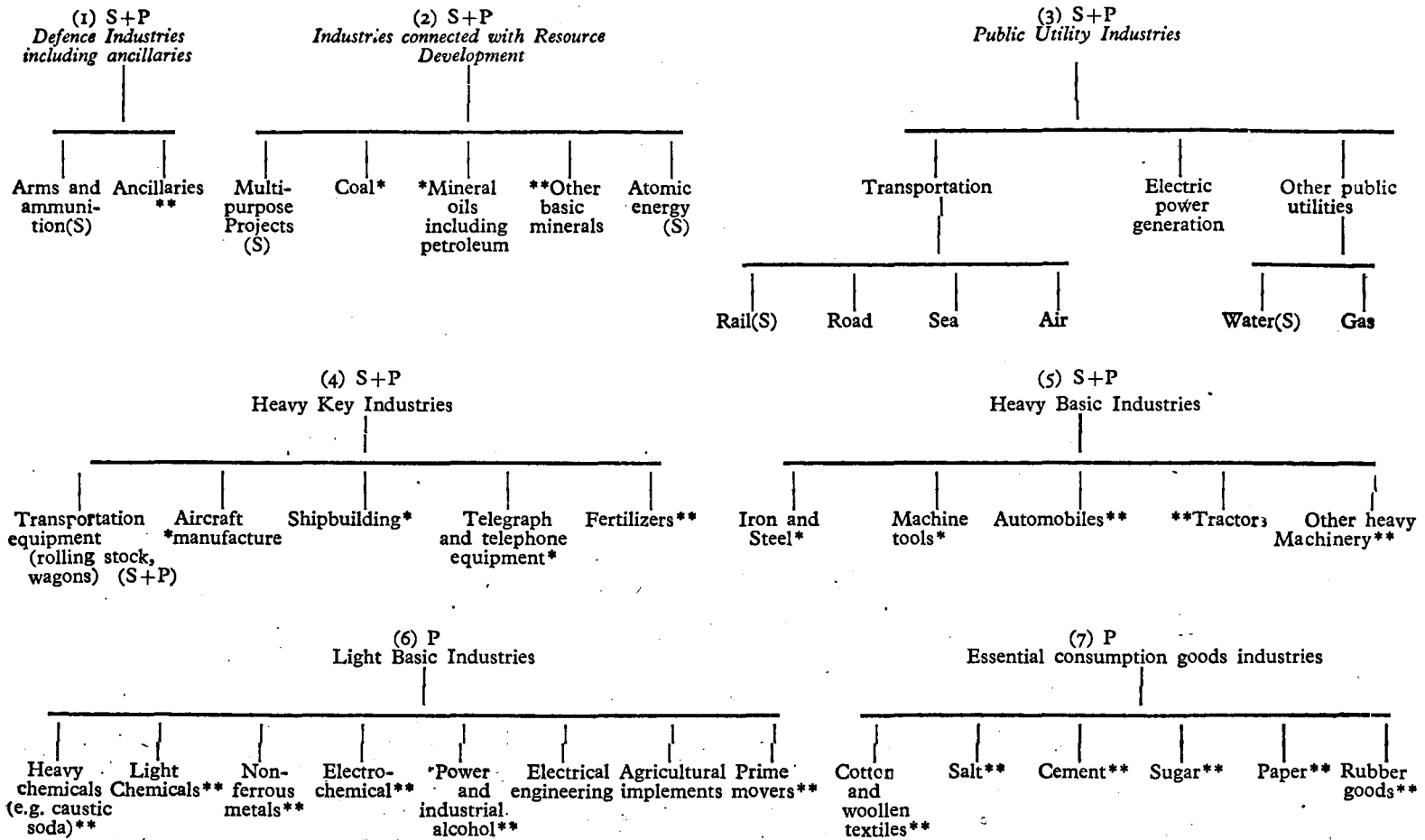
Development of nuclear townships will be a contrast to the kind of development which we have witnessed in the case of refugee townships. Industries located at the sources of raw materials and cheap labour must come first, and the labour force with necessary skill and training, depending on the types of industry planned, must move into the townships when industries are ready to receive them.

These townships will become the medium through which industrial atmosphere will permeate the countryside. They will also be the channel through which energetic and enterprising workers shifting from agriculture would be initiated into the ways of modern technology without losing their moorings in the community life of the villages. It is in this way that there would be upgrading of labour and improvement in the *quality* of employment on a broad basis.

These broad changes in the structure of our economy which I consider essential in the context of a bold plan of economic development have important implications by way of institutional changes. I think that many of them will be *induced* changes but a good many of them must be *autonomous* changes which it is the task of planning to bring about deliberately. This paper deals with the latter type of institutional changes.

There is no doubt that major structural changes in the Indian economy would need considerable expansion of the public sector of industry. To quote Government of India's Resolution on Industrial Policy, dated the 6th April 1948, "the State could contribute more quickly to the increase of national wealth by expanding its present activities wherever it is already operating and by concentrating on new units of production". In order to indicate broadly the industrial fields in which the public sector should either expand, or into which it must enter, it is necessary to state the position in terms of the Industrial Policy Resolution, keeping in view the broad categories of Indian industries, which have developed so far,

India's Industrial Structure: Public and Private Sectors.



Symbols : S—State enterprise.

P—Private enterprise.

*Exclusive right of the State to start new undertakings.

**State regulation and control.

Private enterprise in India has largely concentrated on (a) the development of light industries requiring low-grade skill (rubber, boots and shoes, jute, cotton textiles, soap, etc.) and (b) heavy industries requiring low-grade skill (cement and heavy chemicals). It has also shown considerable interest lately in light industries requiring high grade skill. But this is a field in which there are important gaps. Heavy industries requiring high-grade skill are also a very important field in which private enterprise has shown interest and has achieved notable results in some cases. But here also large gaps have to be quickly filled. In the field of industries connected with resources development, public utility industries and heavy key industries significant developments are possible only through expansion of State enterprise.

It will be observed that the State has already acquired powers of regulation and control over wide fields of industry. But in many fields, particularly in the key sectors, control of a regulatory kind will not achieve the purpose unless more positive ways of activating private enterprise are employed. Something will be said below about the institutional changes that will be clearly necessary.

Even a cursory inspection of the chart given above shows that in certain key sectors private enterprise has to be eliminated. Some of the industries ancillary to defence industries should not be left in the private sector. Exploitation of atomic minerals is a State monopoly. Exploitation of other basic minerals and development of mineral reserves should also belong to the State sector. Nationalisation of the coal industry also cannot be long delayed, unless it is found expedient to have a halfway house under which the coal industry can be compulsorily organised into regional bodies providing for representation of workers and owners, a substantial degree of State control on the operation of these bodies and compulsory amalgamation of small collieries into bigger rationalised units of operation using modernized techniques of extraction. From the point of view of the primary necessity of unification of the transportation system it is necessary that road transport should be nationalised and integrated into railway transportation.* The State has also got to enter the field of transportation on inland waterways. Sea transportation may, however, be left to private enterprise, and has to be subsidised and controlled by the State in the public interest. With vast power generation schemes already completed, and nearing completion, the State must eventually have a monopoly of generation and distribution of electricity.

It is gratifying to note that in sector (4) including the heavy key industries, the exclusive right of the State to start new undertakings has been exercised, and the units already started now form an important part of the State sector. The fertilizer industry, instead of being merely an industry subject to State regulation and control, has now become one of the important State industries. Over the entire field of heavy key industries such industries as we have are predominantly State-owned and State-managed industries.

*This question is discussed in some details below.

It is apparent that in the fields of heavy basic and light basic industries, with the exception of the iron and steel industry, in which new State units will come into existence, the private sector is dominant. Here the State sector must not be content with mere regulation and control. It must enter the field and start new industries according to plan, keeping in view the targets set under the Second Five Year Plan. Many of the industries would create important external economics specially in the context of broad based industrialisation.

It is difficult to suggest that the State should enter the field of consumption goods industries. Rational regulation and control ought to be enough in the existing circumstances. There is, however, a case for the State entering the field of industries or sectors of industries catering for the export market.

We may next define the nature of institutional arrangements required to put the relations between the public and private sectors on a workable footing in the following manner :—

(1) It is best to foster the feeling that there is really one sector, *viz.*, the national sector, and that both the public and private sectors must subserve the national interest.

(2) To create this feeling it is necessary to avoid top heaviness and bureaucracy in public corporations and also the evils of the Managing Agency system in the case of private joint-stock enterprise.

(3) Workers' participation in industrial management is essential, if only because centralisation of power and responsibility is an inherent evil of large-scale industrial organisation.

(4) Since we assume a decentralised economic organisation, co-ordinated by a cost and price system, in order to realize the full advantages of such a system the managers of State industries must be free to experiment with new products, alternative methods of production and combinations of factors of production. They must be made to realize their responsibilities. This is possible only where their remuneration in some way reflects their success or failure as managers. Otherwise the attempt to check irresponsibility from above will lead to bureaucratic regulation which will sap initiative. A system of fixed salaries, depending upon the size of business, supplemented by bonuses based on certain indices of efficiency as well as promotion by selection would be the appropriate safeguards.

(5) To put private and State enterprise on a competitive footing in common fields price should approximate to marginal cost in the case of increasing-cost goods and average costs in the case of diminishing-cost goods. The surplus earned by private enterprise on the sale of diminishing-cost goods should be appropriated by the State by fiscal means for financing development.

(6) Attempts should be made, as in New China, to rely on forms of organisation which bring together the State and private enterprise in a common undertaking.* They are called in New China *State Capitalist* enterprises, which are operated through the link-up or co-operation between the socialist sector and the capitalist sector under the control of the State. First, there is joint operation of State and private enterprise. Second, there are intermediate forms based on the State placing orders for processing jobs for finished goods, making centralised purchases and underwriting the marketing of production. Thirdly, there are the lower forms based on State purchase of products and State agencies acting as selling agents. In the field of commerce there have also emerged several forms of State capitalism, such as State-private joint operation, purchasing agencies, marketing agencies, buying from State-owned enterprises at wholesale prices and retailing at officially fixed prices. Some of these forms of organisation would be useful if the State in India enters the field of trade and distribution.

According to the testimony of the Chinese, "State capitalism" has shown the following advantages :—

- (a) This institution has eliminated "labour-capital conflicts within the internal ranks of capitalist enterprise", which, in spite of high levels of productive efficiency in certain private industries, were "in a state of paralysis"**. "To make the masses of workers feel interested in their own labour and be prepared to raise their labour productivity, raise the quality of their products and reduce production costs—these conditions have been very markedly reflected in the highest form of State capitalism, viz., State-private, jointly operated enterprises".
- (b) State capitalist enterprises have conformed to plan targets, developed their highest economic potential and have "achieved equilibrium between supply, production and marketing".
- (c) These enterprises have developed a norm of production, management and control and "uniformity in operation of enterprises similar in nature and size".
- (d) They have operated on a profit-earning basis.
- (e) Two forms of State capitalist enterprise favoured in New China are: (1) that based on cooperation between private-medium and small factories with large State capitalist factories ; and (2) that based on private stores acting as sales agents for State-owned enterprises in special lines of goods. Such institutional arrangements would be found useful in India if small industries and enterprises are to be strengthened as part of the programme of building up a "Socialistic pattern of Society".

*In 1953 private industry and commerce between them gave employment to 3,800,000 works and shop assistants and formed an important economic sector of the Chinese economy.

** This and subsequent quotations in this section of the paper have been taken from an address of Li Wei-han, vice-chairman, committee of Financial and Economic Affairs, Government Administration Council.

(f) In New China it is recognized that "should there be disputes between the two parties (State and private enterprise) over major issues they shall be referred to the relevant authorities for settlement".

(7) Private enterprise, if it is to operate efficiently, must have a reasonable level of profit guaranteed to it in a planned and regulated economy. In New China the guiding principle was laid down (in September, 1953) as follows:—

Gross profits are to be split up into four shares : " (1) Income-tax payable to the State, (2) contribution to the general reserve of the enterprise, (3) payment of welfare bonus to the employees and (4) *Interest and bonus payments to capital* (including remuneration to its agents). *The payment of interest and bonus to capital may take up about 25 per cent of the profits available for distribution.* In certain enterprises where production is carried on properly and where the distribution of profits is rational, should the payment as interest and bonus to capital exceed the above-mentioned level, it may be continued".*

(8) Establishment of harmonious relations between the public and private sectors and building up what has been called the 'national sector' require the organization of trade and industry into a deliberative body on a national scale. The experience of New China in this connection is instructive. The Chinese have organised a "Federation of Industry and Commerce" with a constitution and membership of 640 representing State firms, cooperatives and public private joint companies. Grouping of industrial and commercial representation has already been completed in 28 provinces, 14 big cities and 1913 counties and small towns. These local groups have been formed into permanent federations under the direction of the local Bureaux of Commerce. An important object of such an institution is to study problems of capital, profit, taxation, accounting system and, above all, the relation of private firms to State firms.

(9) The Government of India have done very little to implement its Industrial Policy Resolution of 1948 in the matter of training a cadre of managerial personnel for State enterprises. Implementation of a bolder Second Five Year Plan is out of the question unless the required personnel with requisite business ability is available. The Chinese have faced this problem too, and they have relied on what they call State Capitalism under which private capitalists "have an opportunity to contribute and develop their talent in management or technique".

In India, as in New China, there is a vast private sector in the countryside which can no longer be left to the devices of anarchical individual operation of farms and other productive enterprises. I shall touch on certain broad institutional changes which are absolutely essential in the near future in these fields.

*Private businessmen themselves admit that 1953 was their most profitable year since the beginning of the present regime. A survey of 230 firms in Shanghai showed that 95 per cent earned net profit in 1953, as against 54 per cent in 1952. (*China News Analysis*, Hongkong, June 18, 1954.)

In the field of agriculture necessary institutional changes may be indicated as follows:—

- (1) Release of productive forces in the countryside through the abolition of intermediary rent-receivers on a rational basis. While the principle of "land to the tiller" is a sound one, it must be recognized that owing to scarcity of land and capital various forms of sub-tenancy, co-partnership and crop-sharing arrangements have come into existence, which hold together the precarious structure of agricultural production. While it is logical to eliminate the functionless owner it is necessary to assess the degrees of functionlessness and decide upon the permissible degree of functionlessness or exploitation as determined by local circumstances and the size of the agricultural surplus population.
- (2) Where the first phase of land reform has been completed or is contemplated the economic position of the peasant must be sustained by institutions supplying seeds, manure, short-term credit, implements, irrigation facilities and marketing facilities. These institutions must grow within the framework of the Community Development Organisation. The recommendations of the Rural Credit Survey Committee should be implemented. Nationalisation of the Imperial Bank is a good preparatory step. Each State should set up a Central Land Mortgage Bank, as the Rural Credit Survey Committee has recommended.
- (3) The attempts on the part of landlords to extend the area under personal cultivation by subterfuges, to eject tenants and treat them as tenants-at-will must be stopped.
- (4) If no ceilings on holdings are fixed at a very early date we shall merely be replacing the class of feudal landlords by another exploiting class which is only technically a class of peasant proprietors, but shows all the undesirable features of landlordism and accentuates class conflicts in the rural society.
- (5) Just as the State has claimed the right to transfer to another management an industrial undertaking if it is inefficiently and dishonestly managed, in the same way the State may also acquire the right to transfer a holding which is inefficiently cultivated or neglected or badly managed to another person provided that fair compensation is paid.
- (6) The incidence of rent has to be rationalised *pari passu* with rationalisation of land revenue assessment.
- (7) There must be rational crop-sharing contracts so long as crop-sharing persists in consequence of the high pressure of the population on land.
- (8) From the point of view of planning the minimum institutional requirement in agriculture is the development of semi-socialized cooperatives. It is suggested that redistribution of land after the fixation of ceilings or allotment of reclaimed land must take place on the basis of compulsory formation of cooperatives. In this respect the experience of agrarian reorganisation in New China would be found instructive. In New China the transition to cooperative farming is a phased programme. First, they organise *ad hoc* mutual aid groups for a season. Later these teams grow into full-year mutual aid groups with some pooling of implements. Finally, there is pooling of land for cultivation, private ownership being retained

and rent being paid to the landowner. This is the stage of cooperative farm management. Mutual aid groups in 1954 embraced 47,900,000 farmers, *i.e.*, 43 per cent of the agricultural population. It is not known how many of them were full-year mutual aid groups. On the other hand, in 1954 there were 14,000 cooperatives with 273,000 farmer members. The target for 1957 is 800,000 cooperatives covering about 20 per cent of farmers. The main instruments are propaganda and persuasion. We have to seriously consider whether a beginning should not be made in India with more elementary forms of cooperative effort on the basis of mutual aid.

It should be pointed out that rural cooperatives in New China are really multi-purpose cooperatives. They lend or sell seeds, prescribe the methods of cultivation, determine the time of harvesting, buy up the crops, fix prices, sell salt, fertilizers and industrial products, and, when funds are short, lend them money. The cooperatives are the subordinate agencies of the Government departments of food, taxation and trade. Their operations are coordinated with Government State trading agencies handling cloth, food and other essential products. Thus cooperatives are an instrument for controlling both the income and expenditure of peasants—a function which is most valuable in the context of actual or potential inflationary pressure in the economy.

The institutional changes in the field of rural industry may now be broadly indicated.

I attach a great deal of importance to the development of nuclear townships as the spearhead of basic technological progress and basic industrialisation. They will set the pattern of structural changes in the Indian economy which can sustain a process of high level economic development. They are calculated to lessen the social and economic distance between the rural and the urban sectors. They are the only means by which we can ensure decentralisation of economic power and, as far as possible, even economic development, and avoid the conflict between the urban and the rural classes. I imagine that the future of democracy in India is bound up with the kind of development that I am visualizing.

If these propositions are accepted then I suggest that here is an important field for State initiative and enterprise. The State has to create external economies for these nuclear townships which will be centres of what is called agro-industry. It is necessary to plan these centres not merely in the context of existing lines of communications. It will also be necessary to plan road and railway development with a view to exploiting the rich potentialities of zones which are inaccessible. It may be possible to link up the planning of these centres with the potentialities of river-valley development and development of mineral resources or forest resources. Once these centres come into existence on the basis of prior planning of industries and occupations to be located there, they will attract private enterprise. Indeed prior planning may proceed on the basis of joint consultation and agreement between the State and private enterprise. Retired men in State service who have been technicians or in the professions and enterprising landlords who seek economic rehabilitation after the abolition of landlordism will find scope for their creative talent in these nuclear townships. If private enterprise is lacking it would be worthwhile for the State to start industries in these

townships till they are taken over by private enterprise. I imagine that these townships can be largely organised on the basis of comparatively quick turn-over of capital. In fact a considerable part of the investment will be of the revolving type over a period of time. This is precisely an important field in which the proposed Industrial Development Corporation can operate to best advantage. If it is too much for it to take this line of activity in its stride, it should be possible to organise a specialised institution to undertake this job.

It would be necessary to encourage the formation of cooperatives for small and even medium-sized industries in the nuclear townships. Dominance of powerful capitalist elements should not extend beyond the light industries and bigger workshops which may, in particular circumstances, be located in a certain township. It would clearly be necessary to minimise social stratification and class conflicts in these townships. Otherwise there is a danger of their gradual disintegration.

This brings us to the problem of the institutional arrangements which are needed to put our cottage industries and handicrafts on a sound basis of economical operation. They may be considered broadly in the light of the remarkable experience which the Chinese have gained in this field over a number of years even before the establishment of the new regime. In New China Government gives active assistance to industrial cooperatives in the form of (a) loans, (b) raw materials and (c) government orders. There are no guaranteed prices as such. But there is certainty of markets, and, besides, prices are expected to be favourable, because Government is prepared to buy in bulk. There is overall planning of production in cottage industries. If Government wishes to discourage production in certain lines it withholds positive assistance mentioned above. Government policy in relation to small and cottage industries is uniform and does not discriminate between production for export and production for the home market. There has been remarkable development of certain cottage industries catering for the export market, such as the famous brocade industry of Nanking and the main industries of Hangchow—tea, silk rearing and silk-weaving. The State affords financial assistance, supplies materials and buys the finished product of small workers both in the tea and silk industries. There is an important institution in New China which we may organise in India with advantage, *viz.* that of grading of exports of handicrafts by an inspectorate set up by Government. It should also be possible to organise a processing and finishing factory for exports to ensure quality and uniformity of standard. There is such a factory in Tientsin.

In subsequent paragraphs it is proposed to discuss the nature of possible institutional changes which are essential for maintaining the *balance* of our economy in the context of a bold plan.

In this context we see more clearly the institutional implications of implementing, for example, a Rs.10,000 crore plan when our approach to planning is 'financial', rather than 'physical'.

It is necessary, first, to pose the problem in the form of the following propositions :

(1) In any economic plan, whether it is a totalitarian plan or a combination of planning with free price formation (which at best is *possible* in India in the present circumstances, ideology apart), the circulation of money against goods must be carefully controlled.

(2) The balance between the two is achieved when the sum-total of purchasing-power flowing into the market during a period out of individual incomes is equal to the sum of prices of all consumption goods offered for sale during the same period. The total value of consumption goods is equal to the total value of all goods produced *less* the deductions for new capital formation and for social consumption. On the other hand, the sum distributed as personal incomes equals the earnings of factors of production *less* deductions for new capital formation and social consumption. Since the sum of all prices equals the sum of all earnings of factors of production, *in principle* the sum of purchasing power given by these equations will ensure internal balance.

(3) *In practice* if we have a combination of planning with free price formation several circumstances will upset the balance :—

- (a) Consumers may vary the rate of expenditure of purchasing power in an unforeseen manner.
- (b) There will be unplanned variations in economic activity in the private sector as the result of which there will be changes in the prices of goods produced in this sector and consequent unplanned changes in the general price level.
- (c) Variations in the real turnover in the private sector will cause variations in the rate of expenditure of purchasing power or demand for money.
- (d) Since the velocity of circulation of money will be different in the public and private sectors movement of money between them will upset the monetary circulation.
- (e) Since we have assumed a combination of planning with free price formation the planning authority can, with a few exceptions, only issue general directives as regards prices and quantities. Prices and quantities would, by and large, be allowed to adjust themselves. Thus variations in prices will occur through unforeseen changes on the demand side or on the supply side.
- (f) It should be noted that changes in prices due to changes in the conditions of demand and supply will be exactly balanced by changes in the earnings of factors of production. There will thus be a change in the level of prices and in the quantity of money in circulation. But the internal balance of the economy will not be upset.
- (g) It is the changes in the unspent margin or the rate of expenditure of purchasing power which are mostly to be dreaded.

What safeguards can we possibly have against this danger ? The answer to this question is very crucial specially if we seek to rely on deficit spending for financing a bold plan.

In New China it has been found crucial for the State to have direct means of neutralising changes in the velocity of circulation of money particularly through control of savings. Ready cash, wherever in existence, is mobilised. Every enterprise has to submit its cash and credit plan. No enterprise is allowed to withdraw money unless there are actual purchases and payments to be made. Cash holdings of the public are reduced to the minimum. They cannot be used for speculation. There have been powerful national savings drives to mop up surplus purchasing power. At the same time the State controls the volume of goods flowing into the market through State trading enterprises. Open market operations designed to stabilise prices of commodities have been the mainstay of the internal balance of the economy. In this connection it may be pointed out that Chinese rural cooperatives in alliance with the rural branches of the People's Bank of China (China's Central Bank) have played an important part in regulating the income and expenditure of the vast masses of the population in the rural sector of the economy. In New China economic experts speak of *Three Balances* :

- (1) balance of State revenue against State expenditure;
- (2) balance of bank receipts against payments, and
- (3) balance of the supply of essential commodities against the demand.

In a planned economy in which a good deal of personal consumption is of the nature of communal consumption it is possible for the State to regulate personal consumption to a considerable extent. This is not the situation in India. There is, therefore, no alternative to institutional arrangements for (1) operating on the supplies of essential goods and services through State-conducted and/or State-regulated trading and distribution, and for (2) operating directly on consumers' money demand through control of savings and other techniques. The nature of these institutional arrangements are considered next.

State trading may take various forms. The State may enter the private sector of trade as an important element so as to establish its price-leadership. It may establish monopoly of trading in essential commodities. It may not itself conduct trading, but may control and regulate trade in the public interest through movement control, transport allocation, price control, allocation of licences or quotas for supplies, moral persuasion, import of supplies from foreign countries to bring down rising prices, etc.

State trading as an important part of the public sector of the economy serves the two-fold purpose of planning. In the first place, it is an important source of public revenue and capital formation. Thus State trading appeals to backward, primary-producing economies depending for their prosperity on export of raw materials, because the enormous profits on trade in essential strategic raw materials in a period of raw material boom can bring much-needed revenue which, in the absence of domestic capital formation, may be used for basic economic development. In New China, on the other hand, State-conducted internal trade has become an important source of public revenue. Thus the income from State-owned

enterprises, including State trading corporations, has increased from 34.08 per cent of total revenue in 1950 to 69.07 per cent of total revenue in 1954.

In the second place, State trading is a means of operating on market supplies of essential commodities and on market demand with the object of stabilizing prices and curbing inflationary pressures. In an expanding economy in which a good deal of physical capital formation is going on these inflationary pressures are inherent in the situation particularly where the State resorts to deficit financing on a large scale.

One must not forget, however, that maximising profits on internal trade for the sake of maximising resources available for economic development may not necessarily be consistent with internal economic balance. In New China, for example, in recent years, the prices of manufactured products were pitched high not only to adjust short supplies to demand but also to raise revenue, but prices in the agricultural sector, being determined mainly under conditions of free competition, were at comparatively low levels, thus giving rise to the 'scissors phenomenon' and distortion of the price structure. That is perhaps one of the reasons why State trading based on monopoly procurement and rationing of food was established in New China in 1953.

Fixation of prices as a dual-purpose instrument of control—as an instrument of taxation and as a means to stabilization of prices—is a difficult instrument to handle. It needs a vast, alert and incorruptible organisation. In principle, the margin within which price variation would be permitted has to be fixed with reference to the elasticities of supply and demand in the case of individual commodities. But in practice operations on the market will be governed by the stock position. If there is an element of taxation in price-fixing the problem becomes complicated, although it is not insoluble. In any case the financial backing of State trading must be so substantial that there should be no possibility of speculation on its breakdown or of speculation on the exhaustion of stocks. That the difficulties involved in State regulation of supplies and prices through State trading are real is indicated by the fact that in New China where there are State trading monopolies in respect of most of the essential commodities there has periodically arisen the problem of "correct price policy" and "re-assessment of commodities" on the basis of classifying goods into "goods of good sale, depressed goods, residue, inferior and spoilt goods". What has also happened is that while the Government has fixed the margins between wholesale and retail prices, in some places the two have been identical and in others retail prices have been below wholesale prices.

In India it will be clearly necessary to have State-regulated trading combined with State-conducted trading in at least essential commodities like foodgrains and cloth, and also raw cotton and perhaps sugar. Since prices of cereals and cloth have a strategic position in our price-structure large reserves of cereals and cloth have to be built up. Since cloth prices depend on the price of raw cotton buffer stocks of raw cotton have also to be built up. *In fact an essential part of physical capital formation must take the form of these commodities at the initial stage.* Full advantage should be taken of the present trend of low prices of

these commodities at home and abroad. By building up reserves we should be able to counteract the present agricultural depression and the operation of the 'scissors phenomenon', and to impart to the economy a basic buoyancy that is needed now. At the same time we shall have ready at hand an instrument with which we can sustain internal balance.

It would also be necessary to control personal consumption by banning or rigidly limiting luxury imports and domestic production of a large variety of consumer goods and of luxury goods.

One particularly unobtrusive way in which we may seek an offset to inflationary pressure would be to rely on services and the use of fixed equipment which is not consumed in use. In this case the commodity sold is produced as it is required and not in anticipation of consumption, and the supply can be varied a great deal without any change in the use of labour and other scarce means of production.

Let us next turn to the question of possible institutional arrangements designed to control consumers' money demand through control of savings and other techniques.

In New China banking has become a basic instrument of planning. Without control of savings and investment in the vast private sector it is not possible in a country like India or China to achieve an internal balance in the context of a bold plan. In New China the basic financial policy, as stated in 1950, was "to absorb more deposits, to set up more Treasury branches and to carry out effective transfer of funds", and it was implemented by People's Bank of China, China's Central Bank. There was concentration in this institution of (1) deposits, (2) bill clearing and (3) credit. But obviously it could not become a centre of bill clearings unless all monetary transactions were channelled through it; and when this happened naturally deposits were mobilised in the People's Bank of China. The essence of monetary control was, therefore, cash control. All State enterprises, public organs, military units and cooperatives were required to make over as deposits all their cash and bills, except a working balance, and to submit periodically a schedule of receipts and disbursements on the basis of which their need for withdrawal of cash could be assessed. The People's Bank, therefore, became the centre of bill clearings and transfer of accounts. Short-term credit transactions were also centralised. This kind of cash control was eminently successful in reducing both the quantity and velocity of circulation of money during a period of hyperinflation.

In New China's budget of 1950 as much as 18.7 per cent of total expenditure was uncovered deficit. 38.4 per cent of the deficit was planned to be met by the issue of public bonds and 61.6 per cent by overdrawing from the Central Bank. The overdraft was matched to some extent by the mobilization of surplus purchasing power by the People's Bank through the device of cash control. The net effect of both was relaxation of inflationary pressure.

In India owing to differences in circumstances it is not necessary for the Reserve Bank of India to perform the functions of commercial banks. But there is no doubt that it must serve as an instrument of planning by integrating and coordinating its activities with the nationalised Imperial Bank of India. The spearhead of advance in the direction of cash control

and deployment of credit should be the Imperial Bank of India with its branches in towns and in the countryside. If this kind of combination is worked out it would provide the institutional basis for minimum monetary control that is needed.

In China the savings drive is a national institution backed by the political power and authority of the State. Since there is austerity all round the appeal to patriotic sentiment and persuasion yields results. Sale of Victory Bonds, savings deposits in real terms, savings deposits with lottery tickets in rural areas, patriotic savings deposits, compulsory insurance for State and cooperative properties and for passengers and semi-compulsory insurance for bullocks, jute, cotton, drilling of wells and transportation of goods, accident insurance, fire insurance, fishermen's insurance and insurance for crops of wheat and rice are some of the means of mobilising savings.

Rural cooperatives in New China in close cooperation with the rural branches of the People's Bank of China have been contributing to the savings drive in the rural areas. During the period of national emergency there has been assignment of savings according to administration units in villages and utmost moral pressure has been exercised on the masses to tap their potential savings. A percentage of sale proceeds of crops has been apportioned for savings. Banks have tied deposits to rural loans and even withheld part of each loan as a savings deposit. Farmers did not start depositing on a large scale till 1952. The Government now offers them special interest rates at harvest time when they are selling their crops to the Government. 10 to 15 per cent per month is paid on deposits kept for one or two months ; 15 per cent is paid on deposits for 3 to 6 months. Deposits may be held for one to 6 months. Although there is a minimum, yet there is no maximum. Interest on deposits made at harvest time is tax-free. The deposits may be made in cash or in kind at a branch of the People's Bank or at a cooperative. To simplify banking business the deposit is not personal and the name of the person does not appear on the deposit notes, though they are not negotiable. Farmers are told that the money deposited will be utilized for industrial development which will benefit agriculture. The Communist Party, Youth Corps and Women's Organisations participate in the campaign. The purpose of special rates of interest and of appeals to farmers is to eliminate hoarding of money in the rural areas, which has large inflationary potential in a country of millions of peasant farmers. The rural cooperative which buys agricultural produce for the Government and sells farmers' requirements also plays a very important role in regulating the income and expenditure of the peasants, apart from contributing to the mobilization of savings in rural areas.

