

JAWAHARLAL NEHRU UNIVERSITY

OFFICE OF THE

**A PLAN OF ECONOMIC DEVELOPMENT
FOR INDIA**

PARTS ONE AND TWO

(S 148)

THE AUTHORS

SIR PURSHOTAMDAS THAKURDAS is the doyen of the Indian commercial world. He is President of the East India Cotton Association, a Director of the Reserve Bank of India, and Chairman and Director of numerous other concerns.

MR. J. R. D. TATA, MR. A. D. SHROFF and **DR. JOHN MATTHAI** are Directors of the great Tata firm, which has pioneered most of India's industries and to-day constitutes one of the major industrial groups in the Empire.

MR. J. R. D. TATA is the head of the firm and of the various Tata companies. He occupies a key position in the industrial life of India.

SIR ARDESHIR DALAL has been a member of the Indian Civil Service and filled many important positions in Government before he joined Tatas. For some years he has been in charge of the Tata Iron and Steel Co., Ltd., whose works at Jamshedpur are the largest in the Empire. Since the publication of the First Part of the Plan he has been appointed by Lord Wavell to the Viceroy's Executive Council as member for planning and development, and has relinquished his post with the Tata Iron and Steel Company.

MR. A. D. SHROFF is in charge of the Investment Corporation of India, the Tata Oil Mills and other concerns. He is known throughout India as an economist and a financial expert.

DR. JOHN MATTHAI is Economic Adviser of the firm and in charge of Tata Chemicals. Since Sir Ardeshir Dalal's appointment to the Viceroy's Executive Council he has taken charge of the Tata Iron and Steel Company in place of Sir Ardeshir Dalal. He has a distinguished record in Government service as an economist and administrator, and was for some years Chairman of the Indian Tariff Board.

MR. G. D. BIRLA heads the well-known financial and commercial organization known as Birla Brothers. His interests are widespread and he is one of the acknowledged leaders of trade and industry.

SIR SHRI RAM is a leading industrialist of Delhi and a Director of the Reserve Bank of India. He occupies an important position in various commercial organizations.

MR. KASTURBHAI LALBHAI is a prominent mill-owner of Ahmedabad. He is a Director of the Reserve Bank of India and controls many commercial and industrial concerns.

A PENGUIN SPECIAL

MEMORANDUM OUTLINING

**A PLAN OF
ECONOMIC DEVELOPMENT
FOR INDIA**

PARTS ONE AND TWO

by

SIR PURSHOTAMDAS THAKURDAS

J. R. D. TATA

G. D. BIRLA

SIR ARDESHIR DALAL

SIR SHRI RAM

KASTURBHAJ LALBHAJ

A. D. SHROFF

AND

JOHN MATTHAI



PENGUIN BOOKS

HARMONDSWORTH MIDDLESEX ENGLAND
245 FIFTH AVENUE NEW YORK U.S.A.

PART ONE

First Published in India January 1944
Published in Penguin Books May 1944
Reprinted September 1944

PART TWO

First Published in India January 1945
Published in Penguin Books in conjunction with Part One, April 1945

The rupee figures quoted in the text have been converted into their sterling equivalents (shown in brackets) at the rate of 1s. 6d. per rupee.

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PART ONE

1

INTRODUCTORY

1. *Aim of Memorandum*

This memorandum presents in brief outline a plan of economic development for India. The plan set out in it is not in any sense a complete scheme nor is its scope so comprehensive as that of the National Planning Committee to whose labours the conception of a planned economy for India is very largely due. Our object is merely to put forward, as a basis of discussion, a statement, in as concrete a form as possible, of the objectives to be kept in mind in economic planning in India, the general lines on which development should proceed and the demands which planning is likely to make on the country's resources. It contains no reference to such essential matters as the organization, methods and technique required for carrying out a plan. For instance, neither the problem of distribution, which is vital to any scheme for raising the standard of living, nor the allied question of the control to be exercised by the state over economic activities are discussed in it. These matters, the importance of which is fully present to our minds, are at present under examination by us. The results of this examination will form the subject of a separate report which we hope to issue at an early date. Meanwhile, in view of the prevailing interest in problems relating to post-war economic development in India, we have thought it desirable to publish in advance our views regarding some of the more fundamental aspects of planning so as to stimulate discussion and criticism of our proposals before our investigations of other aspects of planning are completed.

2. *Political Assumptions*

Underlying our whole scheme is the assumption that on the termination of the