India can learn much from the Chinese experience in the field of mobilization of savings particularly in the rural areas. The branches of the nationalised Imperial Bank in close cooperation with cooperative banks operating under its leadership and control can provide the machinery of rural finance and mobilization of small savings. Neither postal savings banks, nor cooperatives of the type that exist in villages, nor the branches of the Imperial Bank by themselves can provide the net-work of financial institutions which the country will need if it is going to implement a bold plan.

In New China State insurance is an important source of revenue as well as an important means of mobilizing savings. Nationalization of insurance may not be seriously considered in India in view of the fact that the major part of the investments of insurance companies is in Government of India securities. But there is a strong case for extending the sphere of operations of postal insurance to cover wider, though still restricted, categories of insurers.

An important kind of institutional change that is called for in the context of co-ordinated and planned economic development is unification of transport. Railway development in India has been prompted by administrative and commercial considerations. The railways have, therefore, grown as an uncoordinated system. There are about 30 per cent of metalled roads in India parallel to railways, and 48 per cent of railways have metalled roads parallel with them and within 10 miles. Thus while vast stretches of the country are without roads, there is needless duplication of transport facilities in many parts of India. There is already the problem of rail-road coordination, while the country ought to be thinking of a wider extension of the transport network. Water transport has not developed where it is economical and is hampered by monopolistic practices of the carriers themselves or by competition with railways, which also hampers in many cases the railways themselves. Internal waterways have not developed because the isolated efforts of the States have proved ineffective. If one State tries to improve the navigability of a river-system when the main river passes through a number of States, its efforts are likely to be largely frustrated by the schemes of navigation and irrigation executed by States having jurisdiction over the upper reaches of the river.

The remedy for the existing state of affairs can only be found in radical institutional changes which I would like to state as follows :—

(1) Development, planning, coordination and operation of the country's transport system must be vested in a central authority.

(2) Roads must develop as feeders to railways according to regional plans of development, particularly the development of nuclear townships.

(3) Since roads are seldom remunerative in the sense in which railways are, possibilities of traffic alone cannot determine the extent and direction of road development.

(4) There must be intensive development of inland water transport.

(5) All transport in India must be under the authority of a single State-owned enterprise which may be called the Indian Transport Corporation which would sell transport of all kinds. We may think of it as a unified enterprise operating all kinds of transport.

(6) On payment of a stipulated charge the consignee may use any form of transport and should be free to use a special form of transport *on payment of a surcharge*.

(7) It should be seriously considered whether the proposed Indian Transport Corporation should not adopt the basis of a uniform ton mile rate for goods and a uniform mileage rate for passengers, *allowance being made for special costs*. In the case of goods terminal costs can be separated from forwarding costs. Since long hauls mean fuller use of rolling

stock, the rate should fall as distance increases. There should be higher rates for small consignments which involve more handling and use of rolling stock below capacity. Higher rates may be charged for goods requiring special care or risks. Passenger fares and amenities should be the same for users of both road and railway transport, and all passengers should be admitted to the fastest means of transport.

(8) Roads should be built and maintained by a special authority.

Rapid development of resources, particularly those connected with constructional activities and development of industries and tertiary services in various regions, raises the whole problem of division of labour from the institutional angle. A good deal of mobility of labour is presupposed by economic progress, specially when the latter means rational adjustment of manpower to expanding economic opportunities that are created. Our social conditions impede a free or any other labour system. Mobility in response to economic demand does not operate in a manner which ensures economic adjustment. There has always been in India a close relation between division of labour and other basis of distinction and stratification, such as caste and kinship systems. In Western countries, as Durkheim says, ever increasing division of labour, specialisation and interdependence have not guaranteed social solidarity. In India ~~we~~ have neither social mobility, nor a developed system of division of labour, nor social solidarity. The dice is heavily loaded against progress in response to modern technological change. Radical institutional changes in these respects have to occur if we have to benefit by technological progress.

One way of inducing social change that is needed and of also completing our vast construction projects quickly is to organise a trained and disciplined national labour force which, like the armed services, does not recognise differences of caste or community and which can be deployed all over the country like a vast mobile force imbued with patriotic emulation to undertake and complete in record time projects of national construction. People belonging to the depressed classes should form the bulk of this force. The idealistic youth of this country may easily form a powerful element in this force as members of the technical, supervisory and teaching cadres. The Indian army, as the People's Army in New China, may very well find scope for its wonderful capacity for leadership, discipline and hard and sustained war in peaceful constructive activities in collaboration with the civilian labour force. The national labour force that I contemplate should not be a voluntary labour service corps which may operate on small projects for short periods, although I am not ruling out enlistment in an honorary capacity.

This brings us to the basic problem of incentives required for rapid progress in many fields on a broad front. I need hardly say that distributive justice, *i.e.*, equitable distribution of the burdens and benefits of economic development is one of the important condition^s incentives. Under the existing conditions the monetary incentive in the form of higher remuneration for factors of production is unlikely to create the necessary conditions which production can expand without releasing inflationary forces. An underdeveloped country when it seeks expansion of output under the stimulus of monetary incentives faces a crisis of production. The incentive for increasing production

weak, because a producer feels that it will create a glut and bring down prices. On the other hand, withholding of productive power yields higher gross earnings on a low turn-over at high prices, while it involves less production and consequent saving of effort. The distributive system, *i.e.*, the income structure in the society, as we know it in India, is to a large extent the result of a whole network of deliberately created scarcities. Thus the limitation of the output of one commodity deflates the demand for other commodities, and when inflated costs due to restrictions are passed on through the various steps of production, there is cumulative withholding of productive power resulting in the slowing down of the economic machine. This is in fact a serious problem in a low-level economy characterised by shortages and bottlenecks. The difficulty can be surmounted only when the State can create the psychological conditions and institutions which are appropriate to the optimum utilisation of our idle resources. Groups and combinations in the field of industry and trade are an institutional factor which is inconsistent with the so-called competitive social order. In India the problem is complicated by the immaturity of capitalism and the dominance of a feudal social structure which are both inconsistent with reasonably free competition and the release of productive power which is supposed to flow from it. At the same time the role of power and authority in the contemporary organization of labour unions and industrial enterprises is something which has to be reckoned with. We have still to discover the institutional arrangements by which either the necessary equipoise or the necessary counterpoise can be established in the interest of sustained and frictionless economic development.

I am convinced that the present State of employer-employee relations is not conducive to the implementation of a bold plan of economic development. The existing machinery of conciliation and arbitration has, on the whole, shown its futility. We have to get back to the machinery of collective bargaining as the first step. I am an unrepentent believer in self-government in industry. I am aware that the experiment of Works Committees has not succeeded. But the failure is due not only to the ignorance of workers but also to lack of spirit of collaboration between the employer and the employee. I think that the experiment will succeed if industry develops, away from the existing industrial centres, in the rural areas in nuclear townships in which the scale of operation of industries will not be large, the problems of management and technique will not be beyond the reach of the worker's intelligence and an atmosphere of community life will be possible. Even as things are, once broad principles are laid down for the distribution of gross profits, there is no reason why better discipline cannot be imposed on both capital and labour in the interest of the community. In this connection I may refer to the experience of New China in the field of capital-labour relations. As already said, according to the Government's directive of 1953 gross profits are split up into four shares—(1) Income-tax payable to the State, (2) Contribution to reserve, (3) payment of welfare bonus to employees, and (4) interest and bonus payments to capital (including remuneration to its agents). The share of interest and bonus to capital is fixed at a minimum of 25 per cent of profits after taxation, provided that the share may be higher in enterprises "where production is carried on properly and the distribution of profits is rational". Once these principles of allocation of gross profits are laid down, it is the bounden duty of the worker to abide by discipline and contribute his best to the increase of labour productivity. To quote a report presented at the 7th All-China Congress of Trade Unions

the principle accepted by the working class is that "the temporary and sectional interest ✓ of the working class must serve the permanent and overall interest". The report says that the trade unions must mobilise the workers to increase the production of enterprises and that "any deviation from production to speak of amenities would be empty talk and incorrect". It adds that "the trade union organs in private enterprises must take as their central task the good conduct of the work of production. They should, "through labour-capital consultative conferences and labour-capital contracts, improve the way of management, do a good job of production and, on the basis of development of production, solve the problem of amenities of workers as *conditions require and permit*".

The kind of reorganisation that I have suggested in this paper as basis to a bold plan of economic development involves changes in the existing property institutions. The control over value due to scarcity and over productive wealth or capital is an institutional arrangement of the highest significance if a society wishes to order or plan production and exchange. We have to decide pretty soon what general types of property institutions we must have in order to sustain rapid expansion of production. We have done away with the top layer of the *rentier class* in agriculture, while other layers still remain. It is clear from the analysis presented in this paper that wherever economic surpluses emerge in the course of economic development they must be appropriated for general benefit. Absorption of a steadily rising proportion of the additional income generated by a process of economic development requires a careful study of the location where surpluses are accumulating, and means have to be devised, as explained in this paper, by which the State can have flexible institutional arrangements for taxing the surplus at the point or points at which it is emerging. This is the logic of planned economic development in the context of democracy, and any attempt to draw an ideological red herring across the trail should not be permitted to succeed. There is, therefore, full justification at least for social appropriation of the unearned increment of land value in the case of urban real property. There is also full justification for minimal changes in our property institutions, which would vest the Government with the power to acquire agricultural land held in excess of the prescribed maximum size of holdings, to acquire immovable property for rehabilitation of displaced persons or establishment of nuclear townships, to acquire property for the purpose of transfer of one company to another or amalgamation of two or more companies or for the purpose of transfer of mismanaged agricultural property to a party that can manage it efficiently, and to extinguish or modify the existing rights of managing agents or managing directors in the public interest. It will be generally agreed that essential institutional reforms like putting a ceiling on holdings or removing the evils of the Managing Agency system cannot be held up by an appeal to the sanctity of private property.

In conclusion, it is necessary to refer to the institutional changes which are necessary to overcome the shortage of trained personnel which, more than financial resources, is the principal limiting factor of bold planning. It is here that the physical approach to planning is absolutely essential. Lack of key technical personnel and even semi-skilled labour has been a serious bottleneck in India, while at the same time one hears of growing unemployment among technicians and even technical personnel in the middle ranges. There is also

✓ lack of adequate administrative personnel required for implementing even the first five-year "preparatory" plan at various stages. The Government of India's Resolution on Industrial Policy of 1948 still remains to be implemented in this respect. Universities and colleges have still to adapt their curricula and techniques of training to the requirements of a bold plan. New types of development agencies suited to Indian conditions have yet to be evolved. The only striking exception is the Community Development Administration which has been trying to build up a sound and broad base of development organisation. In the light of experience already gained in the field of Community Development an attempt should now be made to develop specialised agencies linked with the Community Development Administration which should also, if it can, function in wider fields of development activity. The plan of a national labour force suggested earlier in the course of this paper for the purpose of mobilization of manpower for nation-building purposes merits serious consideration.

INSTITUTIONAL IMPLICATIONS OF A BOLDER PLAN—AGRICULTURE

by

DR. M. B. DESAI

(Through Prof. C. N. Vakil)

Basic Issue

In striving to achieve large incomes and more employment in agriculture through planning a few facts have to be borne in mind. Indian agriculture, like agriculture in all under-developed countries initiating economic planning, has also to look to the non-agricultural rural and urban sectors for the solution of some of its problems. Investment and planning, for instance, within agriculture will not lead to sustained improvements unless pressure on land is relieved. We should, therefore, be able to think of an investment pattern *vis-a-vis* the various sectors in the economy as a whole which would while leaving enough capital for agriculture, spare resources for rapid expansion of employment opportunities in other sectors. A balance of this nature will be conducive to conditions under which a sound growth in agriculture will be ensured, along with the balanced development of the economy. It is not necessary here to enumerate the basic features of our agriculture which are by now well known. It is also not necessary to illustrate here the approach of countries similarly placed when they embarked upon planned development in the past. It has been recognised that for development of agriculture the emphasis for a long time had been on the industrial sectors in countries like the U.S.S.R. which initiated rapid economic planning. If we examine the economic progress of Western industrialized nations, it will be clear that it was only the industrial revolution and the concurrent growth of supplementary employment opportunities that helped to stabilize agricultural economy. Thus although we would for some time to come devote adequate attention to agricultural improvements, we would not probably have arrive on the highway to sustain sound growth, unless our planning effort visualises a balanced contribution to the national dividend from the different sectors and threfore increased volume of employment. With these preliminary remarks we would like to examine the possible lines of action for the future as would in the course of the next few decades lead to development as enumerated above. It is not necessary to repeat that in the pursuit of these objectives there is no suggestion to relax our efforts at agricultural improvements much less to neglect that sector or initiate an austerity-life for the rural people. Both from the point of view of our large and growing food needs and requirements of agricultural raw materials for industrial progress, rapid improvement in agricultural productivity is necessary. For a long time to come perhaps the exports of agricultural produce will constitute the main source of foreign exchange earnings. Our levels of consumption, particularly in the rural areas, leave a good deal to be desired. To improve them and to introduce a good measure or proportion of protective foods in the dietary

we will have to give adequate attention to subsidiary occupations like poultry, dairying, fruit-gardening, etc., and suitably adjust crop planning in agriculture to give place to them. The All India Rural Credit Survey has brought out how a very large sector of our agriculture is based on subsistence economy and how very small areas and proportion of cultivators have a marketable surplus giving these parts the communalised and/or monetised character. This is a serious handicap in the way of capital formation in agriculture. Such a large subsistence-closed sector, besides, is not conducive to the growth of institutional agencies in agriculture such as cooperative credit, marketing and other servicing societies and essential facilities such as banking in the rural areas. Subsistence agriculture, besides, does not react to monetary, financial or economic techniques in general to bring about desired development in agriculture aimed at necessary adjustments for the good of the cultivators. These are stupendous tasks, but for the proper growth of the agricultural sector they will have to be tackled. Capital formation is low due to low incomes and limited savings. Deficit financing can help to accelerate the tempo of development, but has to be pursued with great caution. In a largely subsistence agriculture, besides, one does not know how far deficit financing with the chain of reactions that it sets in motion can penetrate the economy and produce the desired results. The internal resources should normally constitute the bulk of our planning resources and as they are limited the endeavour should be to invest them in a way as would yield the highest aggregate product. The other criterion is to evolve or think of an investment pattern in agriculture which along with suitable structural, technical or organisational adjustments, produce proportionately large results. It would thus be possible to achieve a much larger measure of achievements with the minimum of capital outlay. Thus an economy in the use of funds will simultaneously lead to a highly profitable utilization of that portion spent in agriculture and free substantial amounts for investment in non-agricultural rural and urban sectors. There is also another objective that the investment pattern in agriculture should aim to achieve. The Indian peasant has, rightly or wrongly, a psychology of welcoming official assistance, financial or otherwise, without endeavouring to catch up the state help later with his personal contributions in terms of money and initiative. The aim of external resource employment in agriculture should, therefore, be to inculcate these habits among the classes for whose benefits it is intended. For this purpose arrangements or a combination of techniques will have to be thought of by which for a given dose of outside assistance in kind, money or technical guidance a much larger local contribution is forthcoming so that when Government initiative and spending are withdrawn the agricultural classes would have been very largely working on their own.

Pattern under the First Five Year Plan : Economics of Irrigation

It is possible to give comprehensive account of the lines which the activities for agriculture development should take with a view to achieving the objectives indicated above, but we will confine our attention to a few of these which are very important or basic. Concentration of attention on these aspects will set in motion processes which would lead to rapid advances later and improvements in other allied or connected aspects of agriculture. It will be convenient to begin with study of the broad pattern of investment targets envisaged under the First Five Year Plan to assess the achievements in the context of the needs of the situation.

The investments on roads, etc., would not be expected to show direct results. The other major item of expenses is the multi-purpose and major irrigation works and the amount spent is Rs. 300 crores till 1953-54, as against a provision of Rs. 434 crores over the plan period. The outlay under this head has increased from year to year in excess of the budget amounts ; this might probably be due to the prices of materials which were rising over the first three years of the Plan. But the miscalculations and wastes are also two major causes of excess spending as amply borne out by official reports. This adds to the costs of the services in the shape of irrigation water, and power where it is to be supplied. The area covered by irrigation from the waters of the major projects is 2.8 million acres, against nearly 17 million acres during the plan period. Further, the major projects have provided employment to about six lakhs of people which indicates by inference that they were very largely in the nature of mechanized works. As against this the outlay on minor irrigation works such as wells, tanks, small bunds, etc. for the plan period is Rs. 120 crores, and the actual outlay till 1953-54 was Rs. 59 crores. The area covered by such minor irrigation projects is 4.7 million acres against a target of a little over 8 million acres by 1955-56. Probably the major works take time to complete and, therefore, in the final analysis they will be able to cover a much larger acreage. What is intended to be emphasized, however, is that in proportion to the outlay the minor works are quicker and easier to execute and translate rapidly into actual results. We have earlier indicated the employment potential created by the major works. In the large majority of cases, besides, the labour force on major works has migrated to the site of the works. Thus they deprive the local people of employment opportunities. The supply of water from major works is unrelated to the suitability of soils for irrigation farming as that aspect had hardly been attended to in the layout of the net work of canals. Probably the implications of overlooking this might be felt at a later stage. The minor works being labour intensive would occupy the local population fruitfully and offer larger employment opportunities. The Five Year Plan emphasized labour intensive efforts in view of the large under-employed and unemployed labour force available in the rural areas. Such an approach will help economise capital and thus be of great advantage. The minor irrigation works not only conform to the criteria suggested by the planners but are also more suitable to the actual conditions in our countryside. The minor irrigation works are automatically located in places where possibilities of irrigation farming exist. In some measure, these have been proved by limited irrigation that might be practised in these parts. Another advantage of minor works is the immense scope that they offer for local participation through contributions in labour which keeps down the cost of such construction to the minimum. It has been found that whereas the per acre cost of irrigation on major works varies from Rs. 125 to Rs. 2000 that on the minor projects barring the tubewells has been round about Rs. 25.

The river valley schemes will necessitate taxation measures some of which may create problems of their implementation. An irrigation cess will be applied to lands in the project areas. It is possible that due to unsuitable soil, lack of farm resources or for any other reason some of the farmers may not be able to avail themselves of the facility. A method of levying irrigation charges will have to be devised which takes these factors into account. Similarly the betterment levy will give rise to an intricate situation about its basis, incidence and the mode

of recovery. Apart from the question of its appropriateness, the immediate issue will be whether it should be treated as a sort of a capital gain tax and collected in anticipation of the benefits or the recovery so adjusted as to relate it to the benefits that actually accrue. Of course, it is not possible at present to say whether adequate statistical material is available about land values and the increase in them due to irrigation facilities to enable us to ascertain the level of betterment levy that should or could be imposed. Whether by forging ahead with the policy of preference for the major as against minor projects we intensify these intricate issues or whether by lying emphasis on the latter limit them over areas where we have already initiated multi-purpose or irrigation projects is an issue for earnest consideration when putting down the blue prints for the Second Five Year Plan

Agricultural Reorganisation

(a) Voluntary Labour

The major vs. minor irrigation schemes is a vital organizational problem in agriculture. If this problem of organisation in agriculture can be successfully tackled, by devising techniques and methods both in major and minor works so as to utilize as large a labour force in the rural areas as possible, we would be able to achieve a relatively greater measure of progress with probably greatly reduced capital outlay and in doing so provide employment to the under-employed and unemployed rural people, relieve pressure on agriculture for livelihood and make welcome supplement to their meagre incomes from cultivation. The achievements from these organisational adjustments has been demonstrated on the Kosi embankment works where great headway could be made at low cost through the popular voluntary contribution of labour. There are other spheres such as reclamation of salt and other cultivable waste lands where the organizational aspect would play a great part. Similar scope for reclamation exists in semi-arid regions such as Kutch, Rajasthan, parts of Saurashtra and Andhra where by the adoption of dry farming technique lands can be brought under the plough, employment opportunities created and sections of farm population, particularly the landless, suitably rehabilitated.

(b) Non-agricultural Pursuits

Apart from the urban large-scale industrial sector where scope for employment through expansion exists, there is also another line of development which will open out employment opportunities. Our attempts to develop cottage, small and medium-scale industries in the non-agricultural rural sector have till now remained isolated. Properly located and timed appropriately so as to afford employment during slack agricultural seasons these industries hold out opportunities for the rural people. Here again the approach should more be from the organisational than investment point of view, as otherwise too much investment leads to waste. A middle course will have to be steered between highly mechanised large-scale industries with efficient productivity on the one hand and less mechanized small and medium-scale industries perhaps less economically located but with greater rural employment potential on the other. A discerning eye for organisation would help achieve a good measure of this combination.

(c) Technical Progress

Likewise there are certain technical matters which if attended to will ensure a great measure of agricultural progress with almost insignificant capital needs. True, though essentially technical in purport they will mainly demand a great measure of organizational effort for their rapid and widespread adoption. It has been well known that the Indian agriculturist employs outmoded cultivation technique and implements. For instance, it has been found that through the use of improved seeds and manures and fertilizers production can be expanded by 15 to 20 and 25 to 30 per cent respectively. Statistics of the area covered with improved seeds and fertilizers are not available. We have from the progress reports of the Plan the targets of expenditure under both and the quantities distributed. In the absence of the rates of application and the crops they include it is difficult to arrive at the extent of their coverage. Certain broad facts about the plan effort in these directions are known and can be briefly indicated. Besides being inadequate in coverage, the efforts at popularising improved seeds and fertilizers, have been lopsided as attention has been confined largely to certain market crops like sugarcane, cotton, etc. leaving out most of the foodgrains and other commercial crops. Efforts to expand the scope continue, but to complete the task in a short time far more intensive effort and organisation will be necessary. Similarly, improved cultivation techniques, judicious crop rotations, dry farming practices, etc., would produce impressive results without much capital. The Japanese method of cultivation, for instance, requires no extra capital except on the use of fertilizers, and yet increases productivity by 50 per cent on an average, besides ensuring economy in the use of seeds. While on the point, we may mention the need to diversify agriculture by giving dairying, animal husbandry, poultry and fruit culture their due place thereby increase the preoccupation and income of the peasant and his family over greater part of the year. These technical-cum-organizational adjustments will lend diversity to farming, reduce preponderance of cultivation in the farming business and thus the great dependence on farm prices. The Netherlands and the Scandinavian countries offer valuable illustrations to the type of mixed economy which impart stability to agriculture and other rural pursuits.

(d) Institutional Approach.

It will be pertinent to mention here the large funds that will be expended in compensation payments to the Zamindars and other right holders while abolishing double tenures. True, a part of this will be contributed by peasants who acquire land ownership; the bulk of the burden of compensation will, however, fall on the exchequer. Large funds could have been saved and fruitfully utilized to meet developmental needs if instead the tillers were assured of security of tenure and fair rent to be disbursed through revenue machinery. In this way land-lords would have become ineffective owners of lands and the exchequer saved of heavy unproductive outlay.

Under the existing sociological and psychological rural set-up institutional approach and joint endeavour and initiative appears to have limited scope. Headway in this sphere can be made by persuasion and after the superiority of an arrangement is demonstrated to the peasant. But in any institutional or joint effort the achievement will be significant if instead of limiting its functions to economic benefits, social education and enlightenment also form a part. A centralized control and management in cultivation is alien to the country's constitution

and the spirit of the people. An institutional approach which ensures popular cooperation and participation and a large measure of decentralized popular control and management will be more efficacious. Let us examine the efforts already made and proposed to be made in the field from this point of view. Consolidation of holdings in our country has made limited headway in those parts of the country where soil and climatic conditions and the cropping system are uniform over fairly large tracts. If we profit by this experience and proceed to introduce these changes where this background exists, a good deal of improvement in the layout of the farms can be achieved. Similarly, in the field of cooperative credit, productive loans would be the ideal of accommodation to the agriculturists as the debts will be self-liquidating. For such a loan policy, however, to succeed, we should be able to inculcate habits of frugal living and savings among the peasantry so that they may meet the unavoidable unproductive expenses on their own. A ceaseless persuasive propaganda and social education by leading influential sections of the rural communities who will be at the helm of the institutional agencies operating in the countryside will be a prelude to this metamorphosis. In like manner cooperative marketing societies should function in co-ordination with the credit agencies and undertake more functions to reduce the cost of their services to the cultivators. It should be indicated that in an under-developed economy where private agencies have created an intricate pattern of dealings during a very large period of free play, the institutional marketing agencies will take time to be firmly rooted. Marketing cooperatives will need a long period of working during both booms and depressions in order to demonstrate their utility over a period of time. It is not prudent to leave them aside in favour of private agencies in good times and look upto them for succour in times of falling demand and declining prices. Even a restricted institutional approach with limited investments would yield impressive results in the shape of lower agricultural costs and higher farm returns. It is only when such limited approach in agriculture has produced results and favourably impressed the farming populace that the Cooperative Village Management can be thought about in stages. Looking to the present conditions and the enormous ground work to be done Cooperative Village Management is likely to remain an ideal for a long time to come.

SOCIO-ECONOMIC IMPLICATIONS
OF THE EXISTING INSTITUTIONAL STRUCTURE IN MODERN BUSINESS
IN INDIA

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This note discusses briefly the socio-economic implications of the existing structure of the economy and the effects of its operations with special reference to the concept of the mixed economy and the role of private enterprise. Initially, it needs to be made clear that the term 'private enterprise' is a comprehensive term including many types of economic activity. At least two distinct types need to be clearly separated in discussing the Indian situation. Firstly, there is private enterprise which may be identified with the type of private operation implicit in all classical economic analyses. In this the number of operators or units of activity in each sphere or field are so numerous and relatively of such size that no single operator could by his action affect either the market for his products or the market for the resources which he has to acquire in order to produce. Over the major field of Indian economy very large numbers of small operators dispersed over wide regions are fully in evidence. The constituent elements of agriculture and most primary productive activity in our economy, barring plantations, are small independent units widely dispersed over the country who cannot by their own individual operations affect the working of market forces. The same holds good of the large sphere of traditional cottage industries and even of small enterprises in the repair and other fields subsidiary to modern industry. In relation to the bulk of activity in commerce, transport and most trades and professions the small man is the typical operator. There has never been any suggestion from any quarter that this large field of private enterprise should be disturbed or be included in the public sector. It has often been suggested that in many of these fields the small operating unit is at present technically and financially weak and does not, therefore, operate with efficiency in terms of either quality of product or unit cost of production, and the proposal has been made that the handicaps of the small independent operator be removed through co-operative effort of the independent individual units. Such cooperation may be in relation to finance, marketing, supply of materials, common technical services or even in relation to production proper. But such co-operation, even when helped by the State or brought about through its agencies, will essentially leave the unit of production and economic operation as an independent unit. It will not be a part of a State socialistic apparatus. That the co-operative unit has and can be made to continue to have the characteristics of essentially independent private organization, though influenced by the State, has been agreed to by all. The Khadi Board, in its scheme of self-employment and dispersed economic activity, has recognised the need for the introduction of co-operative units and has included co-operative production in the self-employment category. No dispute between the sphere of private enterprise and the requirements of planned economic development does, therefore, arise in relation to this vast and essentially private and independent sector of the economy.

The dispute arises entirely in the field of what may correctly be described not private enterprise but monopoly capitalism. The sphere of operation of this is confined to certain restricted though extremely important sectors of economic activity within the country. These sectors are modern banking and insurance, large-scale machine industry, modern mining, plantations, foreign trade and internal wholesale trade and financial operations, such as those on the commodity and stock exchanges. The main point to be noticed about this field of economic activity is that though in relation to total occupied numbers and total number of economic units and establishments the constituents of this field are small, they are by far the most dominant in political, economic and social terms in the country to-day. Secondly, in almost every single field of their operation a degree of concentration of economic resources and power is in evidence. Further, in almost all these spheres the influence of the comparatively restricted number of operators is further increased by trade associations and other devices of common action. To enumerate a few facts, in the field of banking and insurance, a small number of units, less than a dozen in each case, control the larger part of total activity. In the field of large-scale industry in a number of newer industries the bulk of the total field is occupied by a small number of units. Even in the older established and comparatively more dispersed activities such as that of cotton textile or sugar manufacture, the number of units is not very large and the number of units under the control of a small number of entrepreneurs forms a substantial portion of the total. In the field of foreign trade, there has been, as a result of the methods of control developed during the last ten years, a large degree of freezing of the situation. The extent to which the whole business of export and import is concentrated in a few hands is not known to the public at large. But the data must be available with the relevant Government authorities and it is of extreme and immediate importance that they should be collated and published for public information. It is understood that in this field even more than in others discussed above entry is difficult. Whatever precautions may be taken or regulations framed for issuing a small number of licences to new entrants, this field must be considered to be a closed field in which quasi-monopoly rules. There is no real free entry in the field and the operation in it is either a matter of older occupation which means continued privileged position or exercise of patronage by State authorities. Also, by definition, as the number in favour of whom such patronage can be exercised as new entrants would be extremely limited, the operation of the new entry regulations can at the most amount to a small addition to the privileged class every year. The position is apparently different in internal wholesale trade, in the sense of entry not being formally restricted or closed. But even here the facts point out to a large degree of concentration in a small number of hands.

The total effect of the existence of monopoly capitalism in each separate sphere of modern economic activity in India is further heightened by the device of the managing agency. This distorts the working of the economy in a peculiar manner. Instead of bringing about the ordinary vertical or horizontal extensions and combinations common in other countries the system of managing agencies has fostered a development which is peculiarly Indian. This is that of concentration in a small number of units of power over a large number of disconnected fields of economic activity. The effect of this is that the restrictive influence of the operation of

monopoly capitalism in each field is heightened manifold by bringing together the power in many fields in single agencies. Together with the concentration in managing agency goes the concentration in terms of regional and communal or social groups. This is an extremely important sociological phenomenon which cannot be ignored in Indian conditions. It can not be ignored because the total picture that emerges is that of concentration of control over and patronage resulting from, all modern finance, trade and industry in the hands of comparatively small number of persons concentrated in particular social groups. The diffusion of the benefits of the rise of modern industry and commerce is thus severely restricted within the community and the joint operation of socio-economic and political power makes certain groups so entrenched that social justice is denied and social peace cannot be guaranteed with the continuance of this state of affairs.

The peculiarity of the existing situation lies in this that it cannot be tackled by the approach of attempting to break up monopoly capitalism. This is due firstly to the technical consideration. Economies of scale are here so important that the average unit has to be large and in the total Indian context the number of operating units cannot be numerous. And, in common with the general trend everywhere capital formation now takes place to a very large extent within the operative business units and is only partly drawn from outside. This strengthens the position of existing units and helps the progress of further concentration. Further, the existence of such measures as price controls, allocation controls, production controls have made it impossible to think in terms of artificially stimulating competition between units in the field. In fact, all steps taken by Government during the last decade or so have been towards establishing a regime through which all the units in individual fields of modern activity have been drawn close together and have adopted comparatively uniform policies. The result has been that State policy has actively helped the full exploitation by the constituents of the field of modern business of their position as monopoly capitalists. A study of prices of such commodities as that of cloth or sugar during the post-war period fully exemplifies this.

It has been the experience in all countries, including the U. S. A. that the operation of any policy of governmental regulation or direction, even that of stabilising measures, tends to slow down operation of competitive forces within an industry. This effect would be greatly accentuated with the launching of a plan of economic development. The need for closely directing the operation of the private sector would lead to maintenance of conditions in which, on the one hand, risks would be largely eliminated and there would, on the other hand, be no large gains of and scope for a strenuous competitive drive towards expansion. Apart from the operation of the Regulation of Industries Act, the plan in India would define the number of new units in each activity to be established within a period and their location also to a large extent. There would thus be little element of free entry in modern manufacturing and mining and the existing situation regulating entry into foreign trade would continue. In Banking and Insurance present legal and regulatory systems favour greatly the large-sized concerns. There is a constant trend towards an increase in their importance and smaller units are being weeded out or are seeking amalgamation with each other in order to survive.

Modern industry, more than any other field in the Indian economy, is sheltered, protected and helped at the cost of the taxpayer and the consumer. Most industrial activity has been protected, directly or indirectly, at one time or another and some of the most important industries have grown up entirely under protection. In the post-war period, apart from avowedly protective duties, a whole system of import restrictions and quotas has guarded the position of domestic industry. Most of the important activity launched during the war period has been thus protected and new ventures established have been, as in the case of the automobile industry, guaranteed a closed market in advance. The largest financial help given by Government has been available to this sector. The operations of the Industrial Finance Corporation, lending over Rs. 10 crores in 5 years have benefited chiefly some of the largest units in this sector, and Government which perhaps has never yet lent a single rupee free of interest for normal operations in the field of agriculture and small industry has lent Rs. 7½ crores free of interest for a long period to a new Corporation controlled by the biggest elements in this sector. The Government has also, during the post-war period, helped many individual units in the field by large loans on special terms because they could not finance themselves on an adequate scale through the private capital market ; it has also helped rehabilitation of individual concerns by lending services of government officers. It should be noted that all this help serves strictly private interest, in the sense that the improved positions that are built up in this way are sources of constant and increasing current and capital gains for private owners of the concerns. The current controversy over the compensation to be paid for shares of the Imperial Bank fully illuminates the situation. All those concerns whose assets are being constantly protected and improved by public action will on account of that very factor demand high compensation from the public treasury in the event their socialisation is decided upon.

The last point emphasizes an inevitable concomitant of planned development. Rationally planned development in an under-developed economy necessarily seeks to avoid duplication of effort and to concentrate capital intensive effort in as small a number of units as possible ; it seeks equally naturally to protect such units that have been built up and to make their operation as free of risk as possible. All this gives to established units a position of advantage which is constantly growing with the development of the economy. These concerns are in a position similar to that of owners of favourably situated sites in an area of rapid urban development. And given the decision to maintain the units in private hands nothing can be done either to diminish the advantage of those units or to diffuse their gains.

This inability is due to two reasons. Firstly, it is due to operation of a rational plan of development. As pointed out above, such a plan must, for reasons of economy and of convenience of direction and regulation, try to eliminate risks and operate through a small number of units. The whole approach of planned development differs radically from that of the highly competitive processes of the model of the free market, especially where units with large resources are concerned. The second reason why you cannot expect the State in India to break up the concentration of units or of exercise of power in this sector is apparently the avowed policy of using them for formation of capital in the economy. If these units are to serve as centres of very

substantial capital formation their power and privilege have to be increased, not diminished. Special tax concessions given to new companies, general or selective incentives for ploughing back of capital, etc. are all devices advocated for rapid capital formation. Their result, if successful, is naturally that of helping the growth of total resources in the small number of units in the field.

Granted the need for capital formation through these private enterprises, maintenance of large inequality in standards of consumption also becomes inevitable. Those in control of the field cannot be expected to form capital in units they control until after their expected consumption standards are satisfied. One of the most striking features of the history of the last fifteen years is the rapid increase in the standards of remuneration and of living of those connected with Indian modern business in India. (The corresponding standards of those connected with modern foreign business in India are even higher.) That any regulatory or taxing devices can significantly affect these standards appears unlikely. After all, these glaringly high standards of remuneration and living are no more than a reflection of relative economic strength. In a large and poor country like India the vast majority of units of operation whether independent workers or small establishments operate with extremely slender resources of capital in fields where remuneration is low, conditions insecure and profits slender. In contrast, the fortunate few in possession of the field of modern business operate with comparatively vast resources and insecure conditions. The case of those engaged in modern business is not entirely exceptional. The position of those in the modern professions and selected services is somewhat similar. Indian society continues to be honey combed with privilege. The privileged position, social and economic, of the urban intellectual classes is only slowly being undermined. But the attitudes of mind created by the era of privilege have yet to pass and they continue to be exemplified by concepts regarding rates of remuneration as incentives. That the University Grants Commission should consider raising the salaries of University Professors as the most potent instrument of improving University teaching is sufficient commentary on current ideology. Entry into the ranks of urban educated classes is now vastly easier as compared with entry into modern business. Therefore, the position in relation to remuneration and standard of living among the upper strata of these has ceased to be as unique as that in modern business. As a fact, one could say that this movement among the two classes has taken a contrary direction during the last fifteen years. While the privilege and strength of the one class have sensibly diminished—though far from vanished—that of the other have greatly increased. And the trend in the latter case cannot be reversed because of the logic of a plan of development and the policy regarding formation of capital.

Emphasis has been placed above on capital formation as it is obvious that this can be the only reason for maintaining privileged private enterprise in the modern sector. Some economists have justified high monopolistic gains because of the innovating service of the entrepreneurial class. Such innovation is not required in an economy with a backward technique. The task of the entrepreneurs here is not so much to innovate as to adapt and imitate. Moreover, the Indian entrepreneur—whatever high skill he may have as financier or speculator—has not been specially marked for progress in production technique or high average productive efficiency.

Indeed as the events leading up to the promulgation of the Managing Agency Ordinance and recent enquiries into management of some groups have shown, financial acumen has often been associated with low standards of production management. To all this may be added the consideration that the ordinary risks of business have been greatly diminished because of the policy of government and will be further diminished with the progress of a plan of development.

The whole of this discussion emphasizes the fundamental incompatibility of two aspects of the Industrial Policy Resolution of 1948 ; firstly the formation of capital through modern private enterprises and secondly preventing concentration of wealth and economic power. If any fiscal or other measures are used to achieve the second objective, the first must be defeated and the achievement of the first objective must equally inevitably increase concentration. Though no formal enquiry has been conducted into the matter there appear general indications that concentration has increased and whether it increases further or not considerable concentration together with the entrenched position and power of particular social groups must be a continued feature of the economic situation as long as private enterprise occupies the strategic position in modern business that it does today.

The alternatives to the existing position are two. Firstly, the steady extension of the public sector so as to embrace more and more of modern business activity within it. Once no great importance is attached to the private capital market the financial problem presented by such an extension of the public sector presents no great difficulty. The problem of technical personnel or equipment is not also large. The crucial consideration here is that of efficiency of management of business units in the public sector. This is undoubtedly a serious and complex issue. However, the whole progress of planned development towards a socialistic pattern depends on its solution and it must be tackled in any case. The second alternative is to regulate operation of the units in the private sector in the same manner as was done in U. K. and U. S. A. during the war. This would lead to prevention of increase in concentration of resources and of exploitation by them of their quasi-monopolistic position. In both cases capital formation would be not in private hands but in those of public authorities, and the second alternative can be looked upon partially as the transitional stage to the first.

INSTITUTIONAL IMPLICATIONS OF LAND REFORMS IN THE SECOND FIVE YEAR PLAN

by
SHRI M. L. DANTWALA

I

The Background

1. The agrarian structure as we find it to-day in India is admittedly defective both from the point of ownership of land (social justice) and its operation (size of production units). Land is scarce, yet it is concentrated in a few hands. Both in the Zamindari and Ryotwari regions, 50 % or more of cultivators own no more than 10 to 15 % of land ; while at the top, 5% own between them 25 to 40 % of land. Rents, in spite of the tenancy legislation, continue to be high and often extortionate. The situation regarding the size of cultivated holdings is slightly better. Though the holdings are badly fragmented, probably not more than 10 to 15 % of land is in units of cultivated holdings below 5 acres.

2. To achieve the objectives of higher production and better income distribution, radical changes in the existing structure would be needed. It is not necessary for this purpose to start with any *a priori* predilection in favour of an institutional pattern either for ownership or operation of land. This must emerge as a necessity for the type of reform which would be adequate for the purpose of efficient production and better social justice. Of course, no overnight metamorphosis can be expected. The burden of the under-developed economy cannot be thrown off once and for all by reforms—or even revolutions—and changes in the institutional pattern. Yet, the speed is of the essence both in the direction of production efficiency and social justice. Land reforms can make a great contribution to this objective but it would be equally necessary to bring about complementary changes in the rest of the economy, not only for the success of the land reforms but for the overall objective of rapid economic development and establishment of democratic and egalitarian society.

Types of Reforms

3. Reform of the agrarian structure has two aspects : one strictly tenurial, *i. e.*, pertaining to ownership and use rights and relations, and the other regarding the size of the operational unit. The two, of course, are intimately connected and can be brought within a common focus through an integrated policy and programme of imposition of ceiling and floor on owned as well as operated units of holdings. A programme of consolidation of fragments does not seriously interfere with tenurial rights—though the problem of fragments—under tenancy has to be considered. Another crucial problem is that of the organizational pattern for the disposable pool of land formed by the 'surplus' accruing after the imposition of ceiling and by the prohibition of individual cultivation on 'below-the-floor' holdings. Thus, the discussion of the institutional implications of land reform can centre round the policy and programme of ceiling—floor and co-operatives, with consolidation as an obvious concomitant.

II

TENURIAL REFORM

4. We may first review the reform measures already adopted by the various State Governments since 1947 and their institutional implications. The process is not yet complete, neither is it so uniform as to enable the drawing of a firm picture of the emerging institutional pattern. Yet the broad trend flowing from the completed measures and those likely to be completed—if the process continues on the accepted lines—could be indicated.

Zamindari Abolition : Land with Absentee Owners

5. The States in which the Zamindari tenure has been abolished, the change is mainly juridical, with very little effect on the operational pattern. By and large, this reform will increase the percentage of owner cultivators in the total farm population and, at the least, reduce the number of intermediaries. This will have an impact on the economic factors, such as production, income, savings and capital formation, which in due course will influence the agrarian structure itself. It does not seem likely that at the prevailing rates of rent (now charged as revenue) paid by the tenants of ex-zamindars, there would be much inclination on the part of the tenants to buy full proprietary (*e.g.* Bhoodidari in U.P.) rights from the Government. State tenancy is therefore likely to continue.

Tenancy Reform

6. The tenancy reform introduced in various States is likely to affect ownership and operational pattern in the following manner :

(i) Provisions restricting evictions tend to freeze the operational pattern.

(ii) Restrictions on “resumption” by landlords does the same. To the extent to which resumption is permitted—or is secured by dubious means, which is quite substantial—, it tends to create, on the one hand, larger operational units and, on the other, adds to the number of landless workers. Restrictions are, however, of a nature that would prevent formation of very large units. Inter-leasing between the cultivators, which often results in better land utilization by facilitating cultivation on a bigger operational unit, will be hampered by these provisions, as lessors will tend to take back the land, even though the fragments may be scattered. The obvious remedy is of course consolidation. Small owners residing in the village whose main profession is non-agricultural—*e.g.*, village artisans—and for whom rent provides a subsidiary income will be forced either to sell out their land or to take to self-cultivation. If a programme for strengthening small village industries is taken up simultaneously, this will not result in any hardship to the small owners. Forcing of such a choice on non-residential owners (small or large) is fully justified.

Tenant's Right to Purchase Leased Land

7. If the rent is low and the regulation is operating effectively, this right to purchase leased land is not likely to be availed of in any great measures. The improvement in status is not worth the price.

Thus, though there would be some reshuffling of land ownership and cultivation, the tenancy legislation by itself, has no serious impact on the institutional arrangements, except that created by resumptions—and of course unlawful evictions provoked by the legislation. The latter raises the serious issue of enforcement which is not discussed in this Paper. Delay in enactment of announced land reforms or failure to enforce enacted legislation may worsen the situation rather than improve it.

Ceiling on future ownership acquisition and on existing 'Operated' Area.

8. At present there is no proposal for imposition of maximum limit on the existing levels of ownership. The legislation limiting future acquisitions would prevent concentration of ownership. Only the measures limiting the size of the *current* "operated" unit has, therefore, immediate implications for the cultivation-size pattern. They affect the cultivation but not the ownership rights. So for Hyderabad and Himachal Pradesh are the only States where this type of legislation has been enacted. Their institutional implications would depend upon the arrangements made for the disposal of the excess—over the ceiling. These are discussed later.

III

BOLDER PLAN

9. It may be assumed that in the next plan period (*a*) steps will be taken to improve the enforcement of the legislation already enacted and (*b*) further steps will be taken towards realising the two objectives of land reforms of bettering productive efficiency and social justice. The combined effect of the two on the institutional frame should therefore be considered. But before that it would be necessary to prognosticate the direction of the "further steps".

10. The bolder plan, it may be assumed, will be such as would contribute to the overall objective of rapid economic development and mould the agrarian structure on a socialistic pattern. With regard to the former, reform measures will have to be undertaken which will lead to higher production—both for improving consumption standards and for enabling capital formation. At the same time, they will have to be consistent with the egalitarian ideology. Within the immediate short-term period, the policies for the maximum fulfilment of the two—efficiency and justice—objectives may conflict and an optimum combination will have to be worked out.

11. But before we attempt to do so, a somewhat philosophical—or say ideological—issue needs some clarification. How much importance do we—or should we attach to (what is implied by the phrase) individual initiative and freedom? Full *laissez-faire* as we know, results in inequality and exploitation. On the other hand, total control can completely stop exploitation (in the the material sense) and ensure a great measure of material equality but smother the initiative and personality of the individual. Regarding productive efficiency the claims of *laissez-faire* and totalitarianism are still a matter of controversy. Any system—social or economic—with accent on organization howsoever benevolent must

imply diminution of individual initiative and freedom. On the other hand, in any but the most highly enlightened and moral society, neglect of this aspect would lead to anarchy and the worst. Once again a balance—at successive higher and higher levels—has to be struck. Agreement on such abstract issue is different, but a view regarding the same is implicit in all policy recommendations and what is said below has definitely one.

IV

FURTHER STEPS

Ceiling and Floor

12. The ceiling and the floor to the area under individual holdings should be made immediately operative. The ceiling may be placed at three times the family holding and the floor at the "basic" holding as defined by the Congress Agrarian Reforms Committee. The excess land may be under self cultivation or may have been leased. If former, a higher ceiling may be permitted in cases where the break-up is likely to palpably reduce productivity. The onus of proving that such reduction will result, should be on the owners.

Co-operative Pool

13. The excess over the ceiling and the area under 'below the floor' holdings should be pooled into cooperatives of as *small a size* as may be consistent with operational efficiency. Small-size co-operatives are recommended with a view to prevent them from becoming "managerial" organizations.

14. Besides the cultivators (owners as well as tenants) of the erstwhile below-the-floor holdings, some landless labourers could be accommodated on the land under the "co-operative pool". This will depend on the portion of the excess under owner-cultivation. True, person working on the co-ops will have varying tenurial status; some will be owners, others tenants and landless labourers. It should be possible, if necessary, to divide the co-operative pool into three corresponding categories.

15. The formation of co-operatives in this manner will convert disguised unemployment into over-unemployment. The experiment will succeed only if simultaneously efforts are made to develop rural industries.

16. The excess over ceilings need not be purchased unless the tenants wish to, at a price to be determined by the Land Tribunal. The cooperatives will pay reasonable rent, not exceeding one-fourth of the gross produce, to the owners.

Tenancy

17. Only *one type of tenancy* with full occupancy rights should be recognised—exception being made in case of minors, disabled persons, etc.

All those who till land on a crop-share basis and thus share the risks of production will be *ipso facto* considered tenants.

Resumption

18. Resident owner-cultivators would be permitted to resume tenanted land *only up to the time* the integrated programme of ceiling-floor-coop-consolidation is inaugurated, and *only for* the purpose of bringing the operated unit of the owner to the size of a family holding or if the tenant has a larger than a family holding to the extent of the excess, subject to the provision of the ceiling. Non-resident landowners would be permitted to resume for personal cultivation—as defined below—*upto* one family holding *only* the excess over family-size holding of the tenant.

Personal Cultivation

19. Personal cultivation should be defined as one which is undertaken by the owner or a member of his family (to be suitably defined) and in which at least some farm operations, involving manual work, are performed by the owner or the member of his family. Such person should reside in the village for at least half the number of days of the crop season.

V

AGRARIAN STRUCTURE IN FUTURE

20. The agrarian structure resulting from these reform measures will—

- (1) Be considerably simplified. It will have only 4 categories of tenure status : owner cultivators, tenants willful occupancy rights, members of coop. farms and a relatively small class of landless labourers—those working on farms larger than family farms and casual labourers. The inequality still persisting should be sought to be relieved by “functional” (credit, marketing) rather than “structural” reform. The State-partnered co-operative movement should concentrate more on co-operative farms and the below family-size holdings.
- (2) Be egalitarian—inequality being narrowed within the range of 1 to 6—if the basic *i.e.*, the floor is placed at half the size of the family holding.
- (3) Preserve individual initiative and freedom; even the co-ops will be small and not managerial.
- (4) Prevent palpably inefficient farming by prohibiting individual cultivation of the below-basic holdings.
- (5) Tenancy will be greatly reduced. All tenants will have occupancy rights. Small tenants will be in the co-ops and immune from unlawful pressures.
- (6) The change will be least uprooting and will not involve any expropriation. The question of compensation does not arise.
- (7) The cultivation-size pattern will be considerably rationalized. The biggest unit will be three times the family holding ; the smallest one-half of the family holding, with a substantial number of family-sized holdings. The rest will be in cooperatives of a size not larger than three times the family holding. The ceiling and the floor may be fixed at levels that would give approximately some

such cultivation pattern as indicated below. The distribution will be much less skew.

	Land (%)	Persons (%)
1. Bigger than family farm	15 to 20	5
2. Family farms	30 to 35	25 to 30
3. Smaller than family but not below floor farms	15 to 20	20 to 25
4. Cooperatives	25 to 30	
	(10 to 15 % from below floor and 10 to 15 from excess over ceiling.)	40 to 50

NOTE.—3 and 4 will remain problem sectors and would need special attention.

21. The “rights and obligations content” of the peasant proprietorship envisaged in the proposed pattern will be substantially different from the usual or the prevailing. Broadly, it will be regulated in regard to :

- (1) Test of good husbandry ;
- (2) Transfer and sale ;
- (3) Sub-letting ;
- (4) Inheritance; and whenever necessary
- (5) Crop pattern and marketing.

22. The floor and the ceiling levels may be altered if a different pattern is considered desirable and feasible. The decision in this regard will have to be taken by keeping in view its effects on production and capital formation as well as on the socialistic pattern which has been adopted as the objective. Another crucial factor will be the estimate of our ability to bring about the change without unduly dislocating the economy. Some dislocation is inevitable during this process of reorganisation and it may be advisable to keep at least a section of the economy free from disturbance while we are overhauling the other sections of the economy. Cooperative farming is a difficult endeavour and will involve much trial and some error. Besides, the democratic process has its limitations. In view of all this, the ideal of bringing 30 % of the cultivated land—today comprised by the palpably uneconomic units and the excess over the ceiling—may be considered the optimum for the Second Five Year Plan.

23. Experience of land reforms everywhere clearly indicates that successful implementation is not possible without, what it is usual to call, peoples’ participation, but which in essence may amount to taking over the administration by the political cadre of the ruling party from the civil service. Such active “participation” of the political cadre in the task of national reconstruction is essential, but has its dangers which must be clearly understood and guarded against. The *people*, the political party and the civil service have to move together in harmony—which should not degenerate into a drill.

Phasing

24. The programme of land reforms cannot be implemented in parts or in successive stages. Our concept of phasing thus needs a revision. A programme of imposition of the ceiling and the floor if not synchronised with the programme of consolidation or with that of creation of the co-operatives for below-the-floor holdings will involve frequent disturbances and dislocation of the rural economy, and a great waste of national effort. For example, resumptions if permitted after consolidations or formations of cooperatives will upset the pattern of rational surface layout.

25. It is therefore necessary to fully work out the blue prints of the *total programme* before the commencement of the Second Five Year Plan. If for a variety of reasons, such as limitations of administrative machinery, it is necessary to proceed by stages, it should be on the *basis of territorial coverage and not the programme*. A beginning should be made with selected regions and not with partial programmes. Pending full coverage certain *ad hoc* or interim emergency measures will have to be undertaken over the entire area to prevent deterioration in the prevailing conditions and to redress cases of acute injustice. These will be essentially preventive and ameliorative; but the main programme wherever undertaken will be one and indivisible, comprising the entire Floor-Ceiling-Consolidation-Cooperative Complex.

NOTES (APPENDIX)

1. *Page 563*:—According to a sample survey conducted by the Bureau of Economics and Statistics, Government of Bombay, the distribution of cultivated holdings in Bombay State was as shown below :

<i>Size</i>	<i>% of cultivators</i>	<i>% area of land</i>
Upto 5 acres	41·9	6·2
Upto 10 acres	60·9	16·6
50 Acres and above	4·4	34·2

2. *Basic Holdings (Page 566)*.—The logic behind such differentiation is that holdings below the economic size demand a different approach and treatment, say that of rehabilitation. But the number and percentage of such holdings in India is so large that the task of rehabilitation of such a vast sector of the agrarian economy would be beyond the organisational competence of the State. The Committee, therefore, has evolved the concept of a Basic Holding which will be smaller than the economic holding and to which the rehabilitation treatment may be given. A basic holding is a holding smaller than which would be palpably uneconomic from the point of view of efficiency of agricultural operations.

3. *Page 567* :—The phrase “family holding” is difficult to define precisely. The Hyderabad Tenancy Act defines it as “an area which a family of five persons including the agriculturist himself cultivates personally according to local conditions and practices and with such assistance as is customary in agricultural operations and which area will yield annually a produce the value of which, after deducting 50 % therefrom as cost of cultivation, is Rs. 800 according to the price levels prevailing at the time of determination.”

Besides defining the Family Holding as above the Act indicates certain tentative limits for different categories of land.

The Agrarian Reforms Committee defines “Economic Holding” by reference to following principles :

1. It must afford reasonable standard of living ;
2. It must provide full employment to a family of normal size and at least a pair of good bullocks;
3. It must have a bearing on other relevant factors peculiar to the agrarian economy of the region.

It is suggested that in the interest of quick and decisive action too much time need not be spent in drawing up a fine and fool-proof definition of family or economic holding. It would suffice if by a sort of rule of the thumb the pattern of distribution as indicated on pp. 567-568 of the Note is attempted wherever the integrated programme is brought into force.

PUBLIC AND PRIVATE SECTORS

by

DR. S. K. MURANJAN

Expansion of Public Sector at the expense of Private Sector must be judged from the stand-point of objectives in view.

(i) *Augmentation of resources for investment*:—For the sake of finding out the volume of resources likely to accrue from such expansion, calculations may be made on assumption of (a) complete suppression of Private Sector and (b) annexation of a few or many kinds of select businesses.

The calculation procedure may be roughly indicated as follows : Total gross income accruing to individuals and businesses above a certain income level, e.g., Rs. 25,000 a year; *minus* tax already being paid; *minus* number of individuals and businesses in receipt of income *multiplied by* the reasonable average remuneration they should receive, e.g., Rs. 24,000 or 30,000 a year. To make the calculation most favourable to the object in view, all individuals and families above the aforementioned income level are assumed to be in business. The question then arises—Is the magnitude of investment resources likely to accrue large enough to justify the undertaking of the complications and complexities of public ownership and management? Would not taxation be an easier and effective means to achieve the same object ?

(ii) *Augmentation of resources for investment* by use of monopoly position of Public Sector to raise prices to the consumer. (a) Political danger of corruption and demoralisation of democracy—when political parties might at election time compete for favour by promises to reduce prices. (b) It implies either that prices will not fall at any time or that there does not exist any private sector and therefore private businesses. In case prices fall amidst the environment of a mixed economy, it is doubtful whether government agency will be quick enough to judge the change and heavy losses must emerge. In case no private sector exists, the problem of financial losses and gains ceases to exist.

(iii) As a measure for greater efficiency and honesty of management, etc.—

- (a) What is the numerical size and distribution of power among managing agents and entrepreneurs concerned with joint stock and private limited companies ?
- (b) How many of them inherit their present position by family and cast relationships and how many of them started on their own initiative ?
- (c) How many of them start their entrepreneurship by speculation in commodity and stock markets and then use their financial power to obtain control of industry ? And how many of them start as producers and manufacturers ?

- (d) Are original appointments on merit to technical and managerial positions, deliberate training of staff by rotation in varied capacities, large-scale research in industrial products and processes, etc. likely to flourish more under Public Sector or Private Sector?
- (iv) As a measure for attracting savings for investment—
- (a) How far has justice prevailed as between investor *qua* investor in this country and the managing agents and entrepreneurs?
- (b) What part is the Government likely to play now and in future in the creation or diversion of savings for investment? It is necessary to compare the role of individual, corporate and government savings now and in future.
- (v) As a measure for equalisation of incomes both to augment economic welfare and prevent dangers of economic power to political democracy.

The experience of the United Kingdom seems to prove that taxation is a sufficient means to achieve this objective.

(vi) Whatever the areas of Public and Private Sectors, the investment in Public Sector relating to construction works, social overheads, natural monopolies, pioneer industries, etc. is bound to be on such a vast scale that production and distribution controls on selected outputs of Private Sector are inevitable.

(vii) Capacity to cope with uncertainty is generally regarded as the crucial test of economic efficiency and is thought to be a marked merit of the Private Sector. In my opinion, uncertainty must be analysed in detail before arriving at a balanced conclusion.

Uncertainty due to unfavourable price changes:—Larger the area of Public Sector more are losses and gains likely to be balanced. It is difficult to say whether Private Sector judges and anticipates price-changes better since those who survive are seen but those who perish tell no tales and leave no trace behind.

Uncertainty due to product differentiation:—This is entirely a feature of the competitive economy and must tend to be eliminated for those industries transferred to Public Sector. The Public Sector can reduce unnecessary types and thus raise efficiency.

Uncertainty due to innovation:—Must depend on the extent to which Private Sector (a) prizes knowledge and science and (b) is prepared to scrap existing investment. It is probable that the Public Sector is better situated in this regard. Experience of war times supports this view.

Uncertainty of demand:—This is not likely to be a major factor in those industries which supply the basic needs of society like food, clothing, housing, insurance, banking, health, etc. The inclusion of these in the Public Sector with proper policies for stabilisation of incomes will probably raise less difficult problems.

Uncertainty due to uncertainty of government policy:—On the stock-exchanges and Forward Markets, this is an important basis of their business. As no unvarying criteria for such inclusion are available and in a democracy the Industrial Policy Resolution of 1948 may not be the last word, this uncertainty must now be accepted as one of the normal uncertainties of business enterprise.

It will be observed that most of the uncertainties are uncertainties of Private Sector as such and must disappear with the Private Sector.

(viii) *Joint Public and Private Enterprise*:—It deserves to be considered whether certain areas could not be reserved for joint public and private endeavour, pure public endeavour being availed of only in the absence of private enterprise.

- (a) Private floatation with reservation of a proportion of the issue for government ownership. Part public ownership will carry with it the right to nominate government directors, etc. in proportion.
- (b) Nomination of government directors, etc. to all public limited joint-stock companies in the interests of the investors and the community. If there is a marked tendency to form private limited companies, the government director or directors should have a place in all companies above a certain minimum capital.
- (c) Nationalisation of the audit and accountancy profession.
- (d) Creation of an office of Joint Stock Companies. Control on the lines of Superintendence of Insurance Companies.

THE PUBLIC AND THE PRIVATE SECTORS

by

DR. B. V. KRISHNAMURTHI

(Through Prof. C. N. Vakil)

In the discussions on the Second Five Year Plan, it is now generally agreed that there should be a complementary growth of the public and the private sectors. But there is no evidence of sufficient clarity on the important question of allocation of production responsibilities between the public and the private sectors.

Certain broad observations can however be made on this subject. To start with, there can be little disagreement with regard to the Statement that the State should take upon itself the vital task of Social Overhead Capital Formation. For instance, development of railways and highways, irrigation, hydro-electric power generation and distribution, and so on. These are socially urgent capital items which should be given the highest priority. Such capital projects are in their very nature beyond the competence and worthwhileness of private enterprise, for obvious reasons. But outside this important group of projects, there is a vast area of producer goods and consumer goods industries which are well within the competence of the private sector and where the existing record of performance of private enterprise is quite creditable. To cite a few instances, Steel, Cement, Cotton Textiles and Engineering Industries. It is difficult to understand why the State should enter these spheres of production wherein any desired programme of improvement and expansion could be safely entrusted to the private sector.

The progress report of the first three years of the First Five Year Plan amply bears out the fact that, by and large, organised private sector has done better than the public sector. For instance, in the public sector, at the end of the first three years of the Plan, the percentage of achievement to the planned five-year target is 38.1 in irrigation, 41.7 in electric energy, 50 in national highways, 42.1 in primary schools, 23.2 in public hospitals, and so on. Even the tempo of spending in these channels has been relatively slow. In Agriculture and Community Development only 29% of the planned total outlay has been spent in the first three years; in irrigation and power, 49 per cent ; in transport and communications, 42 per cent and in industry, 19 per cent. One has reason to doubt whether in the remaining two years the tempo will rise so high as to enable the realisation of the five-year targets. Be that as it may, is it refreshing to note the progress of the organised private sector in the same three-year period. The cotton textile industry deserves the foremost mention since the industry's annual production for 1953-54 has well surpassed the five-year target. Cement is another laudable instance. By the end of 1953-54 the annual capacity of the cement industry went up to 4.25 million tons as against the 3.28 million tons of 1950-51. And with the

completion of the expansion programme on hand, it is expected that the annual production by 1955-56 will rise to 6.6 million tons as against the target of 5.3 million tons. With regard to iron and steel, "the modernisation and expansion scheme of the Tata Iron and Steel Co., designed to increase capacity for finished steel from 7,50,000 tons to 9,31,000 tons, progressed satisfactorily". And so on.

All this should help us in defining the production responsibilities of the public and the private sectors. When the public sector is finding it difficult, for whatever reasons, even to attain the modest and unambitious targets of the First Five Year Plan, it is difficult to understand why it should enter into enterprises like the Steel Project, which could well be entrusted to private enterprise.

It is important to stress that the rate of progress of the public sector leaves much to be desired. Therefore, instead of an indiscriminate expansion of the public sector, what is called for is concentration of effort in raising the tempo of progress in the projects already on hand. Even after a satisfactory completion of these projects, the public sector could and should widen itself by undertaking similar additional projects, for instance, more railways and highways, more public schools and hospitals, and so on. The scope of expansion in these directions is indeed enormous relative to the availability of supplies at present.

Viewed in this manner, it becomes evident that any attempt on the part of the State to enter into lines of activity which could well be entrusted to private enterprise actually results in misallocation of productive resources at the disposal of the public sector. This is for two reasons. One, these resources are urgently required for social overhead capital formation. Second, the lines into which these resources are being applied can well be developed by the private sector.

If the public sector were to concentrate all its resources on the social overheads, the benefits are once again two-fold. First, the pace for setting the stage for industrialisation is quickened. Second, this very process ensures a stable and steadily growing demand for steel, cement, engineering, etc. and that enables the private enterprise engaged in these industries to expand the size of the industry profitably and confidently. In fact, in under-developed countries these industries can expand at a rapid pace only if there is a sizeable offtake by the public sector and this incidentally explains why the steel and cement industries in our country are doing so well now and were faring so badly in the thirties.

It does not necessarily follow that the public sector should be confined only to the social overheads. Even with regard to the other producer goods industries, if the private enterprise is not readily forthcoming or if the aggregate requirements are so enormous that there is room for both, there is a clear case for the State to step in. Fertilizers are an instance in point. It redounds to the credit of the State to have taken the initiative in this respect and made such remarkable progress.

Besides the public-owned and operated industries, the State could expedite the process of economic development by actively assisting the private sector in a variety of ways. It is a well-known observation that in under-developed countries, the lack of organizational initiative

and entrepreneurship and the absence of adequate finance are the two main reasons for the low level of private productive activity. This is true to a greater degree in the rural and semi-urban areas. And herein lies the vital role the State can play.

In the matter of providing the organizational initiative, the Community Projects and the National Extension Service are welcome features. The so-called boldness of the Second Five Year Plan may well be displayed in these directions. By widening the area of the Community Projects and expanding the Rural Extension Service, the State can most effectively stimulate the growth of cottage and small-scale enterprises which are not likely to come in the way of the expansion of organised large-scale industries.

Regarding the provision of adequate finance, the various finance corporations and the establishment of the proposed State Bank of India are welcome features. Once again, the boldness of the Second Five Year Plan can be well demonstrated in developing the institutions and setting up an effective countrywide machinery both for the mobilisation of savings and the supply of short-term and long-term credit. Of course, these agencies have only to supplement and not displace the organised capital markets and the commercial banking system.

To summarise :

1. Public Sector to concentrate on the expansion of social overhead capital and social welfare (schools, hospitals, etc.).
2. Public Sector to take up other lines, only when private enterprise is not forthcoming in those lines or there is room for both.
3. State to assist actively
 - (a) by providing the organisational initiative in rural and semi-urban areas towards the establishment of cottage and small-scale industries ;
 - (b) by setting up financial agencies both for mobilisation of savings and the supply of credit, without disturbing the capital Markets and the commercial banking system of the country.

EFFICIENCY OF PUBLIC UNDERTAKINGS

by

PROF. D. G. KARVE

The concept of efficiency needs definition in terms of the objectives of an undertaking. Making the most effective use of available resources, or attaining a given objective with the smallest expenditure of resources is a good general way of defining efficiency. But the relevance of objectives to resources is vital. In regard to public undertakings there is a variety of objectives and sometimes there is more than one objective set for an undertaking. Some of these objectives may actually be other than economic. It is in the light of all these that the organization and employment of resources in a public undertaking must be assessed or evaluated.

2. At least three types of public undertakings must be distinguished from one another in respect of the objective set to each. The best known are the public utilities, which have a common service as objective. Rendering satisfactory service to the largest possible number of consumers being the objective, an optimum balance among quality of service, extent of service and cost indicates the standard of efficiency. In such services a surplus is appropriately returned to the undertaking either by lowering charges or improving quality.

3. There is another type of public undertaking which has a more direct bearing on economic development. Whether it is the development of a whole region or the pioneering into a new line of production, *e.g.*, machine tools, which is considered vital to the attainment of economic progress, a public undertaking engaged in such activity will ultimately be judged by the relationship between investment of resources and the value of the product, using the word product in a wide sense. There may be some aspects of public interest in such undertakings which are other than economic. But in the main an undertaking which has economic development or contribution to economic development as its objective must justify itself in economic terms: We are, of course, excluding from this class any preliminary or pilot attempts which are purely experimental. These do not 'graduate' into undertakings until they have shed their experimental or pilot character.

4. There is yet another class of public undertakings where a major objective is the creation of a surplus. Other criteria such as maximization of service and quality, though not altogether irrelevant, take a somewhat subsidiary place to maximization of net revenue or a surplus, if the public undertaking is operating in competitive conditions, there would not be much conflict between the two objectives. But, as would tend normally to be the case, if the undertaking operates as a monopoly maximisation of revenue may be reached at a point where consumption of quality would not reach that high level which would be expected in competitive conditions.

5. Utility, contribution to economic progress, and production of a surplus are, of course, not the only objectives which in practice would be set for an undertaking. But the other objectives, mostly non-economic, will have to be isolated in a discussion about efficiency. Equally well, where all, or two, of these major objectives are mixed up in any particular undertaking, which would often be the case, a balancing of results, quantitative as well as qualitative, will have to be attempted. For each undertaking the test of efficiency will have to be whether the objective or objectives are being realized in the best possible manner, to the utmost possible extent and with the least possible expenditure of resources.

6. Whether we consider the structure of modern business organization or the functions of the several participants in an industrial effort there is no reason to believe that the fact of the proprietorship of a concern being vested in the state or a joint stock company would necessarily make any difference to its efficiency. In this context two points should be clearly set out. The pioneering, risk bearing or enterprise character of business is no longer a normal asset of private or individual concerns. In all these respects the effort called forth under modern conditions of technological progress and of national and international regulation of economic activity is such that no private organisations can hope to be anything but an instrument of social policy. In other words by tariff, subsidies, and other direct forms of sponsoring and promoting the real burden of progress is almost necessarily passed on to the community. The only relevant question in the modern context, therefore, is whether a public or a private agency will be a more efficient instrument—in quality, measure and cheapness of public policy. There is no worthwhile distinction between private and public enterprise, in as much as the nation as a whole is increasingly bearing all the burden of enterprise and risk. The choice is between a private, a public or a semi-public undertaking. It is more the organization, and execution rather than the planning and the risk which are relevant in the atomic and planning age.

7. Another point about which it is equally necessary to be clear is regarding the legitimate sphere of individual enterprise. A person with a new idea, which he considers to be socially useful, ought to have the opportunity to try it out on his own responsibility. This means that the capital which he raises and for the most part the technical and other labour which he employs make no draft on resources which are needed for more important social objects. Within these limits genuine enterprise has an opportunity to grow, and any scheme of expanding the scope of public undertakings should be so designed as not to make an inroad into areas where real individual or private enterprise may be developed. It is conceivable that the scope of such private enterprise may be extended to genuine private partnerships. But there is very little of private or individual enterprise about a public Joint-Stock Company. Its suitability, as an alternative to a public undertaking, must be judged strictly on grounds of efficiency and social purpose.

8. The operational efficiency of a business depends on considerations which affect both private and public undertakings almost equally. An adequate supply of capital is a *sine-qua-non* for both. In the planning of both the professional services of technical, financial and organizational experts have to be used. Both depend for their success on the availability of managerial talent and necessary technical services. The other physical factors and personnel

relations conditioning the success of the activity affect both. It is, therefore, with reference to the presence or otherwise of these determinants of efficiency that the case for each public undertaking must be examined.

9. Examples of successful and unsuccessful undertakings are available from both private and public sectors. Excepting a few reputed firms the record of private undertakings in India does not support the thesis that the economic and social costs of their operation have been on the low side. Even apart from glaring drawbacks of individual firms and industries, as a rule, private business has flourished in India under conditions of monopoly accompanied by lack of effective regulation. The tax-payer and the consumer have been the last to receive any consideration from the typical large-scale business concern in India. On the other hand, public undertakings like several municipal transport systems, as also the state transport and communication concerns have a record of working which need not lose in comparison with similar private concerns. There are, however, a number of instances in which public undertakings have given a poor account of themselves.

10. It is proper, therefore, to assess the prospects of efficient working of a public undertaking on its intrinsic and individual merits. Enough is known of the organization and techniques of management to make it possible for a public undertaking to work efficiently. The decision to put an economic activity into the public sector need in no circumstances be influenced by any initial doubt about the prospects of its efficient conduct. Efficiency is a relative term and it takes in more than one physical and social value. But there is reason to believe that if the conditions favourable for efficient working are created, public undertakings will function with less cost and better results.

11. Among such conditions the form of organization of a public undertaking occupies an important place. It is, however, possible to over-emphasize the difference among the two well-known alternatives. Even where an activity is run as a Government department, as for instance is the case with railways and posts, it is possible for the Government and the Parliament to develop a general attitude of not interfering in the details of planning and administration which are left to the respective heads or boards. On the other hand, it is possible to set up a statutory corporation with a number of restrictions on parliamentary and governmental control, and then to use all powers still left with parliament and government in such a manner as to undermine the initiative and confidence of those who are held responsible for the efficient working of the Corporation. This experience is by no means rare. What is important from the standpoint of efficient administration are the mental attitudes and conventions based on the same. While the relationship of an undertaking to overall planning belongs to the sphere of Parliamentary influence, and while the broad operational policy and its total results belong to the sphere of the administrative responsibility of the Minister concerned, the detailed planning, execution and control of the operations of an undertaking, departmental or corporate, must be left to those who are chosen to be in charge of these functions and are, therefore, put at the head of operations.

12. Given such an understanding of the appropriate roles of the Parliament, the Ministry and the operative organization, there is every reason why the first preference for the conduct of a public undertaking should be for a departmental direction, more or less like the posts or railways. Such a procedure initially reassures the Parliament about the direct responsibility of the undertaking, and when Parliament or Government choose to interfere with a decision of the management, there is no doubt where the responsibility lies. In the other alternative Parliament and Government, if they are ill-advised, are in a position to exercise authority without responsibility. Any special features of organization which are relevant to each kind of undertaking can be easily adjusted to departmental organization, as by creating a separate Administration under the Ministry. The preference for a Corporation was more relevant to a pre-planning stage, where an attempt used to be made to approximate conditions in public undertakings to those in private concerns. Now the shift of policy is obviously towards the other end, and the Company Law is being amended in a manner calculated to make every company almost a state-regulated company without much responsibility on the state. In this context it is best to make every public undertaking a unit operating under an appropriate Ministry, with such organizational aids as may be needed to help Parliament and Government to discharge the new type of responsibility.

13. Two organizational reforms having a close bearing on operational efficiency of public undertakings may be noted. Canons of financial propriety and of accounting procedure which are relevant to current expenditure out of public revenues are not in all cases relevant to the needs of sound business management. Cases have occurred in which advice and criticism based on rules of propriety to which Financial Advisers and Auditors-General are accustomed have resulted in warped judgement and undue restriction on the legitimate freedom and initiative of directors and managers of public undertakings. While it is essential that Parliament and Government should continue to exercise powers of scrutiny and guidance on behalf of the citizens the manner of doing so must be appropriate to the business character of the public activity concerned. Both within the Finance and the Auditor-General's organizations a branch specialized in the finance and audit of public undertakings should be set up, and these should be equipped with codes of procedure appropriate to business management. The services of recognized firms of business consultants and auditors should also be more freely drawn upon than seems to be the case at present.

14. Even a public business, so far as it is a business, must be run as a business, and the Parliament as the "shareholders" representative should insist upon this. It follows from this position that all organization and procedural practices which militate against an efficient conduct of public business to the satisfaction of Parliament should be brought to an end. One such practice is registration of a public undertaking as a private limited company. Obviously this use of Law made by Parliament to restrict its own powers of scrutiny and guidance over state business is bad politics as well as bad economics. If at all any form other than an administration under a department is to be selected it is best to set up a registered public company if for special reasons private partnership in share capital from national or foreign sources has been admitted ; or to establish a statutory corporation, where the respective limits of Parliamentary and corporate powers and functions are clearly stated.

15. In all forms of public undertaking other than a departmental administration, appointment of civilian heads should be scrupulously avoided. Even in departmental undertakings more and more it should be the departmental officers themselves who should gradually rise to supreme positions as in Railways and Posts. Pending the development of an appropriate pool of such qualified technical and managerial officers persons from other private and public undertakings should be chosen. In any case for corporations and public Joint Stock Companies a civilian as a rule should not be chosen. Apart from individual cases, the training and habits of civilians are not suited to the field of business management where precedent is more an obstacle than an aid, and where rules are thumb-rules that flow from practice, rather than rigid yardsticks of correct measure to which conduct has to conform. There ought to be other means of ensuring integrity than handing over business concerns to successful ex-magistrates and ex-departmental Secretaries. In cases where individuals from the civil or other normal services of Government have been chosen for their special suitability, they should resign before accepting a post of direction in a public corporation or company. It has been proved that they cannot discharge with an adequate sense of independence their functions in relation to the undertaking when they can neither shake off their post nor can they ignore their future.

16. In the building up of the efficiency of a public undertaking maximum importance attaches to the education of the public and the interest evinced by them in the success of a concern. The administration of the BEST (Bombay Electric Supply and Transport) and of Indian Railways, for instance, has gained in efficiency by the continuous public interest evoked by them. In the relationships of a public undertaking the 'Public' should have a big place. Many of the drawbacks stemming from alleged lack of interest and responsibility among workers employed in a public concern will yield far more effectively to public watchfulness than merely to the procedural and formal checks of superior authority. With proper education and continuous briefing the public can be induced to take not only interest, but pride in the efficient working of public concerns.

17. Given all these public interest, parliamentary backing, ministerial assistance, and competent management the internal structure and working of public concerns can approximately, and not infrequently surpass, those of the best conducted private undertakings. The more freedom is left to those in charge of an undertaking and the more those who have chosen it as a career are enabled to rise to highest positions the concerns will develop a corporate sense of unity and cohesion. For ensuring team-work as well as for inculcating right attitude of social responsibility, building up of the corporate moral of each undertaking is of great importance. All concerned with an undertaking ought to be taken into confidence as to the role which it has to play in the purposes of the national plan, and they ought to be made aware of the fact that the role is worthwhile. Through appropriate channels they must be held responsible for the efficient discharge of their responsibilities. But the personnel relations in public undertaking must be taken to include relations with the public at large, and even greater attention should be paid to them than is done in a private undertaking.

18. Another important method of building up efficiency which a public undertaking can utilize with greater confidence than a private concern is the adoption of a system of

on-the-work training, both for those who are already in service and for those who are being equipped for a future employment. The growing skill of workers is an asset for the nations industry and all public undertakings ought to promote it both for their own success as also for the success of the nation's economic policy.

19. A radical change of attitude towards success of public undertakings is needed if real efficiency and progress are to be promoted. As efficient units of production and service these undertakings can maintain a high record only by a continuous process of improving productivity. The Parliament and Government, as also any boards or authorities which these may set up in connection with the public undertakings, should encourage all the staff of undertakings to contribute to production progress. Not only must legitimate discretion and freedom to experiment be allowed to staff, but their achievements should be suitably recognized. The creative response of all engaged in public undertakings will vary in proportion to the importance attached by the public, *i.e.*, by Parliament and Government to productive contribution as compared with that attached to formal compliance. There should be some recognized system by which the humblest worker in each public undertaking has an opportunity, subject to a preliminary examination for *prima facie* merit, to make suggestions for improvement and, within appropriate limits to try them out.

20. At least for the immediate future public undertakings will have an initial advantage over their established opposite numbers in the private sector. Technology has been undergoing such rapid changes that a newly established public undertaking starts with better machinery and equipment. It is up to the undertakings themselves to maintain their lead by continuous research and evaluation in all aspects of their working. State agencies guiding and supervising public undertakings can continuously emphasize these aspects. Moreover, if economic activity is an important part of the plan, and if public undertakings are an important part of the agencies of implementation, the services of those who help in making them successful at all levels—should be suitably recognized. Technology has passed the stage where profit motive is enough to ensure successful utilization. But even the cash incentive has been known to be surpassed by an awareness of social service successfully rendered and by a self-esteem reared on the acknowledgment of our fellowmen. These incentives of a democratic and planning age of advanced technology need to be more systematically employed in promoting efficiency.

21. All these considerations apply with special emphasis to public undertakings which have the raising of a surplus revenue as their objective, or as one of their objectives. Unless acceptance of such a role for an undertaking is secured by proper education of the staff as well as of the public there is spontaneous resistance from both these quarters to a concern which is 'exploiting' its privileged position. Mere authority of the State, or discipline within the industry, will not be enough counteraction to chronic sabotage by workers or to ill-usage by consumers. Both these, workers as well as consumers, in their capacity as citizens should be reconciled to, and if possible made enthusiastic about, the overall purposes of policy, of which the public undertaking is a part. This is a tremendous educative effort, But without it there will be neither democracy nor democratic planning.

PLACE OF COOPERATIVES IN THE SECOND FIVE YEAR PLAN

by

PROF. D. G. KARVE

1. The following extracts from the First Five Year Plan will indicate the place which it was intended to allot to cooperatives in the First Five Year Plan:

(a) "When individualism was the order of the day, cooperation represented a defensive act of association on the part of individual citizens. But with the adoption of the principle of social regulation, the cooperative societies, which from their commencement in this country have been socially sponsored and supported, came to occupy a more positive role. In a regime of planned development, cooperation is an instrument, which while retaining some of the advantages of decentralization and local initiative will yet serve willingly and readily the overall purposes and directives of the plan" (p. 163).

(b) "As an instrument of democratic planning, combining initiative, mutual benefit and social purpose, cooperation must be an essential feature of the programme for the implementation of the Five Year Plan. As it is the purpose of the Plan to change the economy of the country from an individualistic to a socially regulated and cooperative basis, its success should be judged, among other things, by the extent to which it is implemented through cooperative organizations. The Planning Commission in consultation with the State Governments, cooperative organizations, and the Reserve Bank intends to formulate a more specific programme for the expansion of the movement in all the sectors in respect of which cooperative organization has been considered suitable" (p. 164).

(c) "Many activities, such as, framing programmes of production for the village, obtaining and utilizing governmental assistance for the betterment of the village, *e.g.*, the construction of roads, tanks, etc., encouraging villagers to improve the standards of cultivation, organizing voluntary labour for community works and generally assisting in the implementation of economic and social reform legislation passed by the States, will naturally fall within the purview of the panchayat. On the other hand, for the working of individual programmes of economic development, where not only the general interest but also the specific responsibility and liability of a member have to be ensured, a more integrated and binding form of association is needed. Specific and practical tasks of the villagers, both agriculturists and artisans, can be best performed through cooperatives. We, therefore, suggest that in so far as institutional reform is an essential part of the implementation of the Five Year Plan, emphasis in due proportion and in appropriate fields should be placed both on panchayats and on cooperative societies" (p. 165).

(d) "While, therefore, on the one hand, larger sums will come to be disbursed in rural areas, it is of the utmost importance to see that monies so spent do not go outside the system of organized credit. In other words, rural savings and monies generally in the hands of the rural population have to be kept flowing into credit organizations. A cooperative society is calculated to do this much better than almost any other organization. If, however, the credit structure of the country is to be

geared to an increasing pace with economic activity in rural areas an intensive effort at integrating all the channels of credit for the common purpose is needed" (p. 166).

(e) "While the controversy between voluntary and compulsory formation of cooperative farms may at this stage be avoided, it can be suggested that in any area where a majority of holders representing at least half of the area under cultivation desire to establish a cooperative farm, legislative means should be at their disposal to proceed with the formation of a cooperative farming society for the whole village. The State on its part should do everything in its power to encourage the establishment of such farms and to promote their satisfactory working afterwards. Farming through a cooperative calls for a number of individual and corporate virtues on the part of members. It will therefore be some time before cooperative farms reach a developed stage. If during the period of the First Five Year Plan, in representative areas of different States a good number of societies are established as going concerns, we can proceed more confidently to expand that pattern of cultivation in the next Five Year Plan" (p. 167).

(f) "It is essential that in every community project area a programme for all-round cooperative development should be drawn up. The establishment of various types of cooperative societies after educating the local public regarding their benefit will be the best means of enlisting the active support of the people on a voluntary basis for work of improvement on an organized scale" (p. 168).

(g) "With artisan industry cooperatively developed and with a number of processing factories established on a cooperative basis, a growing portion of rural economic activities will come within the cooperative sphere. Such development will conform to the requirements of democratic planning and will make it possible at later stages of planning to formulate more comprehensive schemes of economic progress" (p. 169).

(h) "We have expressed our preference for a decentralized type of industrialization, and how far we can go in the direction of decentralization without loss of economic advantage will depend to a very large extent on the capacity of artisans to organize themselves on a cooperative basis. The utility of cooperation in the urban areas extends to the credit and other needs of small entrepreneurs and cottage workers. Urban banking conducted on cooperative lines has a very important role to play in this field. Cooperative banks are more democratic and more amenable to local control than even small-sized joint-stock banks and hence urban banking closely associated with other forms of urban cooperation ought to be purposefully developed" (p. 170).

(i) "Cooperatives are sometimes organized and administered by those who lack both the qualifications and experience necessary for the job. This factor alone accounts for a large number of cooperatives' failures and the uneven development of the movement in the country. The importance of efficient management cannot, therefore, be too much stressed. Being a movement essentially dependent on the ability of persons in humble walks of life, who are often amateurs in the handling of business operations, the need for training and education is greater than for those who have ample resources and business experience" (p. 171).

2. These extracts clearly indicate that the First Plan had a clear conception of the institutional role of the Cooperatives and Panchayats. It had an equally clear mind on the particular place to be allotted to cooperation in the rural and urban sectors, in agriculture and industry, in processing and in marketing. The Plan had also laid emphasis on cooperative training and education so as to strengthen the hopes of success of its programme of cooperative planning.

3. From the latest progress report (September, 1954) it is impossible to get a quantitative measure of actual realization of any of these plans. The latest figures for all-India are available only for the year 1951-52. It may not be altogether irrelevant, therefore, to state here that if planners have to depend on quantitative data which are more than two years old, a five-year period for planning would appear to be too short. On the other hand, if we are to adopt the five-year period as the normal one some method by which all statistics which have a direct bearing on the making of plans and on checking their progress should be capable of almost current compilation by some organization within the Planning Commission. The system of reporting, compilation and publication of almost all relevant statistics needs early improvement.

4. There is no overall significance in figures for later years pertaining to individual States which happen to be incorporated into the progress report only because they were available. In the agricultural sector the only definite fact which emerges is that the number of cooperative societies, their membership, and the extent of their business increased notably in States which already had a fairly developed rural credit movement. Even in these areas, however, progress was by no means very striking, and the community project areas in which much was expected were devoid of noticeable progress except in three or four States. The number of apex banks increased, under influence of the Reserve Bank policy of not issuing agricultural credit as a rule, except through apex banks. The total lending by the Reserve Bank to cooperative banks increased from approximately Rs. 12 crores in 1951-52 to Rs. 15 crores in 1953-54. This, of course, is nowhere near the figure of Rs. 100 crores which was the target of total institutional credit to be made available by the end of the First Five Year Plan. Even where apex banks were started the absence of a sound system of district central banks, and a well-knit organization of primary societies, more or less, immobilized the line of credit offered by the Reserve Bank.

5. Governments on their side stepped up tagai loans without making any deliberate effort to use them as a means or as an occasion to build up any organization among the borrowers. The percentage of arrears in tagai loans is very high, higher than in cooperative organizations. The progress of other than credit organisations in the rural areas was even more limited. In regard to cooperative farming, in respect of which experimental schemes were suggested in the Plan, there was little progress except in Bombay and U. P. Lift irrigation societies and brick-kiln societies made some progress. While some movement forward is seen in all areas, and a few outstanding cases of success can be mentioned in regard to almost all sectors, it is obvious that in no part of the cooperative plan is there enough concrete achievement commensurate with the strong support to the general policy of cooperative development and with the special emphasis on individual types contained in the Plan.

6. There are two specific reasons for this apparent frustration. The main field of cooperative interest, namely rural development, was under investigation by a committee of the Reserve Bank. There was hardly any move in the field of rural cooperation which could not be traced to the sphere of interest of the committee. It is curious, however, to find that in States already well set on the way to cooperative progress, further progress continued to be

made. The non-rural sector, moreover, does not appear to have fared any better than the rural one. This suggests the second cause. Much as planners, administrators and reformers are ready to prescribe the cooperative principle, they are not so ready to insist upon it in practice. In the best of circumstances this vacillation is due either to impatience or to misunderstanding. It is felt that quicker results are obtained through State or private action. It is too late in the day now to re-argue the question, which, one has reason to assume, has been thrashed out before a policy is prescribed in the Plan.

7. Whether it is credit, distribution or production, a definite preference is often shown by administrators for direct State or private action. In cases where this partiality, not sanctioned by the Plan, is due to sheer impatience it is strengthened by another misunderstanding. The role of cooperatives in a planned economy is different from that which they occupy in a regime of *Laissez Faire*. In the latter, complex cooperatives like the other forms of business organization are based on the voluntary principle, though mutual service, as opposed to profit-seeking, is their special characteristic. In the context of planning it is the element of mutual service which is the principal attraction of cooperation for the planner. In a planning economy voluntarism is restricted and regulated in all spheres and forms. But cooperatives as institutions based on the principle of mutual service can more appropriately participate in planning which is really an agency of mutual service on the national level. In a democratic State, as distinguished from a totalitarian State where planning is aptly described as capitalism of the State, the main principle and overall character of planning can be appropriately described as cooperativism of the State. As the implications of this inescapable position are better appreciated by the planning State and by the cooperative organizations a really determined progress along lines of democratic planning will be possible. A further declaration of the determination of the State to stick to cooperative forms of associated economic activity would, therefore, have some advantage.

8. In a democracy economic and social freedom is no less important than political freedom. The only way in which it can be safeguarded consistently with the need to utilize to the full the technological opportunities to raise the levels of living, is to follow in the wake of the principle of self-employment. What one individual, or a family, or a small group which raises no major questions of wage employment can do with efficiency should be left to them. Where bigger associations of man-power and capital are needed for efficient functioning, the organizations should be basically cooperative with such assistance from the State by way of capital and expert guidance as may be necessary. In fields of economic activity where the interests of the whole community are involved, the mutual service principle is best fulfilled by municipalized or nationalized enterprises. The cooperative sector is the sector of self-employment at all these levels, from a household to the whole nation. Hence, a planning democracy must tend more and more to be a cooperativism of the State. It is only with the full realization of the essential significance and ultimate justification of the place of cooperatives in a plan, that lines of concrete action in the Second Five Year Plan must be drawn.

9. The Second Five Year Plan will have to be both a bolder and a more concretized plan. It will have to provide for reaching a long way on the attainment of the following

goals which are inherent in planning under Indian political, social and economic conditions :

- (1) Mobilization of Resources.
- (2) Full employment.
- (3) Maximum production.
- (4) Social equality.

10. In the attainment of all these goals cooperatives have a specific and appropriate role to play. While the extent and organizational details will have to be considered in the context of local conditions, the broad outlines of a scheme by which particular objectives can be served may be indicated.

(1) *Mobilization of Resources.*

(a) For creating interest and enthusiasm among people for national planning generally, and for the particular plans of individual villages, cooperatives, as the smallest unit of economic democracy, will play a very vital part. In the expanded scheme of cooperative organization, almost every family will be a member of a cooperative, through which direct and effective contact and coordination can be secured with the whole nation.

(b) Especially in the sphere of enlisting and usefully engaging the voluntary labour of the people cooperatives of all forms spread over the countryside have great possibilities. It is also through them that local leadership on a large scale can be nursed and directed into constructive channels of social and economic reform.

(c) Even in regard to the mobilization of financial resources it is through cooperatives that the monetary flow can be maintained in active circulation and schemes like small-scale savings and investments can be made more effective. Thus, not only for the ideological content of cooperation but also for its efficiency as an instrumentality of social planning cooperatives will have a valuable role to play.

(2) *Full Employment.*

(a) In so far as the unutilized time of the villager, especially of the artisan, is a challenge to our capacity to provide employment, producers' cooperatives operating at different levels of technological equipment and of capital investment will naturally provide the best possible agency for giving effect to a plan of integrated or common production. The cooperatives themselves will no doubt have to build up their own internal relationships among organizations discharging different forms and levels of functions. Similarly these cooperatives will have to find, and be given their own proper place in the overall scheme of the utilization of national resources. Thus, as a part of the total national effort in pursuance of organizing the whole nation for a common task, producers' cooperatives will serve as an important and indispensable factor.

(b) The scope for employment through labour cooperatives must be fully explored. The number of workers who can muster for common employment over a continuous period, and the corresponding needs of labour in the schemes of development do not always tally. But

if the planners and designers are made aware of the importance, not only the social but also the economic importance, attached to labour cooperatives as a part of the plan, it is possible that schemes providing for more employment may be made effective in association with labour cooperatives. The organization and guidance of such societies, and the way in which they may be made to fit in with the organizations set up for development will need further thought.

(3) *Production.*

In the planning of economic activity in all spheres the cooperative form has a definite role. As planning in India is an evolutionary and democratic process the promotion of the cooperative form will have to be attempted as part of a gradually expanding programme. There is, however, no doubt that unless in all significant aspects of the economy cooperative structures which represent a sizable portion of the total economic activity are built up, the effective influence for betterment and social justice which the cooperatives are designed to exercise will not be produced. The following are the more important forms in regard to which specific plans for implementation will have to be made.

(a) *Cooperative Farming Societies*—The intentions of the First Plan that cooperative farming societies should be started in sufficient numbers in as many parts of the country as possible, so that enough experience may be obtained for a bolder and more specific programme for the Second Plan, have not been fully realized. Further progress along these lines will have to be made and a more specific role for this form in areas considered to be suitable will have to be allotted.

(b) *Cooperative Multipurpose Societies*—As the credit and allied purposes' unit of cooperative action in rural areas the multipurpose form has a vital role to play. Without much difficulty it will be possible to bring into such a society almost all families, who may be served by the society in some form or other. Especially in the business needs of the rural population this type of society has a basic importance. The entire plan of rural development should be actually made effective through such societies, as indeed it was the intention to do even in the First Plan.

(c) *Marketing and Transport Societies*—The importance of cooperative marketing is not confined to its bearing on the success of other forms of cooperation and on the economic condition of the members generally. As an adjunct to national policies of planned economic action the maximisation of the influence of cooperative marketing on supply and prices is very much to be desired. The utmost importance should, therefore, be attached to the promotion of cooperative marketing, and allied services. For the multipurpose as also for marketing societies it is possible to build up quantitative targets of number, investment and business on the basis of the targets implicit in schemes of development which form an integral part of the plan.

(d) *Cooperative Processing Factories*—What has been achieved in this sphere till now is enough to suggest that under favourable conditions created by State policy of encouragement growers can combine to process their produce into more gainfully marketable forms. For

employment, as well as for more orderly discharge of social responsibilities involved in technologically improved forms of production, this pattern of business activity needs support. Taking the main types of marketable produce, and the areas selected for intensive development together it would not be difficult to work out quantitative targets for this type also.

There are many other forms and spheres in which the cooperative contents of the plan can be more specifically worked out as soon as a definite directive of policy is incorporated into the overall injunctions to developmental agencies.

(4) *Social Justice*

It is a sad commentary on most of the socially created schemes of betterment that even they are utilized for the most part by those who are least in need of social assistance. Whether it is a transport service like a railway, a health service like a hospital, or an economic service like extension, unless they are deliberately channelled through local organizations of the indicated section of the community, the better-to-do and the socially influential tend to take away most of the benefit. The old type of selective and small co-operative society is also producing the same undesirable results in the favourable circumstances created by a Welfare State. Without the foundations and the mechanism of a widespread cooperative service running in participation with socially created agencies, the whole fabric of State action tends to be regressive; its benefits are reaped by the better-to-do and its burdens fall on the less favoured. In such a context, which is the bureaucratic context, the more planning there is the more inequality is engendered. The existence of a democracy at the top is no guarantee that its purposes will be translated into action in the countryside. For that end to be assured there must be an economic democracy operating in the villages, and in other areas which are vital to the successful and just functioning of national economy. Only through cooperatives functioning as participants in the efforts of national planning can such a basic democratic way of life be created.

11. For the rural sector it is fortunate that the Planning Commission has already adopted a programme of national extension which in every respect conforms to the requirements of building such a structure of just and progressive life for the people. Unfortunately it often happens with these plans, as with the enunciations and programmes regarding cooperation in the First Five Year Plan, that the actual implementation, if left out as a matter of detail or as permitting of local variation amounting to exclusion, falls far short of expectations. Here we must benefit by experience. Without cooperation the high purposes of National Extension will not succeed. On the other hand, without the assistance of developmental agencies and aids provided by the national extension movement cooperatives will be empty forms. The purposes and programme of cooperation and national extension must be put together so as to form a comprehensive blue-print for loyal and energetic execution.

12. On the strength of such a policy the spokesmen of popular as well as of official bodies in rural and other areas should be called upon to frame detailed schemes of action. The assistance of experts should, if necessary, be made available even at this basic stage. Later these plans should be considered at State level, again, in consultation with all the agencies

concerned, and with expert advice. The Planning Commission on its part should have a specific policy of institutionalizing in cooperative forms the activities sanctioned by it. Under each scheme, there should be a note to say what bearing it has on cooperativization, and in what form and to what extent cooperatives are proposed to be used. Whether adequate provision has been made for routing the requisite resources into cooperatives so as to enable them to play their intended part must also be made clear. For the education of the people, for the loyal execution of plans, and for organized democratic support to the purposes of national planning the more we have of cooperation in the Second Five Year Plan the better.

PRICE POLICY FOR THE SECOND FIVE YEAR PLAN

by

DR. S. R. SEN

I.

Role of Price Policy in a Mixed Economy

1. Under the Second Five Year Plan India will continue to have a mixed economy while striving towards a socialistic pattern of life. In such an economy the public sector comprising largely heavy industries, public utilities, transport, etc., will play an increasingly important role and will occupy a strategic position. But the present indications show that the private sector comprising agriculture, cottage and small industries and some large-scale industries will continue to contribute a very large proportion—probably 75 or 80 per cent—of the national income. Since this sector will be subject to the vagaries of the market forces, internal as well as international, it is quite possible that economic developments in this sector may deviate considerably from the planned pattern unless effectively regulated. It is true that the government's policy for the strategic industries in the public sector will influence the private sector to a certain extent. But for obvious reasons it cannot have the flexibility that would be necessary for taking prompt and effective corrective action against undesirable developments in the private sector. On the other hand, it is quite possible that a serious deviation from the planned pattern in the private sector may adversely affect the public sector itself in the mixed economy of the type which is being envisaged for the Second Five Year Plan. Direct physical controls may be one of the possible solutions but such controls have also their limitations especially in an economy where millions of farmers, artisans and small entrepreneurs will have to be controlled. Too much of direct physical control will kill individual initiative and incentive which are indispensable for any economic development especially in the private sector. A large measure of the necessary direction to the economy will have, therefore, to be given through prices. Even in a completely socialised economy like that of the U. S. S. R. where physical controls play a dominant role, it has recently been found necessary to relax direct physical controls to a certain extent and to make an increasing use of price policy not only for bringing about a balance between demand and supply but also for supplementing physical controls to make the allocation of resources conform to the planned pattern. The need for a well thought out and effective price policy will be much greater in the type of mixed economy that we have in view.

Objectives of Price Policy

2. The broad objectives of such a price policy may be briefly summarised as follows :—

- (A) To prevent sharp fluctuations in the general level of prices with a view to maintaining an economic climate which will be reasonably stable and hence conducive to investment and enterprise ;

- (B) To stabilise the prices of agricultural commodities within certain reasonable limits and *inter alia* ;
- (i) to maintain a reasonable relationship between the prices of agricultural commodities and those of manufactured articles with a view to ensuring that the terms of trade between these two important sectors of the economy do not change too sharply against one or the other;
 - (ii) to create as far as practicable conditions in the agricultural sphere so as to maintain an appropriate relationship between the prices of competing crops necessary for fulfilling the targets fixed in the Plan ;
 - (iii) to reduce seasonal fluctuations in agricultural prices to the minimum ;
- (C) To bring up prices and wages in the depressed pockets by such carefully planned stages as would avoid undue dislocation for the local consumers as well as producers ;
- (D) To stabilise the prices of manufactured articles within certain reasonable limits.

Key Role of Agricultural Prices in India

3. It is obvious that a general climate of economic stability is essential for the successful implementation of the Second Five Year Plan. This can be ensured only if there is a stability of the general level of prices and in a country like India where 50 per cent of the national income is derived from agriculture, stability of agricultural prices is the key to the stability of the general price level. Prices of industrial products can be stabilised only if the prices of raw materials and of foodstuffs are stable.

Problem of Prices may be more difficult in the Second Plan period

4. Present indications are that left to themselves prices are likely to be even more unstable during the Second Five Year Plan period than in the First. Even now economic conditions in India as well as abroad are hovering uncertainly between inflation and deflation. Uncertainties of the cold war, increasing competition in the world markets, disappearance of inflationary pressure, vagaries of the weather and the uncertain lag both in time and in space between investment and consumption, etc. are some of the factors which are likely to contribute to this instability.

5. The problem was relatively simple when the First Five Year Plan was formulated. The malady was definitely known to be inflation. There was no uncertainty either about the diagnosis or the treatment. The Plan emphasised the need for maintaining an integrated structure of prices and recommended direct physical controls, *e.g.*, rationing, procurement, etc., for ensuring it. Even then when the inflationary pressure subsided to a certain extent, there were difficulties in making timely adjustments in policy to meet the changed circumstances. There was no clear decision as to what authority was responsible for keeping a continuous watch over the price situation. There was no clear directive as to what indicators should be watched and the indicator most commonly used, *viz.*, the index number of wholesale prices

was a most inappropriate one. There was no clear prescription as to what action should be taken if the indicators behaved in a particular manner and what should be the machinery most appropriate for taking necessary action when prices declined sharply. And since there was no provision for what are popularly known as "built-in-stabilisers" so that with the movement of the indicators in certain direction corrective measures could be taken automatically by the various authorities, lot of time was lost in discussion and action taken was almost always too late and too little.

6. If this has been the position during the First Five Year Plan when price fluctuations have been much less erratic than they are expected to be during the Second Five Year Plan, it is obvious that definite arrangements will have to be made for the stabilisation of the price level in the Second Five Year Plan if it is desired that action to be taken by Government should be both timely and adequate.

II

GENERAL PRICE LEVEL

7. The first objective mentioned at (A) in para 2 above would be broadly secured if a reasonable amount of stability could be brought about in the long run movements, as distinct from secular movements, in the general level of prices. The distinction between secular trends

No interference with secular trends through Price Policy.

and long-term trends is rather important in this context. It will not be desirable to interfere with the secular trends in any way through the price policy. For instance, if on account of technological developments costs go down it would not be desirable to prevent prices from going down proportionately. Even in regard to long-term price fluctuations it should not be our objective to iron them out altogether or to stabilise them at a fixed level. All that it would be necessary to do is to ensure that price fluctuations may not be too much out of parity with fluctuations in costs and incomes and the time-lag between the two is not too long or the change in the price level in either direction is not too sharp. So long as prices move gradually enough in such a manner that costs and incomes have time to get readily adjusted to it, there is nothing to worry about such price fluctuations. Only such fluctuation in the general price level is to be avoided as is sharply out of step with fluctuations in costs and incomes.

Prices should not fluctuate out of step with costs and incomes.

Indicators to be watched

8. It would be, therefore, necessary to prepare reliable indices not only of (i) wholesale prices but also of (ii) cost of living, (iii) wages, (iv) rent, (v) employment, (vi) inventories and (vii) investment for the country as a whole with sub-groups for important sectors of the economy, both functional, e.g., consumption goods and investment goods industries, etc., and regional, e.g., those characterised by marked heterogeneity and lack of mobility, etc. If possible corresponding indices of (viii) "consumption standard" and (ix) "earning standard" should be also constructed. Indices of (x) cost of production should be also prepared wherever feasible. The sub-groups should be common for all these indices and those falling in non-monetised or inadequately

monetised sectors should be separately indicated. The present practice of looking at the indices of wholesale prices *only* should be discouraged. A careful watch should be kept on the related movements of these various indices. Whenever the relative movements of these tend to deviate beyond (xi) certain margins from the interrelations which are considered conducive to stability or to the implementation of the Plan, suitable corrective actions, monetary, fiscal and also others, should be taken. These margins may be first fixed on empirical considerations and subsequently modified in the light of experience*.

III

AGRICULTURAL PRICES

Indicators to be watched

9. The second group of objectives mentioned at (B) of para 2 above relating to the stabilisation of agricultural prices can be achieved primarily through buffer stock operations supplemented by suitable modifications of export/improvement policies, loans, subsidies and in exceptional cases by crop regulation. The indices to be watched are (xii) prices of major agricultural crops, *e.g.*, paddy, jute, cotton, jowar, bajra, wheat, gram, groundnut and sugarcane (or gur) in different regions (A_p, A_j, A_c , etc.); (xiii) prices of important manufactured articles required by agriculturists, *e.g.*, ammonium sulphate, iron and steel, cement, kerosene oil, cloth, salt, etc. (M_a, M_i, M_c , etc.); (xiv) ratio of prices of important raw materials and their manufactures, *e.g.*, hessian/jute (H_j), cloth/cotton (C_c), etc., (xv) ratio of prices of competing crops in different regions, *e.g.*, paddy/jute (P_j), cotton/millets (C), wheat/sugarcane (W_s), etc.

10. It may not be possible to achieve simultaneously all the four objectives mentioned at (B) in para 2. In that case first priority should be given to stabilisation of the prices of agricultural commodities within certain broad limits. These limits may be the same as indicated by the Krishnamachari Committee on Agricultural Prices, *i.e.*, $12\frac{1}{2}$ per cent. either way of the "fair price". It may be recalled that that Committee recommended that fair prices of agricultural commodities should be determined as under :—

Minimum price
versus minimum
income.

* A simple although rather crude, procedure may be to prepare an index number (S) which represents the ratio of the index number (C) of "consumption standard" and the index number (W) of wages multiplied by 100, where

$$S = \frac{C}{W} \times 100.$$
 Two limits (S_i)—an "inflation point" and (S_d)—a "deflation point" may be also indicated so that only

when (S) tends to rise above (S_i), anti-inflationary measures will be expected and similarly only when (S) tends to fall below (S_d), anti-deflationary measures will be called for. It is not necessary that ($S_i - 100$) or ($100 - S_d$) should be either equal or fixed for all times. If in the base period there is a lack of adjustment between (C) and (W), ($S_i - 100$) should be smaller or larger than ($100 - S_d$) depending on whether there is an inflationary or deflationary trend. In fact it would be useful to make a study of the employment position during the base period while fixing the two margins (S_i) and (S). Moreover, in an economy where technology remains static it may be normally sufficient to watch (C) and (W) only. But in an economy where considerable technological improvements are taking place, it may be necessary to substitute (W) in the base after some reasonable intervals by (W_1) which is better adjusted to the changed situation. For practical purposes, however, it should be sufficient to shift the base period itself perhaps once every five years or so. It may be also desirable to have a few sub-groups of S for important sectors of the economy. It is admitted that this sort of a simplified balanced indicator will be open to a number of theoretical objections. But, however, unsatisfactory such an indicator may be, it will help to correct some of the wrong impressions which the present emphasis on the wholesale prices index number tends to create in the public mind.

- (i) When necessary data become available, the prices should cover the costs of production on representative holdings, including the payment of fair wages to agricultural labourers and leave the producer an income sufficient to maintain himself and his family at a standard of life equivalent to that enjoyed by other comparable classes of the population.
- (ii) In the meanwhile, the prices should be based on the parity prevailing between agricultural prices and agricultural costs during the quinquennium 1924-29. Agricultural costs for this purpose should be represented by (xvi) suitable weighted index number of the prices of cloth, kerosene, salt, gur, sweet oil, iron and steel, bullocks, manures, oilcake and fodder.

Of the two alternatives the second approach seems to be more practicable than the first. It may be, however, necessary to revise the components of the index number and also to fix a more recent base period than the one suggested by the Krishnamachari Committee. There are, however, some who feel that it would be better to fix a flexible floor designed to ensure a minimum income rather than a minimum price as recommended by the Krishnamachari Committee. They suggest that well before the sowing season an announcement may be made of a provisional price (P_p) per unit that will be paid for a crop of certain specified size (Q_p), measured in maunds, bales, etc., and/or bearing a stated proportion to the previous year's crop, thus giving a certain idea about the expected total value (price \times quantity) of the current year's crop and then after the actual size of the crop (Q_f) is known at the harvest time to announce a final price (P_f) that multiplied by the number of maunds, bales, etc., will give that total value, so that

$P_f = \frac{P_p \cdot Q_p}{Q_f}$. The maximum price may be fixed at a certain percentage (say 25 per cent.) above P_f as fixed above.

In fixing the provisional price (P_p) A , A_2 , M_1 , M_2 , H_j , P_j , C_m , etc., as well as the physical targets of area and/or production fixed under the plan should be kept in view. Where, however, the quantity retained (r) by the farmer is a relatively large part of the total crop, it may be desirable to take into account not the total output but the marketable

surplus only so that $P_f = \frac{P_p \cdot Q_p - r}{(Q_f - r)}$. It would be useful if the Panel of Economists give

some thought to the problem. Theoretically it seems preferable to guarantee a minimum income rather than a minimum price but the former is likely to be much more complicated than the latter. The best course perhaps would be not to make any of these alternatives the inflexible basis for price fixation but only to keep all of them in view when fixing the prices. For, the aim is not to hold prices necessarily at any particular line but only to ensure that the tempo of rise or fall is not too sharp or too sudden. Subject to the overriding consideration of keeping the fluctuations in the general level of agricultural prices to the minimum, action regarding an individual crop or a group of crops may be taken with a view to fulfilling such of the other objectives mentioned at (B) in para 2 as may be considered most important.

11. In most cases it will be found that there will not be any conflict between the four objectives mentioned at (B) in para 2. Selective action in regard to a particular commodity or group of commodities may be taken without adversely affecting the stability of agricultural prices as a whole. In case, however, there is any contradiction, only that objective should be given preference which will satisfy to a greater extent the broad objectives of the Plan in general and the targets of area and production in particular. Where it may appear that the prices of a particular agricultural commodity cannot be raised without adversely affecting certain other important objectives, direct relief may be given to the cultivators either by way of subsidy on prices of manufactured articles like ammonium sulphate, iron and steel, cement, etc., which are used by them or in some other suitable manner.

Seasonal Fluctuations

12. The objective of reducing seasonal fluctuations to the minimum will not, however, conflict with any other and it can be best achieved through —

- (a) an early implementation of the recommendations of the Rural Credit Survey Committee of the Reserve Bank regarding warehousing and credit,
- (b) by permitting forward trading in all important agricultural commodities subject to strict regulation by the Forward Markets Commission, and
- (c) buffer stock purchases and sales operating as a counter speculator in the market in the case of very sharp seasonal fall or rise in prices.

IV

OTHER CONSIDERATIONS

Depressed Pockets

13. The objective mentioned at (C) in para 2 can be achieved not so much by price policy as by undertaking special development projects, *e.g.*, road building, minor irrigation works, etc., with a view to injecting additional purchasing power. But this may have to be supplemented by buffer stock purchases in times of sharp and sudden fall in prices. Even when there is a general stability of prices in the country there may be such pockets which would require special attention. Sometimes action taken in these pockets which will be largely in non-monetised or inadequately monetised sectors of the economy may have to be even opposite to the action that may be required for the rest of the economy. For instance, it may very well be that when there is an inflationary trend in the monetised sector of the economy, there will be depressed pockets where pump-priming action will be not only necessary, but will not also have any adverse effect whatsoever on the monetised sectors where anti-inflationary measures may be necessary about the same time. It will be useful to make a tentative list of such pockets in the light of experience of the past decade or so and prepare (xvii) index numbers of prices and wages separately for each of these pockets and watch these indicators for considering as to what extent pump-priming operations in these pockets are either necessary or feasible.

Manufactured Articles

14. As regards prices of manufactured articles, they are usually more stable than agricultural prices and would automatically get further stabilised if measures proposed above for stabilising agricultural prices on the one hand and general level of prices on the other are taken. It will be, however, useful to prepare for very large or semi-monopolistic industrial enterprises, both in the private and public sector, (xviii) index numbers of costs as also of prices and keep a watch on them not only for purposes of price policy but also for checking as to whether there is need for rationalisation in any of these semi-monopolistic enterprises. It may be mentioned here that in the U. S. S. R. such indices are used for fixing targets for the reduction of costs of individual enterprises.

15. It will be observed that the various measures indicated above will on most occasions supplement each other and actions taken for the pump-priming of the depressed pockets or for reducing seasonal fluctuations or for stabilising the price of agricultural commodities will all contribute to the stabilisation of the general level of prices as also of prices of industrial products. This can, however, be ensured only if care is taken to avoid all rigidity and have as much flexibility as possible in the implementation of this policy.

Buffer Stock Administration

16. Of the various measures that may have to be taken, machinery for implementation already exists for all except warehousing and buffer stock operations. Reserve Bank will look after measures like purchase and sale of securities, bank rate and selective credit control. The Ministry of Finance will take action regarding capital issue, taxes, subsidies, deficit financing, etc. The Ministry of Commerce & Industry will look after items like export/import quotas and export/import duties. The Forward Markets Commission will take action regarding forward trading. When the National Cooperative Development and Warehousing Board is set up under the Ministry of Food & Agriculture as recommended in the Report of the Rural Credit Survey of the Reserve Bank, there will be adequate provision for warehousing and credit. For the operation of buffer stocks, however, which is really the key instrument for stabilising agricultural prices it will be necessary to set up an independent organisation. It is essential that the Buffer Stock Administration should be kept separate from the Warehousing Board. For while the Warehousing Board should be just a servicing organisation and should not take any risk whatsoever, the Buffer Stock Administration will have to operate as a counter speculator in the market and will have to take risks and even to bear losses, if necessary. It will not be wise to saddle the Warehousing Board with the risks of the Buffer Stock Administration. These two organisations should, however, work in very close collaboration. While the Buffer Stock Administration should maintain a number of godowns in certain selected centres it should be open for them to utilise the warehouses belonging to the Warehousing Board for its own operations on payment of usual hire charges.

17. The operation of buffer stocks is indeed key to the problem of stabilisation not only of agricultural prices but also of the general price level in this country. In fact, it would be a

multi-purpose operation and would go a long way to protect both the producer and the consumer against violent fluctuations in prices if managed with wisdom and flexibility. At the same time it need not ultimately involve Government in heavy financial loss and whatever loss there may be will be a useful insurance premium to pay. For, the Government will on most occasions be able to purchase at comparatively low rates from the low-price areas when prices are falling and sell the stocks at comparatively high rates when prices are rising. The risk of loss would be further reduced if the Government concentrates its purchases immediately after the harvest of a particular commodity and sells a part of its stock at the lean season of the year, thus taking advantage of the seasonal rise in prices. Moreover, the Government should try to spread the risk over a number of commodities and over a number of seasons and give up the principle of no profit no loss. The Government should be prepared to make small profits when opportunity arises so as to build up a "buffer fund" which can be utilised to meet the loss which may have to be incurred when prices fall. Timely turnover of stocks undeterred by possibilities of temporary loss when prices fall and a firm determination not to seek higher than the normal profit either for the farmer or for the Government when prices are favourable are two principles essential for the success of any buffer stock operation.

18. In view of the fact that there is always a seasonal rise in prices and that in a cycle of five years there are usually two years of short crop when prices are usually much higher than those which rule in the other three years of good or normal crops, a wise handling of the buffer fund should save the Government from incurring undue loss over a number of years. Moreover, as has been mentioned above, if Government carries out simultaneous price stabilisation operations in more than one commodity, then the loss in one may be compensated by profit in another. Some of the surplus stock of foodstuff in particular may be used with advantage in labour intensive development projects, especially in scarcity affected regions or outlying areas. If necessary, the buffer stock administration may also export some of its stocks after making sure of a minimum reserve for meeting unexpected crop failures. There is a feeling in some quarters that buffer stock operations, or to be more precise price support policies for agricultural commodities, would be too costly for a country like India where 50 per cent of the national income comes from agriculture. Since buffer stocks will be operated primarily on the margin, it should be possible to keep the scope within reasonable limits. But the argument that nothing can be done to give support to agricultural prices where 50 per cent of the national income comes from agriculture cannot be accepted especially in a planned economy. If the purchasing power in the agricultural sector is allowed to go down, it is sure to bring about a slump in the market for manufactured goods and unemployment in its wake, thus starting a vicious circle which would upset the Plan completely. Since the object is not to peg the price at too high a level but only to prevent it from falling to an uneconomic level, there is no reason why the proposal should prove unduly burdensome. It may be also pointed out here that the time when it may be necessary for the buffer stock administration to make heavy purchases will precisely be the occasion when deficit financing will be feasible. Therefore, losses which the buffer stock administration may have to incur should not cause undue concern.

No large loss in the long run.

Surplus stock to be used for development work.

Although in times of depression the best way of pumping purchasing power into the economy may be through public works, yet the planning and execution of public works will take very often a long time and will not be adequate to cope with a sharp decline in prices. In such an emergency buffer stock purchases will be the quickest way of injecting additional purchasing power into the economy.

Organisation

19. It would be necessary to make adequate provisions for administrative machinery, for a revolving fund, for storage accommodation and also for incurring loss up to a certain limit over a period of five years. Neither the working funds required nor the loss envisaged are, however, likely to exceed what had actually to be met for the Food Administration in the past. As regards organisation, to begin with, it may be of advantage to convert the present food administration into buffer stock administration and utilise its trained personnel and godowns. Later on, however, it may be of advantage to form a separate corporation so as to make it as independent as possible of political pressure.

Public Works Programme

20. As regards the public works programme it would be necessary to have a supplementary list of fully worked out schemes included in the Second Five Year Plan. Otherwise our experience is that by the time the new schemes can be planned and approved and put into operation considerable damage is already done. Besides having a supplementary list of schemes which can be put into operation at short notice, all the schemes included in the Second Five Year Plan should be classified as far as practicable into (a) schemes of production and (b) schemes of economic and social overheads. Production schemes should be divided into (i) early maturing and (ii) late maturing schemes according as goods will be produced and marketed within a relatively short period or not. In times of inflation public investment on "early maturing production" schemes should be stepped up. At the time of deflation, expenditure on "economic and social overheads" should be increased. And again it would be of advantage to sub-divide each scheme into a rigid part and a flexible part wherever possible. While the rigid part will have to be continued in any case, the flexible part may be adjusted suitably according as there is inflation or deflation. All these would enable the Planning Commission to effect a more appropriate deployment of resources according as the general trend is inflationary or deflationary than would be otherwise possible. In fact, in the Second Five Year Plan the strategic deployment of resources will be no less important than the mobilisation of resources. And for this purpose there should be sufficient flexibility in the Plan itself. A well thought out programme of deployment of resources which is properly attuned to the general price trends would not only make available resources go further than they would normally do but in the ultimate analysis would also go a long way towards a better mobilisation of resources. In this connection it would be useful (xix) to make a careful study of the timelag between the various broad types of public investment and the effect produced by them on prices and wages and also of the reaction of future markets to various anti-inflationary or anti-deflationary measures taken by Government.

Development of resources.

Direct Physical Controls

21. It is expected that if these various measures are taken it will not be necessary to take recourse to direct physical controls to any great extent. If, however, all these measures fail, the Planning Commission should be prepared to take recourse to "restrictionism" in times of acute depression and to rationing and procurement in times of acute inflation and should have plans ready for the same. But such direct physical controls are not only irksome but also have very harmful effects in the long run and should not, therefore, be resorted to except in great emergency and even if resorted to should not be continued beyond the absolutely minimum period necessary.

Recession to be avoided at all costs

22. There seems to be a feeling in some quarters that inflation will continue to be the main problem during the Second Five Year Plan period. Although the possibility of inflation cannot be completely ruled out, present indications, however, are that we should be troubled more by price recession, either over-all or in certain pockets or seasons, rather than acute inflation during the Second Plan period. The quantum of investment envisaged for the Plan is no doubt large but unlike war time investment it will be very largely on "production" schemes. The danger, therefore, may very well be that additional supply of goods will sometimes outstrip additional purchasing power at least in the short period rather than the other way about. We shall have, therefore, to take special care that the development of the various sectors of the economy is so balanced that the additional production in one sector may be readily absorbed by the additional purchasing power generated in other sectors. Our objective should, of course, be to avoid both inflation and deflation. But if the choice lies between a mild inflation and recession, we should avoid the latter rather than the former. For, a mild inflation provides a much better climate for investment and economic development than recession can ever do.

23. It should be borne in mind that a recession developing in the world market may completely upset the price structure within the country and thus upset the Plan. Export/import quotas and duties and subsidies may, no doubt, help to a certain extent in this direction but may not be enough if there is really a serious depression. In completely socialised countries like the U. S. S. R., State-trading has been resorted to partly for insulating the domestic economy completely from the vagaries of international trade. We need not go so far but we should be prepared to take fairly drastic measures to insulate our own economy in case a serious depression develops abroad.

ORGANISATION AND TECHNIQUES OF ECONOMIC PLANNING IN THE U.S.S.R. WITH SPECIAL REFERENCE TO AGRICULTURE

by

DR. S. R. SEN

I. ADMINISTRATION AND PLANNING OF AGRICULTURE IN U.S.S.R.

Administrative Structure in U.S.S.R.

Soviet Russia has a federal structure of Government. There is the Union Government at Moscow which is the Federal Government for all the constituent Republics of the Soviet Union. Below it there are 16 Union Republics each with its own legislature, Council of Ministers and Planning Commission. Each Union Republic is divided into a number of Oblasts (or Regions) and in a few cases they include also what are known as small autonomous Republics or Territories which for all practical purposes are equivalent to Oblasts. Each Oblast has its own administrative machinery as well as its planning machinery and comprises of a number of Raions (or districts) which again have their own planning as well as administrative machinery. Below the Raion the lowest administrative unit is the Town Soviet or the Village Soviet. But the lowest planning unit is the factory or the collective farm or the State farm. We propose to discuss below the structure of economic administration as also process of planning at each level from the Union Government downwards with special reference to agriculture.

Supreme Soviet

2. The supreme political as well as economic authority in the Soviet Union is the Supreme Soviet of the U. S. S. R. which is equivalent to our Parliament. All major decisions regarding planning have to be approved by it. But in practice the Supreme Soviet is a decision recording body rather than a decision making body. The real decision making bodies in the Soviet Union are the Council of Ministers and the Central Committee of the Communist Party. In practice it is the President of the Council of Ministers and the General Secretary of the Communist Party, who are the two key figures in the Soviet system of administration and who between themselves virtually rule the whole country.

Council of Ministers

3. The Council of Ministers of the U.S.S.R. has under it a number of Ministries, *e.g.*, Agriculture, State Farms, Heavy Industries, Light Industries, Foreign Trade, Home Trade, Finance, Transport, Internal Affairs, Foreign Affairs, etc. as also the Gosplan or the Planning Commission and the Central Statistical Office. The Chairman of the Planning Commission is a member of the Council of Ministers. In fact the present Chairman, Mr. Saburov,

is one of the four Deputy Prime Ministers. The Director of the C.S.O. holds office directly under the Council of Ministers, but is not its member. Formerly he was a member of the Planning Commission but recently there has been a complete separation between the C.S.O. and the Gosplan.

4. In the system of Soviet Economic Administration, the Gosplan, the various Economic Ministries and the C.S.O. are the key stones.

Planning Commission

5. The Gosplan comprises of about 20 members, all of whom are whole-time officers. No member of the Gosplan is permitted to hold at the same time charge of any Ministry because it is felt that Gosplan being a coordinating body should be in a neutral position to take an over-all view rather than the view of a particular Ministry. The members are specialists in different fields of the economy. While the Chairman of the Gosplan is a member of the Council of Ministers, the other members do not have ministerial rank or function. Besides the Chairman, the Gosplan has 12 Deputy Chairmen each of whom controls 2 or 3 Divisions. The Gosplan is divided into a number of Branch or Subject-Divisions and Functional Divisions. The Branch Divisions deal with different subjects of economic administration, *e.g.*, agriculture, iron and steel, fuel, electrification, supplies and deliveries of agricultural products, light industries, local and cooperative industries, transport, culture, health, etc., and are more or less counterparts of the various economic Ministries. The Functional Divisions seek to coordinate and scrutinise the proposals of various Branch Divisions from different economic points of view. The nature of their work will be apparent from their names, *e.g.*, Division of National Economic Plan, Division of National Perspective Plan, Division of Finance, Prices and Working Costs, Division of Capital Works, Division of Natural Resources, Division of Home Trade, Division of Foreign Trade, Division of Territorial Distribution of Productive Capacity, Division of Inspection and Use of Productive Capacity, Division of Balances and Plans of Supplies, Division for Distribution of Man-Power, Division for new Techniques, Council of Technical and Economic Experts, etc.

Council of Technical and Economic Experts

6. The Council of Technical and Economic Experts of the Gosplan is a very interesting body. It seeks to maintain the closest liaison between the scientists on the one hand and the Planning Commission on the other. All its members except the President are part-time workers and are selected from front rank scientists in various fields. The Academy of Sciences as well as other academies are represented on this body. The President of this Council is a whole-time member of the Planning Commission. This Council submits periodically to the Gosplan analysis of various projects referred to it from time to time by the Gosplan. Gosplan also appoints special working groups of scientists from time to time on which are co-opted specialists from various scientific organisations as and when necessary.

7. The Union Planning Commission has a staff of about 1,000 technical experts. It is housed in a most imposing sky-scraper type building near the Revolution Square of Moscow.

Since it is the repository of all secret information about the Soviet economy it is a very closely guarded place. Passes are checked at three or four centres before one is allowed to enter it.

Union Ministries

8. The organisations of the various Union Ministries naturally vary according to their functions. There is nevertheless a broad similarity of structure. We propose to describe below the organisation of the Union Ministry of Agriculture as an illustration.

Ministry of Agriculture

9. The Union Ministry of Agriculture has a total technical staff of about 1,800. It is headed by a Cabinet Minister and 5 Deputy Ministers. In Soviet Russia Ministers are not necessarily politicians. In fact about half of the Cabinet Ministers and almost all the Deputy Ministers are promoted officials. The Deputy Ministers in particular are specialists in their respective fields.

Under the Minister for Agriculture there is a Council of nine comprising the Minister, the five Deputy Ministers and three Heads of Departments. The Heads of Departments represented on the Council are the Head of the Economic and Planning Department, the Head of the Department of Supplies and the Head of the Department of Irrigation. The main Departments of the Ministry are as follows. The figures in brackets show the strength of the technical staff of each Department.

- (1) Economic & Planning Deptt. (240)
- (2) Deptt. of Supply (100)
- (3) Deptt. of Irrigation (80)
- (4) Deptt. of Animal Husbandry (80)
- (5) Deptt. of Machine Tractor Stations (300)
- (6) Deptt. of Extension & Scientific Research (225) †
- (7) Deptt. of Electrification (25)
- (8) Deptt. of Forestry (130)
- (9) Deptt. of Agricultural Education (50)
- (10) Deptt. of Programmes of Kolkhozes (25)
- (11) Deptt. of Agricultural Construction (80)
- (12) Deptt. of Land Utilization and Land Policy (20) †
- (13) Deptt. of Finance (30)
- (14) Deptt. of Labour & Wages (15)
- (15) Deptt. of Accounting (15)
- (16) Deptt. of Surveys (100)
- (17) Deptt. of Law (8)
- (18) Deptt. of Inventories (23)
- (19) Deptt. of Insects and Pests (17)
- (20) Deptt. of Scientific Techniques (14)

10. It may be noted that the above staff represents the staff located in the Ministry only and does not include the staff of the subordinate offices. Where the Ministry has very large subordinate office, for instance the Department for Control of Insects and Pests or the Department for Irrigation, the staff in the Ministry is necessarily small. On the other hand, where there is no subordinate office, for instance, the Department of Machine Tractor Stations, the staff in the Ministry is necessarily large. The number of personnel shown against each Department should not, therefore, be taken as indicating the relative importance of each department or of the total number of persons working on these subjects. The Department of Scientific Techniques has only a staff of 14 in the Ministry but attached to it there is a Council comprising 50 scientists from various Academies and Research Institutes.

Planning and Economic Department

11. In order to give some idea of a particular Department we may take the Planning and Economic Department as an illustration. As there is the Planning and Economic Department for the Ministry as a whole, similarly there is a small unit for planning in each of the important functional Departments. For instance, the Animal Husbandry Department has a planning staff of 5 whereas the Department of Machine Tractor Stations has a planning staff of as many as 17. These Planning Units of the various Departments although they are located in different Departments are really under the control of the Planning and Economic Department. Out of the 240 people working in this Department about half work on planning for the Ministry as a whole and the other half work in the various Departments. This Department has three Divisions:—

- (i) Planning,
- (ii) Economic and
- (iii) Statistics & Methodology.

12. The Planning Division consists of the Planning Units in the various Departments plus a Co-ordination Unit in the Division itself. The Economic Division carries on investigations either directly or through various agencies in the States and Research Institutes into various problems of farm management and agricultural economics, *e.g.*, cost of production, productivity of labour, specialisation in different types of *Kolkhozes*, etc. The Statistics Division deals with all statistical information which is required for the administrative work of the Ministry.

Statistics

13. In Soviet Russia all agricultural statistics are divided into two parts: (i) Figures regarding operations, *e.g.*, how much land has been sown, how much crop has been harvested, how much fertilizers have been distributed, how much milk has been produced, how much fodder is being consumed, etc., are operational statistics which are collected exclusively by the Statistical Organisation under the Ministry of Agriculture. (ii) Figures which give the over-all picture of the agricultural economy, *e.g.*, figures regarding overall acreage, production, cattle numbers, etc., which are collected once or twice a year or once in 5 or 10 years through censuses, are collected by the various collective farms, State farms, Machine Tractor Stations, etc., and one copy is sent to the Union Ministry of Agriculture and the other copy is sent to the

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C.S.O. While the Statistical Division of the Ministry of Agriculture uses the data for its administrative purposes, over-all compilation and publication for the country as a whole is done by the C.S.O. The Central Statistical Organisation has a Council of Scientific Methodology of which the Head of the Planning and Economic Department of the Ministry of Agriculture is a member. The reason why publication of all statistical data is centralised in Russia in the hands of the C.S.O. is that it enables the C.S.O. to advise the Planning Commission and the Council of Ministers independently, to keep a check over the work done by the various Ministries, but above all to keep the data secret. In Russia a vast amount of statistical data is collected every year, but a very small proportion of it is published. Even what is published especially regarding production is more in terms of percentages of previous years rather than in absolute figures.

It appeared to us that one of the main reasons behind the centralisation of the publication of statistics in the hands of C.S.O. is this emphasis on secrecy. The C.S.O. every year makes proposals to the Government as to what figures should be published and it is only these which find the light of the day. On our questioning why they had this duplication by which same returns went to the C.S.O. as well as the Ministries, we were told that this was considered to be useful rather than a waste of effort, because one acted as the check on the other. In Russia where the market mechanism is not there, the accuracy of statistics is very important for planning purposes because planning has to be done not only for the State as a whole but also for each small unit, *e.g.*, the collective farm or the factory or the village or the district. Because the statistics collected are scrutinised simultaneously by two organisations—by the C.S.O. who have better knowledge of statistical methodology and by the Ministries and local authorities concerned, who have better knowledge of local conditions and also of the subject, the advantage is that one acts as check on the other and there is mutual discussion for correcting any discrepancy which may occur. But it is the C.S.O. which is the final authority as to what figures should be accepted.

Central Statistical Organisation

14. In this context it will be perhaps useful to say something about the organisation of the Central Statistical Office. The Russians consider that a strong Statistical Organisation is indispensable in any planned economy. In a *laissez-faire* economy where the pricing system in a free market generally adjusts supply and demand at various levels, over-all statistics are perhaps sufficient for economic administration. But in a completely socialistic economy where the guidance of the pricing system in a free market is absent, detailed statistics regarding supply and demand position at each level from the farm and the factory upwards are indispensable for the purpose of economic administration. Moreover, it is extremely important that these statistics should be very accurate. For even small mistakes in statistics may have disproportionate effect on economic decisions and may completely upset the economic calculations. That is why in Russia they maintain a huge Central Statistical Organisation besides having independent statistical units in different administrative departments and the information collected by each is used to check the information collected by the others and a certain amount of duplication is considered to be desirable from this point of view.

15. The C.S.O. in Russia has a total statistical staff of 36,000. Its Head Office is at Moscow, but it has sub-offices at the Republic Headquarters, at the Oblast Headquarters down to the Raion Headquarters. The staff in Moscow Headquarters is about 800 so far as the main Secretariat is concerned. Besides this there is a computing office where all machine computations are done. This office employs a staff of 1,000 and has a very large number of electronic machines. Besides this there is a special office for statistical publications which also employs about 500 people. At the top of the C.S.O. is a Director who holds office directly under the Council of Ministers. Until 1948 the C.S.O. was under the Planning Commission. But since 1948 it has been made an independent organisation because it was felt that this separation would enable the Council of Ministers to get an independent report from the C.S.O. on the work of the Planning Commission. The offices of the C.S.O. at the Republic and lower levels are all under direct administrative control of the Head Office in Moscow and are maintained from the Union Budget. The offices of the C.S.O. at the Republic and lower levels, however, are required to serve the Republic Governments and local authorities also. The office of the C.S.O. at the Republic Headquarters has usually a staff varying from 80 to 400 depending on the size of the Republic. Similarly the office of the C.S.O. at the Oblast Headquarters has a staff of 10 to 70, at the Raion Headquarters 2 to 5. Besides Raions there are also representatives of C.S.O. located in important factories and cities. The lowest officer who is called a local Inspector, supervises the book-keeping in the collective farms, State farms and factories. He is usually a man who has been given 3 years' training in a Statistical School. There are about 17 such schools for the training of local statistical inspectors in the whole of Soviet Russia. As has been explained above, statistical information from each factory or collective farm or State farm goes up in two parallel directions—one through the offices of the concerned Ministries and the other through the offices of the Central Statistical Organisation. At the lowest level, however, it is the local Inspector of the C.S.O. who supervises the collection and compilation of data by the Accountants of the collective farms and factories. The senior officers of the Ministries or of the C.S.O. at higher levels check these data in the light of other information which may be available to them. The C.S.O. in Moscow has to send to the Planning Commission and to the Ministries concerned :—

- (a) Every day certain key data about production, *e.g.*; steel, electrical energy, coal, oil, cotton textiles, transport, etc.
- (b) Once every ten days details about the above.
- (c) Once every month corrected data about the above and also data regarding number of cattle in Kolkhozes, the amount of milk produced in Kolkhozes and Sovkhozes.
- (d) Once every six months area under crops, production of crops in Kolkhozes and Sovkhozes.
- (e) Once every year number of cattle belonging to private individuals, production of small enterprises, etc.

16. The C.S.O. is at the service of all the Ministries concerned and supplies them with necessary data immediately on request. There is also very close liaison between the Ministries and the C.S.O., of which the Heads of the Economics and Statistics Departments of the

important Ministries are members. The C.S.O. also gives advice on methodology to the Ministries in regard to statistics which are collected by them directly. As has been mentioned earlier all statistical publications are centralised in the C.S.O. and only a very small part of the total amount of statistics collected is published and for that purpose order of the Government has to be taken by the C.S.O. every time. The last publication giving figures of production of the crops in Russia was brought out before the War. We were told by the Director of the C.S.O. that they are considering the desirability of bringing out a volume giving the latest figures of agricultural production. We are not sure, however, if the figures will be mere percentages or some absolute figures will be also published. The Director of the C.S.O. gave us, however, two interesting pieces of information. Firstly, the figures relating to production of agricultural crops will in future not refer to biological yields or the production as on the field but only to the volume of the surplus which has either been stored in the godowns of the collective farms or delivered to the State authorities. He explained that so far as the national economy is concerned it is not the production on the field which is important but the surplus which is available for the use of the nation. Moreover, the figure of production as on the field can never be as accurate as the figure of the surplus which is available to the nation and hence they are no longer collecting figures about the production on the field. Secondly, he said that they are not also collecting figures of production of crops on the personal allotments of the collective farmers. He said that this production is very small and unimportant so far as the national economy is concerned. It would, therefore, appear that the Soviet agricultural statistics are rather incomplete judged even by our standards and they have cut the Gordian knot of collecting statistics from small private allotments of farmers simply by not collecting the statistics at all. We were, however, told that complete enumeration is the method which is mostly used in Russia. They require this method because they have to plan for every field, every farm and every factory and sampling is not very useful for this purpose. Nor is it necessary because each factory and each collective farm has a very complete system of accounts and the question is merely of extracting these figures and compiling them at each successive higher level. In Russia they are making use of sampling for finding out information about consumption pattern, family budgets, etc., and not for the estimation of production or area. They have got a sample of 22,000 urban families and 9,000 families of collective farms from which they collect regular information about family budgets.

Administration in the Republics

17. The administrative system which obtains at the Union level is more or less repeated at the State level. For instance, at the Headquarters of the Republic of Uzbekistan which we had opportunity to study there is a Republic Soviet and then there is a Council of Ministers and a State Planning Commission and a State Statistical Organisation. The State Statistical Organisation is, no doubt, a part of the C.S.O. but the others are theoretically independent of the Centre. There is, however, considerable difference between theory and practice in Soviet Russia. In theory each Republic in Russia is entirely independent. It can even secede from the Union if it likes. But in practice it is much more subordinate to the Union

Government than any State in India. In the first place the Communist Party is a very strong controlling organisation in the hands of the Central Authorities. Secondly, most of the important sources of finance are controlled by the Union Government. The financial resources left to the States are so meagre that they are not in a position to look after anything except routine administration of law and order and items like health, culture, etc., For any big developmental project whether it is a big factory or a big irrigation scheme or a big agricultural scheme or a national road, the Union Government has to make necessary provisions. Moreover, the State plan has to be approved by the Central Government and is an integral part of the over-all plan of the country. This completes the subordination of the Republics to the Union Government.

The Planning Machinery at the Republic Headquarters in Uzbekistan

18. In this context, it may be of interest to give some idea about the organisation of the Planning Commission and the Ministry of Agriculture of the Republic of Uzbekistan. The Uzbek Government Planning Commission comprises nine members nominated by the Government. The Chairman of the Planning Commission has the rank of a Minister, but he is not a member of the Council of Ministers. There are four Deputy Chairmen. All the members of the Planning Commission are full-time members. There are 17 main Departments in the Planning Commission, *e.g.*, Deptt. of Coordination, Department of Health and Culture, Department of Agriculture, Department of Planning and Construction of Buildings, Department of Supply of Materials and Equipment to Industry, Department of Supply of Shoes, Textiles, Wool, Kenaf and Silk, Department of Supply of Consumer Goods, *e.g.*, fish, milk, canned goods, oil, condiments, tobacco, bread, wine, etc., Department of District Cooperative Societies, *e.g.*, potteries, furniture, agricultural implements for local use, knitting, special local textiles, etc., Department of Turn-over of goods, *e.g.*, shops, restaurants, dairies, etc., Department of Transport and Department of Finance. There is a total staff of 120 at the Headquarters of the Planning Commission of the Uzbek Republic. The Planning Commission has 10 branches, 9 for the 9 Oblasts of the Republic and one for the autonomous Republic of Karakul Paks kaya which is a constituent part of the Uzbek Union Republic. The Planning Commission, at the Oblast level, have a staff varying from 15 to 18 depending on the size of the Oblast. Below each Oblast there are about 32 Town Planning Commissions each having a staff varying from 3 to 15 and 130 District Planning Commissions each having a staff of 3 to 4. The officers of the Planning Commission at various levels are usually Graduates in Economics. But there are a few who have Agricultural or Engineering Degrees. The Agricultural Division of the Planning Commission has four Sections, *e.g.*, Section on Cultivation, Section on Cattle Breeding, Section on Mechanisation, and Section on Collective Farm Economy. The Chief of the Agriculture Division is an agricultural officer of long experience with a high agricultural degree. The Chief of the Cultivation Unit is an agronomist. The Chief of Cattle Breeding Unit is an animal husbandry expert. The Chief of the Mechanisation Unit is an engineer and the Chief of the collective Farm Economy Unit is an economist.

Ministry of Agriculture in Uzbekistan

19. The organisation of the Ministry of Agriculture of the Uzbek Republic is as follows:— The Ministry has a staff of 180 employees at Headquarters in addition to staff at the Oblast and at the Machine Tractor Stations. The staff at each Oblast Headquarters is about 40 to 50 persons. In each Oblast there are about 20 to 25 Machine Tractor Stations which have a full complement of technical staff, sometimes even as high as 200 to 300 depending on the size of the Machine Tractor Station. Besides the Minister there are five Deputy Ministers and a number of heads of Departments. There is an Advisory Council of 9 to 11 members consisting of the Minister, the Deputy Ministers and the important Chiefs of Divisions. The main Divisions are Economics and Planning, Finance, Cotton, Grains, Fruits and Grapes, Machine Tractor Stations, Forests, Silk, etc. One typical Department, *e.g.*, Machine Tractor Stations Department comprises one Chief, one Deputy Chief and 4 Divisions, *e.g.*, (i) Exploitation of Machines, (ii) Repairs, (iii) Finance and Planning and (iv) Accounting, each Division having a staff of 4 to 5 persons.

Planning Machinery at Oblast Level.

20. At Stalingrad we had the opportunity of studying the Organisation of the Planning Commission and Agriculture Department at the Oblast level. The Planning Commission of the Stalingrad Oblast has a staff of 30 people all of whom are economists. Besides this, each of the 43 Raions of the Stalingrad Oblast has a staff of 3 economists who work under the control of the Oblast Planning Commission of Stalingrad. The Oblast Planning Commission has one Chairman, one Deputy Chairman and Chiefs of Sections, *e.g.*, Agriculture, State Farm, Industry, Health, Education, Fuel, etc. The Chief of the Agricultural Section has under him a staff of five economists.

Agriculture Department at Oblast Level

21. The Agriculture Department of the Stalingrad Oblast has a total staff of 150. There is a Chief of the Department and two Deputy Chiefs and there are the following Divisions with the staff of each indicated in brackets:—

Extension and Mechanisation (MTS) (27)	
Animal Husbandry	(12)
Irrigation and Water Control	(6)
Forest	(17)
Finance	(7)
Planning & Economics	(12)
Organisation of Kolkhozes	(5)
Crop-Rotation & Land Utilization	(7)
Training	(7)
Secretariat	(8)
Construction	(8)
Five Zonal Divisions	(10 each)

22. The Planning and Economics Division of the Oblast Agriculture Department works in close cooperation with the office of the Planning Commission at the Oblast level. Below the Oblast level there is a planning staff of 3 to 4 at each District level and planning staff for the Agriculture Department in each Machine Tractor Station. When it is remembered that in the Soviet Union there are altogether 94,000 collective farms, 9000 Machine Tractor Stations, 4,700 State farms, about 4,000 Districts and 16 Republics, the total amount of technical and planning staff which is employed there would seem to be colossal even for agriculture alone. Besides the Ministry of Agriculture, there is the Ministry of State Farms at the Union level and the Ministry of Milk and Meat and Other Consumer Goods which also have similar large organisations and are concerned with agriculture. Besides, there is a Ministry of Supplies which is responsible for the distribution of grains. At the Republic level there is a Ministry of State Farms and a Ministry of Irrigation and a Ministry of Supplies, besides the Ministry of Agriculture and each of these has equally large staff as the Ministry of Agriculture described above. It should be also remembered that Uzbekistan which we gave above as an illustration is a relatively small Republic. The Russian Republic which is the largest has much bigger staff than the Uzbek Republic.

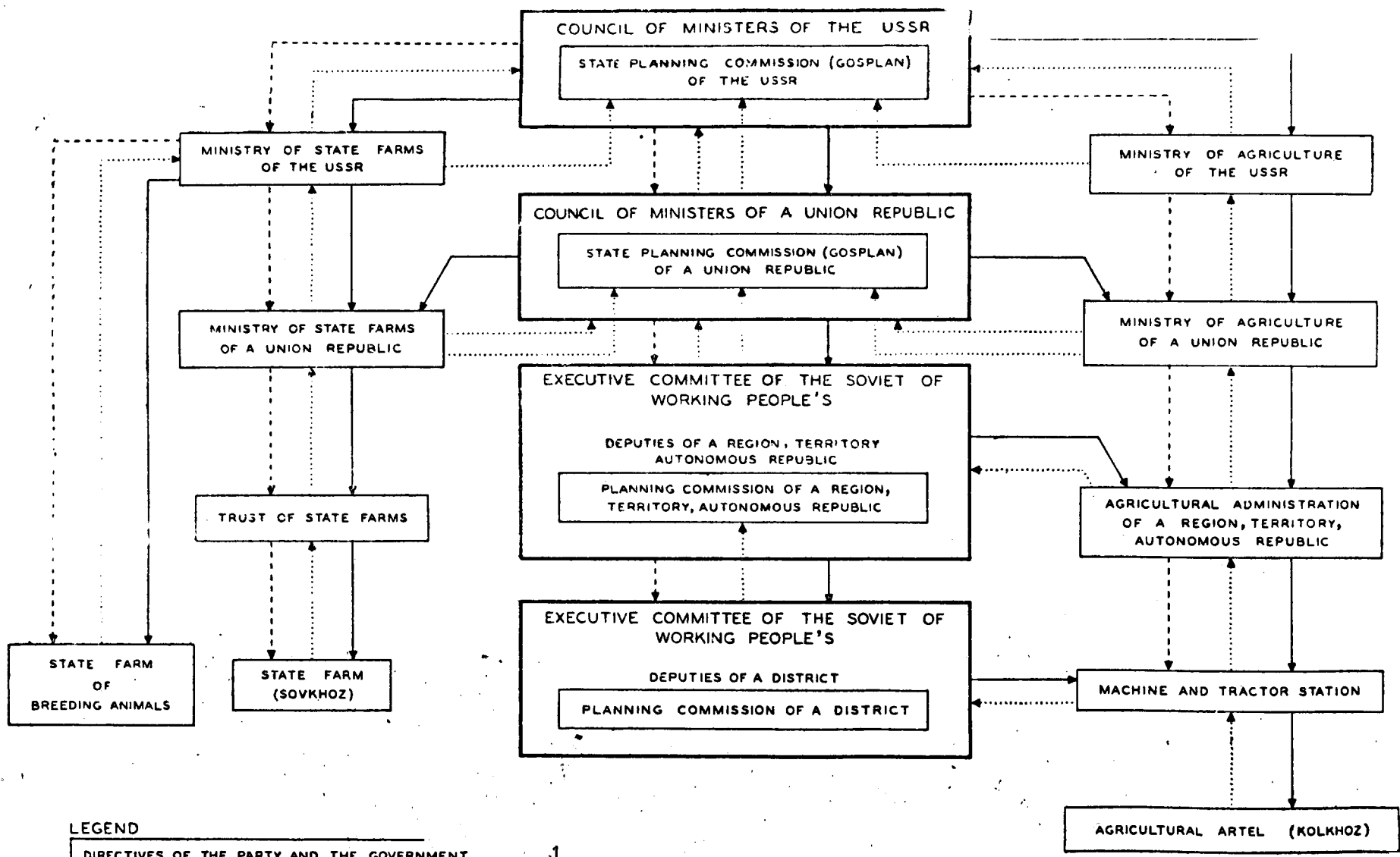
II. TECHNIQUE OF AGRICULTURAL PLANNING IN U.S.S.R.

Planning from the Top

1. Planning in Russia is done both from the top downward and from the bottom upwards. (Please see enclosed chart.) Planning at the top is done by the Union Planning Commission in consultation with the various Union Ministries and is usually of two types. In the first place there is the long-term plan or what the Russians call perspective plan. Secondly, there is the current annual plan which the Russians call concrete plan. On the basis of the data collected by the C.S.O. and the various Ministries as also on the basis of other information available with the various organs of the Central Government, the Branch Divisions of the Planning Commission and the Planning Divisions of the various Economic Ministries proceed independently to work out certain tentative targets for the perspective plan. The perspective plan is usually for a period of five years, but in some cases, it may be for shorter or longer periods. For instance, some plans for electrification are for 10 or 15 years. But these are broken down to five-year plans in order to fit in with the over-all five-year picture.

Deliberate duplication. Simultaneous planning by the Branch Division of the Planning Commission and the Planning Division of the Ministry is not considered as wasteful duplication but is held to be useful in as much as it assists the checking of one set of ideas by another and also helps to bring out certain points which planning at only one place might overlook. Generally speaking, preliminary planning by the Branch Division of the Planning Commission is influenced more by over-all economic considerations, especially the availability of resources, while planning by the Planning Division of a technical Ministry is influenced more by technical considerations. If the former brings out clearly the requirement of the situation, the latter tends to emphasise the technical possibilities. This is followed by mutual consultation between these two Departments as a result of which the Branch Division of the Planning Commission suitably modifies its tentative plan. The Plan is then examined by the various

SCHEME OF PASSING A PLAN OF AGRICULTURAL DEVELOPMENT IN THE U.S.S.R.



LEGEND

DIRECTIVES OF THE PARTY AND THE GOVERNMENT
 DRAFT PLAN
 STATE PLAN APPROVED BY THE GOVERNMENT

Functional Divisions of the Planning Commission and finally goes to the Co-ordination Division who try to fit in the various sectional plans into a comprehensive national plan. These papers are then placed before the members of the Planning Commission who try to match the requirements with technical possibilities and balance the demands of various sectors with the economic resources available to the nation. The draft perspective plan thus prepared is then put up to the Council of Ministers who give necessary directives to the Planning Commission. The draft perspective plan is then suitably amended by the Planning Commission in the light of these directives and sent to the Ministries concerned. This draft plan is kept as a secret document in the Ministries and is not sent further down. It just puts a rough picture before the Central Ministries as to the over-all economic position and sets certain tentative targets for the general guidance of the Ministries.

Planning from the Bottom : Broad Directives from Above

2. Simultaneously planning starts also from the bottom. In the light of its experience of past years and its judgement of future technical possibilities each factory and each collective or State farm prepares a perspective plan of its own. Generally they concentrate their attention on technical possibilities rather than on over-all economic requirements except in regard to two or three very important items about which they get some guidance from the announcements or speeches of the top leaders of the Government or the Communist Party as to what the most urgent national requirements are. These top leaders usually base their announcements on the preliminary assessments made by the Planning Commission as described above. The plans of the collective farms and the factories then come up to the Centre through two different channels—one through the Planning authorities at the District, Oblast and Republic levels right up to the Union Planning Commission and second through the Departmental authorities at the Oblast and the Republic levels right up to the Union Ministries concerned. At each stage there is appropriate examination from the economic and technical points of view and necessary co-ordination from the District, Oblast or Republic point of view. The Union Ministries then re-examine the tentative draft plan which was earlier prepared by the Planning Commission in the light of the plans received from the Republics.

Matching of Draft Plans

3. It is at this stage that final balancing of the technical possibilities, as set out in plans submitted by the Republics and the over-all requirements as assessed by the Planning Commission, is made. The general bias is to interfere as little as possible with the plans received from the Republics in as much as these are considered to be more realistic of the two. If, however, in the light of the over-all considerations as revealed by the draft plan prepared by the Planning Commission it is felt that the plans of the Republics should be changed to a certain extent, additions wherever possible are preferred to subtractions. Where subtraction is inevitable it is not done in a *pro-rata* manner. Only such subtraction is made which would make the best possible use of the economic resources and which would mean the least interference with the plans of individual collective farms and factories. The Republic plans as

modified by the Union Ministries are then sent to the Gosplan which then prepares a final draft plan. This plan is then put up to the Council of Ministers and to the Supreme Soviet for approval and becomes the perspective plan for the next five years. This plan is then published and forms the general guide for all organs of the Government and all Units of Production for the next five years.

Annual Plan

4. But this perspective plan is merely a statement of targets and is not detailed enough. In the light of this perspective plan a concrete plan has to be framed every year. The procedure for the formulation of this annual plan which is called the current plan or concrete plan is more or less the same as that described above for the perspective plan. The main difference is that in the current plan the emphasis is more on planning from the bottom upwards. The formulation of the annual plan starts somewhere about June or July and is finalised round about November-December. Once this plan is approved by the Government it has the effect of a law and is binding on all concerned. It may be interesting here to describe the procedure for the planning in agriculture in some detail.

Planning in Agriculture

5. The main purpose of the plan for agriculture is to establish the right proportion between agriculture and industry, *i.e.*, between foodgrains and raw materials which are required by the non-agricultural consumers and the industrial products which are required for agriculture. Then there is the need for establishing the right proportion between different branches of agriculture, *e.g.*, between crop economy and animal husbandry. This establishment of right proportion between different branches of agriculture depends upon the establishment of certain balances, *e.g.*, the plans of tractors, plans of different agricultural machinery, plans of mineral fertilizers, plans of fodder, etc. In Russia there are about 94,000 collective farms comprising about 760 million hectares of land, 9,000 machine tractor stations having about 1 million tractors (in terms of 15 HP Units) and 276,000 combines and 4,700 State farms comprising about 70 million hectares of land. The collective farms and Machine Tractor Stations are supervised by the Union as well as Republic Ministries of Agriculture whereas 80 to 90 per cent of the State farms are managed by the Union Ministry of State Farms, a small proportion by the Republic Ministries of State Farms and some by the different technical Ministries, especially the Ministry of Meat and Milk Production. Some industrial Ministries, especially those which operate in outlying districts, *e.g.*, Ministry of Oil and Ministry of Coal have also a few small State farms of their own for special purposes, but these form a very small part of the agricultural production of the country. Agricultural planning, therefore, mainly involves planning by the Ministry of Agriculture and the Ministry of State Farms and to a small extent by the Ministry of Meat and Milk Production. As the procedures followed by these Ministries are more or less the same, we shall explain it mainly in terms of the Ministry of Agriculture. Both the Ministry at the top and the farms at the bottom have to take into account a number of factors in the matter of formulation of the agricultural plan. Those are :

- (a) Total cultivated area and area under different crops;

- (b) Yield of different agricultural crops;
- (c) The number of cattle and other animals;
- (d) The productivity of each animal;
- (e) Degree of mechanisation of works in the collective farms and State farms;
and
- (f) Materials and techniques needed to achieve the targets in view.

6. The first step is to analyse carefully the experience of preceding years and examine in particular how the deficiencies and short-comings noticed in the past can be eliminated. The next step is to take into consideration the achievements of progressive collective farms, Machine Tractor Stations and State farms in order to determine how far improved techniques and new machines may be utilised to increase the productivity. This year the Kolkhozes started their planning for 1955 as early as in June 1954. This planning is mainly done by the executive body of the Kolkhoz in consultation with the experts of the local Machine Tractor Station. Sometimes a member of the Communist Party or an officer from the District Planning Commission is informally associated. The members of the Kolkhoz mainly base their plans on their past experience. The representatives of the Machine Tractor Stations help them in assessing the possibilities of technical improvement. The representatives of the Communist Party or of the District Planning Commission if they happen to be present emphasise some of the urgent national priorities in the light of which the production plan has to be determined. The ultimate authority for the preparation of the plan for the collective farm is, however, the Executive Committee of the Farm which has to get the approval of a general meeting of all the members of the collective farm before the plan can be finalized. This plan reached in 1954 the Oblast authority by the 3rd week of June which in its turn sent it to the Republic Agriculture Ministry and the Republic Planning Commission by the end of June. By the first week of July the Republic Planning Commission started examining these various plans and put up its final plan to the Republic Government on the 4th of August. Simultaneously copies of the plans of various Ministries reached the Union Ministries by the 1st week of July who completed their own scrutiny by the 1st week of August. Between 15th August and 15th September, meetings were held in Moscow between the Union Planning Commission, the Republic Planning Commission and the Union Ministries for finalising the plan for 1955. In the light of these discussions the Union Planning Commission finalised their plan by the end of September and the Government gave a decision by the end of October. Necessary adjustments to be made in the draft plan in the light of the decisions of the Government were completed by the middle of November after which the revised plan was sent downwards to the Republics, Oblasts, Collective and State farms so that the collective farms might know definitely by the middle of December their plans for next year. In previous years preliminary targets for even the annual plans used to be fixed by the Gosplan sometime round about July. From 1954 onwards the Gosplan has decided not to fix these preliminary targets so far as current plans are concerned.

Decentralisation in Planning

7. In fact there has been a sharp change in the nature and procedure for planning since 1953. The change has been mostly in favour of reducing central control, increasing local initiative, concentration of emphasis on broad features instead of details and reduction of red tape. It appears that during the last decade or so, the officers of the Planning Commission were trying to plan for greater and greater detail and increasing their zone of control. The control by the Central Planning Commission became so tight that each collective farm had to submit a detailed plan (*Vide* Appendix II) in which particulars regarding acreage and production of different crops, the amount of fertilizers to be used, the amount of chemicals to be used, etc., all had to be set down. The Central Planning Commission used to give directives even for individual collective farms as to what should be produced, how much should be produced and how exactly it should be disposed of and so on. Planning thus became not only too much of an interference with local initiative but matters came to such a pass that the Soviet authorities had to look up and take certain drastic actions. This is the story behind Mr. Khrushchev's famous speech last year in which he roundly chastised officers of the Planning Commission who in their zeal to plan and control every detail of economic life had almost brought economic life itself to a stand-still.

Controversy between Planning Commission & Ministries

8. We discovered that there has been considerable controversy from time to time between the Russian Ministry of Agriculture and the Russian Planning Commission over planning. The officials of the Planning Commission used to think that the agricultural officers were too narrow minded and did not have sufficient broad vision while the officers of the Agriculture Ministry felt that the officers of the Planning Commission were too theoretical and lacked a sense of reality. In fact whomsoever we talked with in the Agriculture Ministry he emphasised how necessary it was to ensure that there should be frequent interchange between officials of the Planning Commission and the technical Ministries and that the Planning Commission should not be a body composed of mere theoreticians. They told us that in 1954 one officer of the Agriculture Division of the Planning Commission, the Head of the Economic and Planning Department of the Ministry of Agriculture and one Agricultural officer from the Republic concerned were touring the country in order to get first hand information from the collective farms so as to make the plan for 1955 more realistic. People in the Planning Commission whom we questioned about the matter admitted that there was a tendency to plan too much in the past but they tried to explain that the recent change was a progressive measure made possible only by the development of technical cadres in the *Kolkhozes*. They said that in the past when the technical cadres in the collective farms were not so well trained, there was a need for central guidance even in the matter of details but now that the technical cadres in the collective farms had become better trained that need was no longer there and hence there had been a relaxation of controls in recent years.

Recent Changes in Russian Economic Policy

9. There is no doubt, however, that the Planning Commission had erred on the side of carrying planning too far. But it also seems that there has been a definite change in Russian economic policy after Stalin's death. There seems to be relaxation in every sphere of economic life in recent years. Not only local authorities are being given greater initiative, there has been also a considerable emphasis on material interestedness or in other words "profit motive" for the farmer. Formerly, the collective farmer had to sell most of his products to the Government. Now his compulsory sales to the Government have been cut down to a very small quantity and he is free to sell either to the Government or in the open market and in fact there are now quite a large number of collective farm markets where agricultural products are being sold openly at prices much higher than controlled prices. The new policy looks somewhat like the dual price policy which the Government of India adopted a few years back for sugar.

III. PLANNING OF COSTS, PRICES AND TRADE IN U.S.S.R.

1. In Soviet Russia the Planning Commission determines not only the production pattern, but also the costs and prices of the various products and how they should be distributed. A brief description of how this is done may not be out of place here.

2. By cost of production the Soviet authorities understand the expenses of a given enterprise in money term for production of goods f.o.r. These expenses include:—

- (a) Cost of raw and semi-manufactured materials which are used for production, fuel and energy. These items usually cover 2/3rd of the total cost of production;
 - (b) Expenses of organisation;
 - (c) Wages including contribution towards social insurance fund;
 - (d) All other expenses primarily connected with administration which are not included in the above;
 - (e) Amortisation in Russia averages 2½ per cent. It is supposed to include full depreciation, but no obsolescence. Obsolescence is supposed to be allowed for in the planning for national economy as a whole and is borne by the State and not by any individual concerned;
3. In Soviet planning of cost of production attention has to be paid to two main items:—
- (i) The determination of the expenditure for raw materials, amortisation and wages as explained above.
 - (ii) The determination of expenditure which is involved in converting the goods into what is called commodities, in other words, the cost of transport, storage and distribution of the finished product upto the stage of consumption.

While the expenses of production of a particular factory include not only cost of production of finished goods but cost of production of unfinished goods also, cost of production of a commodity includes the expenses which relate only to the finished goods produced during a given period and may include any cost incurred in previous periods which may have gone into

the production of these finished goods. Besides the determination of the above two, the Planning authorities also try to secure progressive reduction of cost of production during the plan period. For this purpose they use an index of changes which take place in the average rate of cost during the plan period.

4. In order to establish the above index they use :—

- (a) Material balances, *i.e.*, data regarding material required and material used in the previous year ;
- (b) Amortisation Fund. In order to define this they use the balance of capital funds where the increase of the average annual value of principal funds is given and the norm established by Government for amortisation purposes ;
- (c) Wages. Care is taken that the expenses on this item correspond to the planned amount of wage fund for the plan period under consideration ;
- (d) The figures regarding administration and other expenses for previous years and measures taken in the current plan period for the reduction of such expenses.

5. In Russia the Union Planning Commission establishes figures for cost of production for about 20 items only, *e.g.*, coal, oil, peat, electrical energy, timber, synthetics, rubber, sugar, etc. Costs of production of all other items are established by the Ministries concerned. Generally the Planning Commission establishes costs of only such items which are of national importance and in regard to which there is not much regional difference. There are some products of a very localised character, *e.g.*, special types of local costumes, the costs and prices of which are fixed by local authorities.

Costs of Joint Products

6. In regard to the allocation of costs of joint products a rule of thumb method is generally followed. Certain co-efficients are determined on the basis of existing levels of prices and these are applied for allocating the total cost of production amongst the various joint products. Generally they concentrate on the principal product and try to assess its cost separately and assume that the costs of the by-products do not change and that there is no change in the technique of production either. They admit that this is not a very satisfactory method, but say that this is the only practical method which they have at the moment. They are gradually trying to make the technique more perfect.

Costs of Agricultural Products

7. As regards agricultural products the plan for cost of production establishes costs only for State farms and Machine Tractor Stations. For the collective farms it is only the price which is fixed and not cost of production. Regarding State farms cost of production is established for different items, *e.g.*, for 100 kilograms of grain or cotton or beef or milk or wool, etc. For Machine Tractor Stations cost of production is defined separately for different items of operations, *e.g.*, deep ploughing of one hectare of land, harvesting of one hectare of grain, etc. For transport the plan establishes the cost of one ton/kilometre. Accounts for all these as well as planned estimates of products and services are prepared and published separately.

8. To give an example, in determining the cost of production of a crop like wheat an attempt is made to determine separately two groups of expenses, *e.g.*,

- (i) expenses which can be related directly to the produce, *viz.*, seed, fertilizers, wages of State farm workers, fuel, etc.
- (ii) expenses which are of a general nature for the State farm as a whole, *viz.*, salaries of State farm staff and other administrative expenses. The first group of expenses is calculated on the basis of established norms provided in the plan. The second group of expenses is distributed between different products on the basis of established co-efficients. These co-efficients are established by experts separately for each farm.

Cost of Production of M.T.S.

9. The main items which enter into cost of production of Machine Tractor Stations are :—

- (i) fuel,
- (ii) capital repairs,
- (iii) wages,
- (iv) expenditure for current maintenance of machines,
- (v) administrative and other expenses.

One difference between the determination of cost of production of State farms and of Machine Tractor Stations is, that while in the former amortisation is included, in the latter amortisation is excluded. Amortisation of the M.T.S. is borne by the State and not by the M.T.S. budget because the Government wants to help the collective farms by keeping the cost of service provided by M.T.S. as low as possible. Generally speaking Ministries are supposed to establish plans separately for each State farm or M.T.S. But in practice they establish certain general plans for a number of homogenous zones. Within these zones, the Republic Ministries or Trusts establish plans for each Machine Tractor Station and State farm separately. In preparing these plans not only accounts of previous years are taken into consideration, but the achievements of the best State farms and Machine Tractor Stations in the zone are also kept in view.

Cost of Transport

10. Plans for transport are established in terms of ton/kilometre. It is assumed that the cost of transport of one passenger for one kilometre is equal to transport of one ton for one kilometre. The following items are taken into consideration :—

- (i) fuel ;
- (ii) electrical energy ;
- (iii) medium and current repairs ;
- (iv) expenses connected with maintenance of railways, high roads, water-ways, etc.;
- (v) wages ;
- (vi) administrative and other expenses.

Cost of Turnover

11. The next item in the cost of commodity production is the cost of circulation or of turnover. This cost is generally established in terms of copecks per rouble of retail turnover, as well as in percentages of the level of the previous year. In other words, the plan says that during the current year the cost of turnover should be so much copecks per rouble of retail sales and there should be a reduction of so much percentage over the cost of previous year. The main elements which enter into the determination of cost of turnover are :—

- (i) wages ;
- (ii) transport costs ;
- (iii) interest for credit ;
- (iv) maintenance of shops, etc. (including amortisation) ;
- (v) processes like packing, sorting in shops ;
- (vi) losses in storage and transport by trading organisations themselves.

Fixation of Prices

12. There are two types of prices in Soviet Russia—(i) State prices and (ii) Collective Farm market prices. The latter are not fixed by the State but are left to be determined by the forces of supply and demand in the market. But in as much as the bulk of the commodities traded in the country is sold at prices fixed by the State, the collective farm market prices are also indirectly influenced by the State prices. The State prices are of three main types :—

- (a) State wholesale price,
- (b) State procurement price, and
- (c) State retail price.

Wholesale Prices

13. The underlying object behind the fixation of wholesale prices by the State is to enable it to control the level of expenses in the national economy and to take measures for the reduction of the cost of production progressively. Thus the main basis of these prices is the cost of production which is supposed to reflect the condition of production in a particular industry. Except in the case of the timber industry, prices are fixed in such a way that the industries make a profit. The general level of profit is about 3 to 5 per cent of cost of production. But in the electrical and metallurgical industries the level of profit allowed is as much as 8 per cent. The timber industry generally works at a loss and has to be subsidized by the State. In fixing the structure of wholesale prices of different commodities an attempt is made to maintain a right proportion between the prices of different commodities. This establishment of a right proportion is a very important means for controlling industrial production and for exercising control over the economy as a whole. In Russia the price mechanism is utilised firstly, to stimulate the use of less scarce raw materials in place of more scarce raw materials. For instance, we were told, that sometime back when there was a shortage of copper, Government doubled the cost of copper and introduced premium for the use of substitute metals. This premium was based on copper prices. It is felt that even in a planned economy it is necessary to give such

Margin of profit allowed.

Prices used for resource allocation.

stimulus which encourages economy in the use of materials in certain desired directions. Secondly, the price mechanism is also used to facilitate rationalisation in the matter of transport of goods. For instance, prices of oil are fixed *c.i.f.* within particular zones so as to achieve economy in transport. Thirdly, the price mechanism is used to stimulate the utilisation of new techniques. For instance, when it was found that the use of steel rather than iron is better in the matter of concrete construction the relative prices of steel and iron were fixed in such a manner that people were encouraged to use more steel and less of iron. While the above three considerations are generally borne in mind in determining the wholesale price, the level of profit is determined in such a way that a sufficient circulating fund can be built up for a particular enterprise. Normally the circulating fund consists of owned fund and credit fund. An attempt is made to see that the industry has sufficient owned fund to cover certain minimum amount of fuel, materials, etc. Credit required for purposes like the payment of wages or for additional material, etc. is usually obtained from State Banks.

Procurement Prices

14. The State procurement price is, however, determined on different considerations. It applies mainly to the products procured by the State on a compulsory basis from collective farms and is usually fixed by the State at a much lower rate than the cost of production. The underlying theory is that the State had made available a certain amount of land to the collective farm and is not collecting any rent for the same. The difference between the cost of production and the procurement price fixed by the State is supposed to cover a part of the rent for the land.

Retail Prices and Turnover Tax

15. The State retail price at which a commodity is sold to consumers includes :—

- (a) wholesale price,
- (b) cost of retail distribution, and
- (c) turnover tax.

The turnover tax is the main source of State revenue in Soviet Russia and varies widely from commodity to commodity. Where the State wants to encourage consumption, a turnover tax is fixed at a relatively lower level ; where the State wants to discourage consumption, the turnover tax is fixed at a relatively higher level. The turnover tax is also the instrument by which the State forces everyone to contribute a certain amount for national investment. In the matter of fixing the turnover tax not only a careful study is made of the cost of production and distribution but also of the relative supply and demand position of various commodities.

16. What has been said above about the underlying principles of production and pricing of agricultural commodities applies broadly to other commodities also, although in the case of these commodities the administration is done by other Ministries, *e.g.*, Ministry of Light Industries, Ministry of Fuel, etc.

Distribution

17. The distribution of commodities is mainly handled by the Ministry of Trade. Retail distribution in Russia is carried on through three principal channels :—

- (i) State retail trade network,
- (ii) Cooperative retail trade network,
- (iii) Collective farm market.

The first two constitute the organised sector of the trade and are directly influenced by Government planning. The collective farm market behaves more or less like the free market in nonsocialist countries. But it is to a large extent influenced indirectly by State and cooperative trading which together constitute about 90% of the total volume of the trade in the U.S.S.R. Of the total volume of State trading, the Ministry of Trade accounts for about 60% while 27% is handled by the system of workers' supplies in industrial enterprises. (This system was started during the Second World War when rationing was introduced and is mainly in vogue in areas where the geographical location of industries is such that special organisation is necessary for supplying the day-to-day requirements of the workers. For instance, in the Donetz basin where a large number of industrial enterprises are concentrated, special arrangements for supplying the requirements of the workers have to be made. The remaining 13% is covered by network of other State organisations, e.g., Ministry of Health controls all drug stores, Ministry of Culture runs all book shops, Ministry of Communications controls all sales of stamps, etc. **State trading.**)

Cooperative Trading

18. Besides State trading a fairly large volume of trade is carried on by the cooperative system. There are altogether 23,000 consumer's cooperatives in Russia having 33 million members. In 1954 these cooperatives controlled over 226,000 State enterprises. Any person on attaining the age of 18 is eligible to become a member of cooperative if he lives in the district. He has usually to pay a fee of the order of 150 to 200 roubles. Members of the cooperative elect their executive committee and chairman, the representatives of village cooperatives elect the District Union and the representatives of the District Union in their turn elect the Regional Unions. The Regional Unions elect State Unions which in turn elect the Central Union.

19. Consumer's cooperatives get bulk of their supplies according to the State plan of consumer goods distribution either through an organisation of the Ministry of Trade or through other co-operative organisations. They also get supplies from local cooperative industries and occasionally make purchases in the collective farm markets. Co-operatives generally get their financial requirements partly from the subscription paid by their members and partly from ploughing back their profits. In case of need they get credit from the State also.

Planning of Retail Distribution

20. In planning the retail distribution careful consideration is paid to the following :—

- (a) The general volume of sales,
- (b) The types of commodities to be sold,
- (c) The construction of new shops and restaurants,
- (d) Number of workers and employees in the trade network,
- (e) The possibility of reducing the cost of distribution,
- (f) The amount of profit accruing from trade and the percentage of this profit which is to be paid to the State.

21. In the matter of general planning of trade it is very important to establish a balance between national income and national expenditure during the plan period. Estimates are made of the principal items in national income, *e.g.*,

- (i) Wages—these constitute as much as 75% of the total national income;
- (ii) Income in money terms of the rural population :—
 - (a) Income received by the collective farmers for work done for the collective farm. Here income in cash only is taken into consideration and not income in kind,
 - (b) Cash receipts of collective farm workers from the sale of their own private production,
- (iii) Pensions;
- (iv) Scholarships;
- (v) Other receipts from State organisations, *e.g.*, the State lotteries, prizes, etc., credit given to individuals to build houses; and
- (vi) Other sources of income not included in the above.

22. Only money income is taken into consideration because it is only that part of the income which is spent for distribution of money amongst various items, *e.g.*, savings and expenses that is really pertinent for the planning of home trade. Money income is either spent or saved. Money expenditure can be of two types—

- (i) Non-commodity expenses and
- (ii) Commodity expenses .

23. Non-commodity expenses include :—

- (a) payment for different services. *e.g.*, transport, rent, cinemas, theatres, etc.,
- (b) taxes and payments to different social organisations, *e.g.*, income-tax, payments made to trade unions, Communist party, cooperative organisations, etc.,
- (c) voluntary subscriptions, if any, to State loans, and
- (d) changes in the volume of savings of working population.

It is not necessary to compute the total amount of savings. It is enough if changes within the plan period are estimated because that would give an idea as to what amount of additional income will be saved. The underlying theory is that if more money is saved, less will be available for purchasing goods.

24. Commodity expenses can be obtained by deducting non-commodity expenses and increase in savings from total income. For instance, if total cash receipts are equal to 100 milliard roubles, non-commodity expenses 25 milliard roubles and increase in savings in the year is 3 milliard roubles, then total commodity expenses are equal to 72 milliard roubles. It is this amount which is likely to press on the supply of goods. This no doubt gives the over-all picture but then it is necessary also to know the distribution of this as between different classes of the population, *e.g.*, between workers of factories and those of the collective farms. For instance, to the extent that the workers of factories make purchases at the collective farm markets, there is a transfer of income from the industrial workers to the collective farm workers. Since the consumption pattern of the latter is different from the consumption pattern of the former, it is important to know the extent of this redistribution of income for the purpose of planning trade. It is also necessary to have some idea as to how the total of commodity expenses is broadly distributed amongst different commodities and for this purpose special studies and surveys have to be undertaken.

25. After the necessary data about commodity circulation have been obtained, the planning authorities have to determine how best to correlate with it the various articles on which this amount is likely to be spent. For this purpose a special index number is prepared.

Index of Commodity Circulation

In preparing this index number care is taken that the volume of planned stocks of goods earmarked for commodity circulation should always exceed the receipts for commodity circulation by a small amount. Thus if commodity circulation is equal to 1,000 million roubles, stocks of goods should be 1,030 or 1,035 million roubles. The margin varies in different cases and in different periods and depends on—

- (a) Scale of reduction of prices determined by the State for the plan period. This means that the physical amount of goods sold must be gradually increased following a certain plan so that the total volume of money receipts being the same if the supply of goods increase, it may be possible to bring about a progressive reduction in prices. These reductions are systematically carried out. For instance, in 1954 as a result of reduction of prices the people gained as much as 20,000 million roubles.
- (b) Norms of commodity stocks established by State. The usual norm is that the trade network should always have stocks of goods sufficient for 60 days on the average. For different kinds of goods, however, and for different trade organisations the actual figure varies. For instance, the figure is higher for trade organisations which are situated at a long distance from manufacturing organisations. Moreover, as the volume of commodity circulation varies, these norms have also to be varied from time to time. For the purpose of determining the volume of goods which should be released to the trade network against the volume

of commodity expenses calculated as explained above, the method of balances is used. This is based on a list of commodities which is revised from time to time following the chain method. With the help of this list the plan of balances as prepared by the Gosplan and approved by the Government is given effect to. This plan determines in considerable detail what volume of different goods should be made available to the public.

Market Fund

26. It is the determination of the amount to be sold to the people or the market fund as the Russians call it which requires special care. In the Soviet Union about 60% of all market funds is distributed by the Union Government itself. The remaining 40% is distributed by agencies of the Republic Governments and by cooperative industrial enterprises. The list of commodities for popular consumption contains about 40 to 45 important items *e.g.*, flour, flour products, meat products, fish products, fats, sugar, textiles, foot-wear, knit-wear, furniture, soap, etc., which are distributed by the various Ministries of the Central Government either through their own agencies or the agencies of the Republic Governments. Commodities like watches, radios, sewing machines, etc., are distributed by the Ministry of Trade. Those commodities, production of which is of the nature of local enterprises, *e.g.*, the production of pencils, etc., are distributed in the same locality. Formerly there was greater centralisation in the matter of distribution; recently there has been considerable relaxation, the present emphasis being to give the maximum possible initiative to local trade organisations. At present 60% of the retail commodity circulation handled by the Ministry of Trade is carried out by the local trade organisations of the Ministry. The Central Directorates of the Ministry of Trade handle only about 40% of the total volume of transactions.

Study of Demand

27. The Ministry of Trade and the Central Cooperative Union carry out special studies of the demand situation and of the consumption pattern. For this purpose the Ministry of Trade has set up a Central Institute of Trade which concentrates on studying problems like methods of planning of retail trade, reduction of costs of circulation, relationship between trade and industries producing for popular consumption, determining internal resources and trade, etc.

28. There are a number of practical problems in regard to the estimation of demand and consumption pattern which have not yet been quite solved. An attempt is being made to solve these problems by setting up a number of control shops where these problems are being analysed in detail. Simultaneously special conferences of buyers and consumers are being held to find out their preferences. The Directors of the various Department Stores hold periodical conferences of consumers with this object in view. In estimating the distribution of the total volume of commodity circulation, plans are made not only on the basis of the volume to be handled by the various organisations, *e.g.*, the Ministry of Trade, the Central Co-operative Union, etc., but also on a territorial basis. The Council of Ministers of the Union Government determines the distribution as between the various trade agencies of the Union Government and those of the Union Republics. The Council of Ministers for the Union Republic in their turn determine the territorial distribution as between various regions, districts, cities, etc. As

has been mentioned earlier the plan for commodity circulation also includes plan for reduction of cost of circulation. Principal items included in the cost of circulation are :—

- (i) Wages of workers and employees (40 of total costs),
- (ii) Maintenance of shops and general house keeping (7%),
- (iii) Transport (23 to 25%),
- (iv) Losses,
- (v) The interest on credit granted by the State (3%), and
- (vi) Advertisement.

In Russia the margin allowed for cost of circulation between wholesale and retail prices included in turnover tax is 7 to 8% for industrial goods and somewhat lower for foodstuffs. Out of this, profit comes to about 2 to 2 ½% and the balance represents transport and storage expenses and distribution costs.

IV. ROLE OF FINANCE IN SOVIET ECONOMY

Physical Planning & Financial Planning

It will appear from what has been said in the previous chapters that economic planning in the U.S.S.R. is carried out primarily in physical terms. This is facilitated by the fact that the U.S.S.R. possesses a very elaborate system of statistics and also detailed information about various technical co-efficients derived from the "norms" which have to be fixed as a matter of routine by various enterprises under the Soviet system of factory and farm management. The necessary correlations are worked out by the method of balances.

2. But planning in the U.S.S.R. is also done in financial terms and financial controls play quite an important role in the Soviet economy. The usual procedure is to carry out preliminary planning in physical terms as far as practicable and then to translate it into financial terms and make an estimate as to how much of the financial requirements of the Plan should be met from the resources of State enterprises, collective farms and cooperatives and how much from general public funds, *i.e.*, the State budget. It is, however, the latter which really plays the major role in the total financing of the national economy as will be seen from the following table :

(In milliard Rubles)

	From State Budget	From resources of enterprises & farm organisations	Total
<i>Total Financing of National economy</i>	216·4	110·3	326·7
(i) Heavy industry	79·7	53·5	133·2
(ii) Furtherance of production of consumer goods, improving their quality and enlarging the established trade organisations	14·2	22·4	36·6
(iii) Development of agriculture and animal husbandry	62·5	11·9	74·4
(iv) Development of Transport, etc.	21·5	17·3	38·8

Resources of State Enterprises

3. Although the State owns and controls all State enterprises each State enterprise is treated as a separate entity with its own separate account of expenditure, income, profit and loss and programme for current operations and investment. Necessary provision is made in the financial plan of each enterprise not only for current requirements but also for such expansion and development as may be necessary. Each enterprise is required to provide a certain percentage of its income for its own development. But the State provides the basic funds which the enterprise requires initially and also lends for specified periods such additional working funds as it may need from time to time. The financial return allowed to the enterprise is linked in such a manner to the degree of fulfilment of the tasks allotted in the plan (*inter alia* through a system of incentive bonuses for performances of individuals, shops, plants, etc.) that the management and workers of the enterprise become materially interested not only in the fulfilment and even over-fulfilment of the plan but also in the most economic utilisation of the resources placed at its disposal. The State exercises its economic control over these enterprises to a considerable extent in financial terms. The main objectives of these controls are: (i) reduction of cost of production, (ii) timely repayment of loans given by the State to the enterprise, (iii) more effective utilization of the basic funds, (iv) fulfilment of the plans of capital accumulation, (v) accomplishment of the planned tasks of the enterprise in conformity with the prescribed quality as well as output and (vi) maximisation of the production of the enterprise along the lines indicated in the plan.

Resources of Collective Farms and Cooperative Enterprises

4. Unlike State enterprises which as a whole constitute the common socialistic property, the resources of enterprises in the collective farm cooperative sector constitute the collective property of the respective organisations. Each cooperative enterprise has ordinarily to find the capital required for increasing its output as prescribed in the plan out of its own resources. It can, however, get part of its working capital as loan from the State banks. The transfer of resources from one cooperative enterprise to another or from a cooperative enterprise to a State enterprise is deemed to represent the fulfilment of trade relations. The degree of development of these trade relations determines the relative importance of money in the economic activities of cooperative enterprises and also the degree of development of their financial resources.

General Public Funds

5. General Public funds which are represented by the State budget are utilised for satisfying the general needs of the Society, *e.g.*, general administration, defence, education, health, scientific research, insurance, provision of capital for expanding productive resources, etc. The chief source of revenue for the State budget is the profit and accumulations of the State enterprises. This takes the form of taxes on turnover, deductions from profits, deductions for the fund of State social insurance, return of loans given by banks and payment of interest on these loans. The second important source is the obligatory payments by the collective farms and cooperatives partly for privileges enjoyed and partly for services rendered by M.T.S., Electrical Stations, etc. A third source is tax on personal incomes, payment of insurance premium

from private individuals. Receipts from taxes and other levies on collective farms, cooperatives, and individuals constitute, however, only 8% and State loans only 2.8% of the U.S.S.R. Budget in 1954. Bulk of the receipts come from the first item mentioned above.

High Turnover Tax and Low Income Tax

6. One of the main characteristics of the Soviet fiscal system is the very high rate of turnover tax which is sometimes as much as 500 or 600 per cent and low rate of income tax which varies between 2% and 13%. This is against the canons of progressive taxation with which we are familiar in this country. But the Russian economists are of the view that the canons of taxation which prescribe a low rate of sales tax and highly progressive rate of income tax in capitalistic societies where there is no direct State control over personal income are not applicable to a socialistic society where levels of personal income are directly controlled by the State. In such a society income tax need not be a tool for reducing social inequality but represents only the contribution which the individual should pay towards the cost of administration of the country. The turnover tax, on the other hand, is considered to be very important for such a society in as much as it serves as a tool of economic control especially for maintaining a balance between supply and demand of various commodities.

7. Soviet authorities make quite an extensive use of financial measures as an instrument for controlling production and distribution and utilise what they call "credit-banking" as well as "finance-budget" methods for this purpose.

Role of State Banks in Financial Control (Credit-Banking Method)

8. The banks which are all owned by the State serve both as the treasury and as the accounting centre for all enterprises in the country. They also provide short-term credit. Every State and cooperative organisation must keep its funds in the State banks. By keeping accounts of individual enterprises, organisations and institutions, supervising their monetary transactions and making payments according to the provisions of the State budget, the banks are enabled to control the whole of the circulating funds in the economy. The fundamental tasks of this control are :—

- (i) to supervise and to assist the execution of financial operations as provided in the plan;
- (ii) to stimulate better utilization of resources by factories, firms and other enterprises and to show the possibility of more effective utilization of basic funds, quick repayment of loans, reduction of costs of production and distribution, stimulation of savings, etc.;
- (iii) to audit the accounts of all State enterprises and prevent misuse of State funds; and
- (iv) to strengthen financial (budgetary, credit, and accounting) discipline in general.

Role of the State Budget (Budget-Finance Method)

9. It is, however, the State budget which is the basic financial plan of the State that consolidates finance relating to all branches of national economy, industry, crop production, administration, defence, etc. This basic financial plan is based on the various indices of the 29 P.C.

national economic plan, *e.g.*, volume of capital investment, quantity, quality and cost of different products, volume of turnover and stocks of goods, volume of education, health, etc. The fundamental tasks of financial planning are held to be;

- (i) estimation of the resources of national economy, their allocation for the satisfaction of the various urgent needs of the Society according to prescribed priorities and the full mobilisation of all these resources;
- (ii) stimulation of the effective utilisation of all materials, labour and monetary resources and ensuring the maximum possible economy;
- (iii) guaranteeing the planned proportions in the national economy, maintenance of the conformity between distribution of incomes and the distribution of the goods produced according to the national economic plan.

Role of Soviet Ministry of Finance *Vis-A-Vis* Administrative Departments

10. While it is the Planning Commission which formulates the national economic plan, it is the Ministry of Finance which prepares the State budget in the light of the approved plan and takes the responsibility for the proper implementation of the financial part of the national plan. In this context it may not be out of place to describe the role which the Soviet Ministry of Finance plays *vis-a-vis* the administrative Ministries. Once the annual operational plan which is formulated largely in physical terms is finally decided each administrative Ministry proposes the budget provision in financial terms according to that plan and this is scrutinised by the Ministry of Finance. After the budget has been approved by the Government, the administrative Ministries are free to spend the amounts as laid down in the plan. There is no question of further expenditure sanction as is the practice in this country. Each officer in charge of a certain budget head is free to spend the allotted amount without any further reference to the Finance Ministry. This is considered important because it is the officer in charge who is held responsible for the expenditure of the sum provided and carrying out the project concerned. If the officer fails to carry out the project and if the sum provided remains unspent then he becomes liable to disciplinary action. On the other hand, if the Finance Ministry's concurrence was necessary, before any expenditure could be undertaken then the officer concerned could not be made entirely responsible for non-fulfilment of his part of the plan. Hence, once the budget is passed, the Finance Ministry holds only a watching brief and has no power to interfere on its own account with the working of any administrative Ministry. From each spending Department it gets a short report regarding expenditure every month and a detailed report every three months. It scrutinises these reports and if it is dissatisfied with any action taken or if it feels that the situation has changed so much since the budget was provided, that certain expenditure which has been sanctioned in the project should not be made under the new circumstances it first draws the attention of the officer concerned and has a discussion with him. If there is no agreement and if the Finance Ministry feels that the subject is important enough the Finance Minister contacts the Minister in charge of the Department under question and discusses the matter with him. If there is no agreement and the Finance Minister feels that the matter is important enough to be taken to the Cabinet, he sends a note to the Cabinet, which then examines the question in the light of the explanation given by the Minister in charge of the Department concerned and it is only the Cabinet which has the

power to give a directive to the Department not to proceed with the expenditure in question. Until this directive is given by the Cabinet, the Department concerned is free to go on with the expenditure as was originally planned. We were told that this procedure has the advantage that it places the responsibility for action squarely on the Department concerned and at the same time it enables the Finance Ministry to keep under review the different items of the expenditure. And since it is only the Cabinet which can take a decision that certain expenditure should not be incurred the Officer in charge cannot plead that he could not take any action because of interference from somebody also. If the Cabinet asks him not to spend the money and not to go on with the project, then naturally he has no further responsibility.

11. Considerable importance is given in the U.S.S.R. to keeping a continuous watch over the progress of the plan, taking effective and prompt measures to remove any bottlenecks or other obstacles which may crop up from time to time and adjusting the plan suitably to meet changing circumstances as and when necessary. For this purpose a number of indices are prepared designed to bring out the three main balances of the economy, *viz.* (i) material balances relating to correlation between production and consumption of different products in kind, production, depreciation and distribution of capital goods, utilisation of raw materials, accumulation of consumer goods, exports, imports, etc.; (ii) labour balances relating to availability, distribution and utilisation of different types of unskilled and skilled labour, technicians, specialists, etc.; and (iii) financial balances relating to distribution of national income as between accumulation and different types of consumption, allocation of capital investments as between productive enterprises and social and economic overheads, volume and distribution of wage funds and market funds, volume of commodity circulation, volume and distribution of the cash plan of the State bank, etc. It is the duty of the Planning Commission and the various Ministries to keep a constant watch over these indices and take such action as would ensure a balanced development of the national economy. Any default on the part of an officer in charge of a department or enterprise is very severely dealt with. "Norms" of performance are fixed in each case and full powers given at each level commensurate with the responsibility prescribed. While overfulfilment of the "norm" brings handsome rewards, under-fulfilment means automatic reduction of remuneration in ordinary cases and removal from office or even more severe punishment in cases of serious default except where there are satisfactory extenuating circumstances.

PLANNING TECHNIQUES

by

DR. R. BALAKRISHNA

I. Aims of Planning

1. Desire to plan arises out of a shortcoming in the economy relatively to advanced countries.
2. A belief that through planning it would be possible to achieve certain things which may not be possible under free private enterprise.
3. Aims can only be broad and necessarily vague. They should not be fantastic, but they cannot be specific. They ought not to be inconsistent with each other—compromise. Nor can they be unrealistic in relation to overall resources. For example, doubling per capita income, raising living standards, aiming at full employment, achievement of a Welfare State.

II. Aims should take the form of targets for realising the desired ends

1. Nature of the targets would depend on the type of pattern desired—Socialistic pattern.
2. The kind of balance between targets would also depend upon the priority among the aims.
3. Targets in their ultimate analysis would be governed by the resources available. To some extent resources could be imported and also internally created. So simultaneous endeavour has to be made to create them. So achievement of target has to be graduated over a period.
4. Targets have to be dovetailed : that is, the achievement of one should concurrently be related to the utilization of it in the realisation of other targets. The output in one sector must be matched with the off-take in another. If 10 million tons of steel production is taken as a target, the fabrication of it and the actual utilization in other directions should also be planned. There should therefore be a timing in related targets. Some targets could no doubt be independent of each other. Steel and textiles could be independent; but even they in their ultimate effects are related to each other: textile machinery require steel.
5. In fixing targets an overall resource allocation is automatically determined.
 - (a) In the first instance, we must see whether such resources are available.
 - (b) Also study from where the resources come; are they unutilized resources or do they move from other sectors? Is such movement in conformity with the overall objectives or has it been having adverse repercussions on the achievement of other targets? In the absence of regimentation even within the Public Sector, what incentives are to be offered either to encourage or discourage such movement.

Or should there be any direct method of controlling such movement? This is the dynamics of planned operation.

6. Targets should be flexible : what might have appeared as an optimum combination at the beginning may cease to be so with experience.

III. Method of achieving the targets : the technique of the production function

1. Here the sphere of planning is narrow : the firm or individual establishment.
2. Purpose is to attain efficiency in production. Otherwise, while the overall structure of the planned economy may be sound there is a risk of its functioning at a low level of efficiency.
3. Optimum combination of factors; the size of the unit, the proportion of the factors combined, the nature of managerial competence and Scientific Management.
4. Measurement of Productivity : Labour productivity variations to be ascertained: input-output ratio. Methods for maintaining productivity at a high level.
5. Creation of External Economies: Their non-availability in under-developed areas. Planning for their availability. Starting of suitable subsidiary and supplementary industries in the vicinity of industrial areas.

IV. The Private Sector : Capitalist Planning

1. Parallel maintenance to avoid complete regimentation and to have the benefit of free enterprise. The gain would outweigh the loss of perfect and precise planning. Still comprehensive planning is possible.
2. Private sector to be made to conform to the overall plan which is for the whole economy: Method of doing it is to give in the first instance blueprints of the plan to each industrial segment of the economy. Then through the fiscal method offer incentives and impose deterrents to win adherence. Even subsidies may be paid, if necessary. Direct methods of control on capital issue and on raw materials.
3. Tendency and manner of conflict : outbidding each other for resources: resist the influence of deterrents and incentives particularly when they are weak. Deliberate failure to co-operate with the public sector to reach targets. Attempts to thwart the efforts of the Public Sector particularly when the two sectors are integrated in the reaching of particular targets. For example, when adequate steel is not made available to locomotive manufacture, machine tool and other State-owned industries.
4. Deterioration in the spirit of enterprise: sphere assigned may be narrow, less profitable and more risky. Freedom and activity may be curtailed by direct and indirect methods of control; tax burdens may be heavy reducing the incentive to effort. Recent labour welfare measures. A general dislike of the mixed economy. A potential fear of nationalisation and the Socialistic pattern. Therefore a reluctance to make heavy financial commitments. More interested in quick returns than in long-run stability of industry—negligence of depreciation and replacement.

5. Optimum combination of factors and productivity may not be at their best owing to short-run considerations. So State may have to institute Working Parties and Productivity Experts to enquire and report. Individual interest may not conform to national interest.
6. Agriculture the largest segment of the Private Sector.
 - (a) Fiscal methods ineffective in making it conform to overall plan.
 - (b) Direct methods of control difficult, as large numbers are involved and they are scattered.
 - (c) Mass awakening and subsidies in kind, for example, fertilisers, seeds, etc.: National Extension Service and Community Projects most appropriate.

V. Financial and Physical Planning

1. The two are not contradictory: Physical Planning absolutely essential for giving concreteness to effort.
2. Finance is the mobilizer of Physical Planning. Therefore finance has to be planned.
3. Neither of them alone can set things going. Mere finance out of proportion to physical resources will either not be absorbed or result in inflation.
4. The decision to have a certain volume of investment for doubling the national income over a period is on the assumption that the physical resources exist and would be forthcoming. But an accurate estimate of it before implementation is essential. If that falls short, the financial plan must be curtailed.
5. Similarly, financial allocation for particular segments would depend on the resources specific to each and the degree to which diversion of general resources would be possible. Investment in each segment should also be governed by rate of productivity among them. Acceleration of higher productivity segments would result in a quicker increase of national income.

VI. Dynamics of Planning

1. It is a static approach to think merely in terms of targets and investments; the resources have to come from somewhere.
2. Unused resources and personnel could no doubt be pressed into service but they may not be sufficient; even if sufficient, their employment and the consequent expenditure by them would alter the overall equilibrium of the economy. If a diversion of resources becomes necessary, their movement must be watched and provided for in the subsequent operation of the Plan.
3. So concurrently with the implementation of the Plan, a study of the dynamics of the factors of production should be set afoot. In the absence of regimentation, the influence of factor prices on automatic reallocations should be observed. We may fail to reach certain targets if resources leave the segment for want of any special attachment to it either on account of disagreeableness of work or absence of monetary incentives.

4. With a Grand Plan having investments on several fronts, the small-scale sector even if self-employed and the unorganized group are likely to lose their personnel. If fostering them is also an objective, special measures have to be adopted.
5. At the end of every phase of the Plan period, the Planning authority must be in possession of information regarding such dynamics and make suitable adjustments for the future.

VII. The Overall Pattern of the Economy

1. Existing pattern and desired change: If capitalistic and individualistic, why change desired? Perhaps does not conform to the welfare ideal.
2. Value judgement the basis of assessing the shortcoming of the existing pattern. Optical evidence of poverty and riches. No statistical study of distribution of wealth and determination of poverty line.
3. Clear definition of Welfare Ideal which is the objective. The pattern is the means of achieving it. It may be one of the many ways of reaching it and need not necessarily be the best. Is it certain minimum income or standard of living and communal consumption of as many essential things as possible? Also Social Security. Who would define the above? What should be the degree of disparity in wealth and income? Or is it merely to take off the edge of Capitalism by preventing a few abnormalities of it?
4. What would be the features of the Socialistic Pattern?
 - (a) The ultimate purpose of economic activity is to enhance the well-being of the people. But this is a platitude unless a concrete form is given to the idea.
 - (b) It may take the form of certain target which alone would conduce to human well-being taking the present standard of life.
 - (c) It could also determine the form of economic organisation: the small and medium scale in preference to large scale.
 - (d) It might mean a general State control over key resources even though they may be allowed to be utilized by private enterprise. No private monopoly to be permitted.
 - (e) In marketing, no form of organized control by private parties to be permitted. State intervention to break them either through importation or by maintenance of buffer stocks of essential goods.
 - (f) Earnings in various occupations should have a floor below which they ought not to be allowed to fall.
 - (g) A turnover tax for State saving and investment for the amelioration of the poor, such as slum clearance and building of houses for the poor, free education, etc.
 - (h) Social Security with a wide coverage.

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LEVEL OF LIVING

A STUDY OF TRENDS IN VARIOUS COMPONENTS

(*Economic Division, Planning Commission*)

In the case of countries undertaking planned economic development, the problem of the measurement of the level of living is central to the formulation and subsequent evaluation of their economic and social programmes. The object of this paper is to work out the various components of the level of living in India and to examine the recent trends in these components. Such a study may be useful for fixing some of the targets for India's Second Five Year Plan.

2. The level of living is a composite entity whose totality cannot be conveyed by any single comprehensive indicator. For the purpose of measurement it is necessary to break up the concept of the level of living into specific components. Lists of such "components" have been suggested in some of the publications of the U.N. agencies.* We have, in the main, followed the listing of components proposed in the U.N. Experts' Report on "International Definition and Measurement of Standards and Levels of Living, 1954." The problem of measurement of these components involves choice of suitable 'indicators' and in this connection the inadequacy of statistical data is a limitation. Besides, it has to be borne in mind that the concept of the level of living in its broader aspect also includes certain non-material elements which cannot be quantitatively measured.

3. The major 'components' of the level of living in India may be broadly expressed as below :—

- (i) Health,
- (ii) Food and nutrition,
- (iii) Clothing,
- (iv) Housing,
- (v) Education, including literacy,
- (vi) Employment and conditions of work.

In what follows, an attempt has been made to examine the recent trends in the various 'components' and to set forth certain broad conclusions which emerge from the study.

(i) *Health*

Figures on life expectation and mortality rates are important indicators of changes in health conditions. The significance of demographic trends in assessing the social and economic

*c.f. *Worker's Standard of living—Studies and Reports*, I. L. O.; *Essentials of Rural Welfare*, 1949, F.A.O.; *International Definition and Measurement of Standards and Levels of Living*, 1954, Report by U.N. Experts

advance has been stressed in the U.N. Study on the "Determinants and Consequences of Population Trends." Available data indicate that high mortality rates are generally associated with low *per capita* incomes, high ratios of illiteracy, and a large proportion of population engaged in agriculture. However, figures on expectation of life and mortality rates are dependent not only on actual living conditions but also on the provision of medical facilities. In India, the figures on expectation of life at birth have shown consistent improvement over the past few decades, having risen from 23·63 for males and 23·96 for females in 1901 to 32·45 for males and 31·66 for females in 1951. The table below sets out for recent years the trends in the annual death rate and infant mortality rate.

Table I

Year	Crude Death Rate*	Infant Mortality Rate†
1938	23·7	167
1949	15·8	123
1950	16·0	127
1951	14·4	124
1952	13·6	116
1953	**	N.A.

*Number of deaths per 1000 persons.

†Deaths of Infants under 1 year of age per 1000 live births.

**Provisional figures relating to monthly death rates are available.

Year	Month	Crude Death Rate	Crude Death Rate	
1953	Jan.	13·8	July	14·8
	Feb.	11·8	Aug.	17·1
	Mar.	12·7	Sept.	17·1
	April	13·1	Oct.	19·1
	May	13·7	Nov.	16·9
	June	13·4	Dec.	16·1
1954	Jan.	14·3	April	11·6
	Feb.	11·5	May	13·1
	Mar.	11·8	June	12·3

Source : *Monthly Abstract of Statistics.*

The decline in mortality cannot, however, always be construed as a reflection of improved economic conditions of the population. "There is evidence that the *per capita* production of foodstuffs and raw materials decreased in the post-war years and it is likely that the decrease was the greatest in certain under-developed countries. However, it appears that public health and medical technique have provided for the maintenance and extension of human life without an accompanying improvement in the economic condition." (*The Determinants and Consequences of Population Trends*, 1953). In India, during the post-war years *per capita* availability of food supply was at a lower level as compared to pre-war standards yet the post-war demographic trends show an improvement. As just stated, improvement in health conditions is brought about not only by improved economic conditions but also by increase in medical facilities and by special campaigns to fight specific diseases. The extent of health and medical facilities available can be broadly indicated in terms of the number of hospital beds and physicians in relation to the population. The table below shows the recent trends in these indices. It will be seen that the number of hospital beds per million persons was 317 in 1953-54; it is expected to be 327 by 1955-56 if the current Plan target of adding 10,000 beds to 113,500 available in 1950-51 is realised. During the present Plan period, there has been a stepping up of public expenditure on health; it has risen from Rs. 28 crores (Centre and States) in 1950-51 to Rs. 43 crores (Centre and States) for 1954-55. In terms of *per capita* expenditure on health, the increase has been from 12 annas in 1950-51 to about 18 annas in 1954-55. Nonetheless, the provision of medical and health facilities available to the population remains far from adequate and calls for increased public expenditure during the next Plan period.

Table II

Year	Population (in millions)	Number of beds (in hospitals and urban and rural dispensa- ries)		Number of registered physicians	
		Total	Per Mill. Persons	Total	Per Million Persons
1943-44	329.0	N.A.	..	47,500	144.7
1949-50	354.9	111,523	314.3	56,249	158.5
1950-51	359.3	113,557	316.8	59,317	165.1
1951-52	363.8	..	..	61,457	168.9
1952-53	368.4	..	..	64,062	173.9
1953-54	373.0	118,349	317.3	..	..
1954-55	..	..	..	..	..
1955-56 (Plan target)	382.3	125,037	327.0	..	..

Source : D.G.H.S.

(ii) *Food and Nutrition*

The *per capita* calorie intake provides a useful indicator of changes in the level of food consumption. The table below gives the trends in national average food supplies in terms of calories.

Table III

Year	Average (calories)
1934-38*	1970
1948-49	1620
1949-50	1620
1950-51	1630
1951-52	1590
1952-53 . . . . .	..
1953-54 . . . . .	..

*Includes Pakistan.

The total calorie figure covers consumption of cereals, sugar, pulses, potatoes, meat, milk, fats and oils.

(Source : *U.N. Statistical Year Book*)

The figure for 1951-52 stood at a low level of 1590 as compared to 1970 in 1934-38 for undivided India and as against the estimated requirement of 2250 calories in a country like India†. This downtrend in calorie intake was reversed in subsequent years. This is confirmed by the figures on average availability of cereals as shown in the table below :—

Table IV

Year	Availability per adult per day (Ounces)
1934-38 (average)	16.3
1947-48	13.5
1948-49	13.4
1949-50	13.7
1950-51	12.9
1951-52	12.7
1952-53	13.7
1953-54	14.9

(Details see in Annexure).

†c.f. *F.A.O.'s Second World Food Survey and Year Book of Food and Agriculture Statistics.*

In the last two or three years there has been an appreciable improvement in the levels of cereal consumption. Although figures for cereal consumption by themselves do not provide a direct measure of nutritional intake or of the distribution of food within the population, they can still be taken as broadly indicative of changes in the nutritional level. The minimum of cereals required in a balanced diet was placed by the Nutrition Advisory Committee at 14 oz. per adult per day. For 1949-50, the estimated cereal production was 45.1 million tons, with the average availability of 13.7 ounces per adult per day. During 1950-51 and 1951-52 the average cereal availability was 12.9 and 12.7 ounces respectively. The 1952-53 average cereal availability was more or less back to the 1949-50 level and by 1953-54 it had exceeded the minimum nutritional standard. With the estimated production of 56.1 million tons, which exceeded the Plan target by 3.5 million tons, the cereal availability for 1953-54 comes to 14.9 ounces per adult per day; this is higher than at any time in the post-war period.

In regard to pulses and grams, the Nutrition Advisory Committee had suggested a minimum availability of 3 oz. per adult per day. In 1950-51, the estimated production of grams and pulses was 8.3 million tons, with average availability of 2.1 oz. per adult per day. To reach the 3 oz. level by the end of the First Plan, it would have required additional production of 4 million tons, whereas the Plan target was fixed at only 1 million additional tons of grams and pulses. While this target was exceeded by 0.3 million tons in 1953-54, the average availability of 2.4 oz. for that year was still below the minimum requirement of 3 oz. per adult per day. Data in regard to the availability of protective foods, (*i.e.*, milk, ghee, fruit and vegetables, fish, meat and eggs etc.) are inadequate. However, some rough idea about the inadequacy of their present consumption levels can be had from the table below :

Table V

(Oz. per adult per day)

	Minimum Nutritional requirement	Estimated availability		
		1950-51	1951-52	1952-53
Ghee and Vegetable Oil	2	0.36	0.33	0.29
Milk and milk products	10	4.8	5.1	5.0
Meat, fish and eggs.	4	0.4	0.4	0.4
Fruits and nuts	3	1.9	1.9	1.8
Sugar and Jaggery	2	1.5*	1.6*	1.4*
Leafy vegetables	4	1.6	N.A.	N.A.
Other vegetables	6			

*In terms of gur.

Source : *Food Situation in India—1939-53*, Ministry of Food and Agriculture.

If the targets for the next Plan were to be based on the assumption of maintaining 1953-54 consumption levels, output of cereals would have to be increased from 56.1 million tons in 1953-54 to 61.2 million tons in 1960-61. The present availability of pulses and grams is, however, still below the minimum nutritional requirement of 3 oz. per adult per day, and to obtain that requirement, output would have to be increased from 9.9 million tons in 1953-54 to about 13 million tons in 1960-61. In addition to providing for these minimum increases in the production of cereals and pulses, the next Plan would have to provide for substantial increases in protective foods.

(iii) *Clothing*

Between 1927-28 and 1937-38, the *per capita* consumption of cloth was estimated to be between 15 and 16 yards. Thereafter, until 1947-48, it varied between 12 and 14 yards. The subsequent trend in the quantity available for consumption is indicated in the table below :

Table VI

(million yds.)

Year	Population	Production		Export		Imports	Availability of cloth	
		Mill-made	Hand-loom made	Mill-made	Hand-loom made		Total	Per Capita Yds.
1950-51	359.3	3664	804	1210	59	6	3205	8.9
1951-52	363.8	4076	843	388	41	8	4498	12.3
1952-53	368.4	4598	1108	565	55	5	5091	13.8
1953-54	373.0	4879	1300	706	63	5	5415	14.5
1954-55*	377.6	4950	1500	750	50	5	5655	15.0

*Estimates.

For 1950-51, average availability of cloth was at a low level of 9 yards, because of low production and large exports. For the subsequent years, the quantity available for consumption shows an upward trend. The Plan target for 1955-56—mill production of 4,700 million yards and handloom production of 1,700 million yards, with an allowance for exports

of 1,000 million yards—was aimed at a *per capita* figure of 15 yards. By 1953-54, mill production had already exceeded the Plan target. For 1954-55, mill production is estimated at 4,950 million yards and handloom cloth at 1,500 million yards. Allowing for exports of 800 million yards, we may reasonably expect the average cloth consumption in 1954-55 to be at a level envisaged for the final year of the Plan.

For 1960-61, the Textile Enquiry Committee has estimated the per capita cloth requirement at 18 yards. If we accept this figure for the next Plan, the quantity of cloth available for consumption will have to be increased from 5,415 million yards in 1953-54 to 7,323 million yards in 1960-61. In other words, allowing for an export target of between 1,000 and 1,200 million yards, total production of both mill-made and handloom cloth will have to be between 8,300 and 8,500 million yards as compared to 6,400 million yards estimated for 1954-55.

(iv) *Housing*

Available statistical data in regard to housing are very inadequate. In India, over the past few decades, a rapid increase in population especially in the urban areas has taken place. In the decade 1941-51, while the rural population increased by 9 per cent the urban population increased by 41 per cent. At the close of the decade, the shortage in urban houses was estimated at 18 lakhs* in addition to 10 lakhs houses required for displaced persons from Pakistan. Statistics for the number of urban and rural houses as given in the National Income Committee Report are as below :—

Table VII

	1948-49	1949-50	1950-51
Number of rural houses (lakhs)	542.3	541.6	541.0
Number of urban houses (lakhs)	97.8	99.7	101.6

It will be seen that over these three years, the number of rural houses shows a fall and this fits into the trend which characterised the decade 1941-51. The number of urban houses over this period, however, shows an increase which represents a rate of growth of the order of 2 per cent per annum. There has since been a considerable increase in urban construction activity. This is borne out by the trends in the output and consumption of cement which can be taken to be broad indicators of investment activity, in this sector.

*Environmental Hygiene Committee's Estimate.

Table VIII

Year	Output		Consumption
	Total (['] 000 tons)	Monthly average (['] 000 tons)	(Monthly average despatches) (['] 000 tons)
1938	1404.0	117.0	..
1950	2612.4	217.7	218
1951	3195.6	266.3	265
1952	3537.6	294.8	296
1953	3780.0	315.0	313
1954—Jan. . . . .	..	362.8	267
Feb. . . . .	..	351.9	348
Mar. . . . .	..	389.0	392
Apr. . . . .	..	359.8	383
May . . . . .	..	373.4	361
June . . . . .	..	352.5	354
July . . . . .	..	365.1	381
Aug. . . . .	..	342.5	350
Sept. . . . .	..	361.5	337

Source : *Monthly Abstract of Statistics.*

Data in regard to output and consumption of cement indicate that investment activity in urban construction sector is going up. The cement output for 1953-54* shows an increase of 50 over the year 1950-51. It is true that part of the increased demand for cement has originated from the public sector on account of large outlays on multi-purpose projects and other building activity. Nonetheless, it is reasonable to assume that there has been a considerable increase in urban construction activity. Over the present Plan period, we may expect the number of urban houses to increase by about 13.%. This order of increase postulates an average annual rate of growth of 2.4% as compared to an annual increase of about 2% during the period 1948-49 to 1950-51. The annual increase in urban houses may be expected to be proportionately larger in the later years of the Plan. In absolute figures, the number of urban houses at the end of the present Plan period can be placed at about 115 lakhs as compared to 101.6 lakhs in 1950-51.

The number of urban houses assumed for 1955-56 would be sufficient to maintain availability of housing at the 1950-51 level, provided the urban population over the five-year period did not increase by, say, more than 15%. It has, however, to be remembered that the availability of housing in 1950-51, with urban population at 6 crores, was itself short of re-
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quirements by about 20 . Therefore, in order to produce any impression on the present housing situation, the number of urban houses available may have to be increased from some 115 lakhs in 1955-56 to about 150 lakhs by 1960-61. Even if we aim at having 140 lakh urban houses by 1960-61, we shall have to provide over the Second Plan period for an addition of 5 lakh houses every year as compared to an average annual increase of about 2.7 lakh houses during the First Plan.

(v) *Education*

Among the useful indicators of the educational component of the level of living are the proportion of children 6-14 years of age attending or enrolled in schools, attendance or enrolment in post-primary schools, number of primary schools per 100,000 of population in 6-14 years age group and pupils per teacher. Most of these relate to the achievement of literacy. They could be supplemented by data relating to the university and higher education and by statistics on circulation of newspapers and periodicals per certain number of population and library and museum facilities, etc. However, literacy by itself can be taken to be the most direct measure of the non-material conditions of living. The table below gives some of the relevant data upto 1951-52.

Table IX

	1939-40*	1949-50	1950-51	1951-52*
A. (i) Total Population (6-14) (lakhs)	598.76	677.27	687.42	697.57
(ii) School-going Population (lakhs)	136.82	208.2	220.45	229.43
(iii) Percentage of (ii) to (i)	22.9	30.7	32.1	32.9
B. (i) Total Population (14-23) (lakhs)	550.26	622.64	631.97	641.30
(ii) School-going Population (14-23) (lakhs)	5.65	16.84	18.72	21.75
(iii) Percentage of (ii) to (i)	1.3	2.7	3.0	3.4
C. (i) Number of Primary and Middle Schools	2,00,254	2,17,746	2,23,267	2,29,225
(ii) Number of Schools per 100,000 of population (6-14)	335	322	325	329
D. (i) Number of pupils per teacher in primary schools.	30	34	34	34
(ii) Number of pupils per teacher in middle and high schools.	22	25	24	23
E. (i) Enrolment in professional and technical institutions. (lakhs)	4.80	15.09	16.53	N.A.
(ii) Enrolment per 100,000 of population	152	422	457	N.A.

*Figures in Table VII, relate to Calendar Years. For 1953-54, production of cement was 40,28,000 tons as compared to 26,92,000 tons in 1950-51.

*Relates to British India.

For subsequent years, steady progress can be inferred from the increase in the public expenditure in education. This rose from Rs. 61 crores (Centre and States) in 1950-51 to Rs. 100 crores (Centre and States) in 1954-55. In terms of per capita expenditure, the increase has been from Re. 1 and 11 as. in 1950-51 to Rs. 2 and 10 as. in 1954-55.

For primary education, the revised Plan target was 38,000 additional primary schools and addition of 40 lakh pupils to the 1950-51 number. The five-year target for basic education was in addition to this and aimed at 9,500 basic schools and 27 lakh pupils. By the end of the present Plan period, the proportion of population (6—14) going to primary and basic schools is expected to be 38% as against 32% in 1950-51 and 23% in 1939-40. In the light of the 'Directive Principles' of the Constitution, the next Plan target should aim at the provision of primary school facilities for the entire population of children between 6 and 14 years of age. Moreover, facilities for technical education will have also to expand substantially and all this would call for considerable increase in the expenditure on education.

(vi) *Employment*

Available employment data in the country relate to the urban section of population which forms but a small proportion of the total active population. The basic fact which governs the level of living of the majority of the active population in the agricultural sector is under-employment rather than unemployment and it is in regard to the degree of under-employment that it becomes difficult to devise suitable indicators. Some idea of the magnitude of the problem can be had from the occupational structure and the per capita real earnings in different occupational categories. Available figures on distribution of working force by industrial origin show that over the five years, 1948-49 to 1952-53, the proportion of active population engaged in agriculture and allied activities has remained more or less constant at about 72%. It does not appear that the occupational structure will register any significant change by the close of the present Plan period.

In regard to the state of under-employment in the agricultural sector, certain useful data have become available as a result of the Agricultural Labour Enquiry conducted by the Ministry of Labour. The enquiry relates to 1950-51. It shows that an average agricultural labourer is idle for about 98 days a year, and on this basis one can say that about 28% of the agricultural labourers in the country are either unemployed or under-employed. According to the enquiry, 17.6 million families out of a total of 58 million rural households belonged to the category of landless labourers. As an appreciable degree of under-employment also prevails among rural households cultivating their own lands, it may be reasonable to assume that, on the whole, perhaps about 15—20% of the existing working force in agriculture is not adequately employed.

As regards urban employment, figures on the volume of industrial employment and statistics relating to unemployment throw some light. It will be noted from the table below that the average daily number of workers employed in factories covered by the Factories Act has not shown any improvement over the past few years.

Table X

(In lakhs)

1938	1947	1948	1949	1950	1951	1952	1953	(first half)
17.38	22.74	23.60	24.34	25.04	25.36	24.43	25.08	

Source : *Monthly Abstract of Statistics*

Over this period, real earnings of industrial workers show a significant increase. The all-India index of real earnings (Base : 1944-100) rose from 99.7 in 1945 to 172.6 in 1951. For subsequent years, corresponding data are not available, but average annual earnings of factory workers have not shown any decline since 1951. On the other hand, the consumer price index has come down. Thus, whereas the volume of industrial employment has remained more or less static, it can be presumed that real wages of industrial workers, on the whole, have improved.

On the other hand, the unemployment statistics show certain disquieting trends. The following table shows the numbers on the live registers of the Employment Exchanges.

Table XI

Year (Quarter ending December)	Number of persons registered with employment exchanges
1949	274,335
1950	330,743
1951	328,719
1952	423,597
1953	514,991
1954	587,376

In interpreting this unemployment statistics, various limitations have to be borne in mind. An analysis of these data shows that among the persons registered with Employment Exchanges, there are some who are already employed but are seeking better employment. It is also likely that greater use is being made of these Exchanges by job seekers in urban areas. Yet the trend is indicative of a lack of balance between the growing population and the corresponding employment opportunities to absorb them. This is confirmed by the reports of the various unemployment surveys recently undertaken in the country which show that some 8 to 10 per cent of the urban working force are without employment.

Conclusions

The following are the broad conclusions which emerge from this study :

- (i) Figures on mortality and life expectation at birth reflect steady improvement in the health of the people. The health and medical facilities as evident from the number of hospital beds and physicians per million persons are, however, far from adequate. During the present Plan period the public expenditure on health has risen from Rs. 28 crores (Centre and States) in 1950-51 to Rs. 43 crores (Centre and States) in 1954-55. In terms of per capita expenditure the increase has been from 12 annas in 1950-51 to about 18 annas in 1954-55. In the next Plan it will be necessary to provide for a still greater increase in the public expenditure on health.
- (ii) Over the past three years, there has been an appreciable improvement in the levels of cereal consumption. The consumption of cereals in the country has risen from 13 oz. per adult per day in 1950-51 to nearly 15 oz. per adult per day in 1953-54. In 1953-54, the Plan target was exceeded and the average cereal availability was higher than the minimum nutritional requirement of 14 oz. per adult per day. The present availability of grams and pulses is, however, still below the minimum nutritional requirement of 3 oz. per adult per day. The deficiency in the consumption levels of protective foods (*i.e.*, milk, ghee, fruits, vegetables, fish, eggs and meat, etc.) is even more pronounced. In addition to providing for increases in the production of cereals and pulses, special efforts will be required in the Second Plan towards overcoming the deficiencies in protective foods.
- (iii) The Plan period has witnessed steady improvement in the availability of cloth. The present Plan target of per capita consumption of 15 yards is expected to be realised in 1954-55. For 1960-61, the Textile Enquiry Committee has estimated the per capita cloth requirement at 18 yards. This may be a reasonable target for the next Plan.
- (iv) Available data in regard to housing are highly inadequate. For 1950-51, housing shortage was estimated at more than 18 lakhs in addition to 10 lakh houses required for displaced persons from Pakistan. During the present Plan period, the number of urban houses may be expected to increase from 101.6 lakh in 1950-51 to 115 lakhs in 1955-56. In order to produce any impression on the present housing situation, the number of houses available may have to be increased to some 150 lakhs by 1960-61. Even if we aim at having 140 lakh urban houses by 1960-61, we shall have to provide over the Second Plan period, for an addition of 5 lakh houses every year as compared to an average annual increase of about 2.7 lakhs during the First Plan.

- (v) In regard to education, public expenditure has shown an increase from Rs. 61 crores (Centre and States) in 1950-51 to Rs. 100 crores (Centre and States) in 1954-55. In terms of per capita expenditure this increase has been Rs. 1/11 in 1950-51 to Rs. 2/10 in 1954-55. By the end of the present Plan period, the proportion of children (6-14) going to primary and basic schools is expected to be 38% as against 32% in 1950-51 and 23% in 1939-40. In the next plan, we may have to aim at the provision of primary school facilities for the entire population of children between 6—14 years of age.
- (vi) In regard to the state of employment in the country, available statistics relate to the urban section of the population. In the case of majority of population engaged in agriculture, under-employment is the basic fact governing the levels of living. On the basis of data made available by the Agricultural Labour Enquiry, one can hazard some rough estimate and say that nearly 15—20% of the entire working force in agriculture may be without adequate means of employment. As regards the employment situation in urban areas, increased unemployment is noticeable from the recent figures of the number of persons registered with Employment Exchanges. This is also confirmed by the Reports of the various unemployment surveys recently undertaken in the country. One can, therefore, say that employment opportunities have not been keeping pace with the rapidly growing population. The next Plan must aim, at a minimum, at providing employment for 9 to 10 million, which represent the additional working force.
- (vii) Some idea of the direction in which the levels of living are moving, can be had from the per capita national income figures. These are available for the years 1948-49 to 1953-54 and can be seen from the table below :

Table XII

	1953-54*	1952-53	1951-52	1950-51	1949-50	1948-49
<i>Net output in Rs. abja†</i>						
at current prices	106.0	98.6	99.9	95.3	90.1	86.5
at 1948-49 prices	99.5	95.2	91.6	88.5	88.2	86.5
<i>Per capita net output in Rs.</i>						
at current prices	283.9	267.4	274.5	265.2	253.9	246.9
at 1948-49 prices	266.5	258.1	251.7	246.3	248.6	246.9

*Preliminary.

†abja—100 crores.

Source : C.S.O. Estimates of National Income.

Preliminary estimates for 1950 (at 1948-49 prices) and per capita income place the total national income at Rs. 9,950 crores (at 1948-49 prices) and per capita income at Rs. 266.5 (at 1948-49 prices). As compared to 1950-51, these figures represent an increase of 2.4% in the total national income and of 8.2% in the per capita income. (These increases are in real terms.) In view of this, the next Plan could perhaps aim at an increase in national income of, say, 25% over the five-year period.

ANNEXURE

Population, food production (cereals only) and availability per adult per day

1948—54.

Years	Population* (in millions)	Estimated adult population at 86% (millions)	Production† of cereals (million tons)	Quantity available for consump- tion from internal sources after all- owing for seed, etc. at 12½ % (million tons)	Quantity available for consump- tion after allowing for imports and off-take from carry- over stocks (million tons)	Availability per adult per day (ounces)
1	2	3	4	5	6	7
1948	344.3	296.1	43.7	38.3	40.7	13.5
1949	348.6	299.8	43.3	37.9	41.0	13.4
1950	353.1	303.6	45.1	39.5	42.4	13.7
1951	359.3	309.0	41.7	36.5	40.6	12.9
1952	363.8	313.1	42.9	37.5	40.4	12.7
1953	368.4	316.7	49.1	43.0	44.2	13.7
1954	373.0	320.8	56.1	49.0	48.7	14.9

*Figures for 1950 are from *Five Year Plan—Main Report*; for 1951 from Census ; and for subsequent years have been worked out on the basis of 1.25% increase every year.

†Production figures refer to agricultural year, July-June. For instance, figures shown under 1948 relate to the agricultural year, 1947-48.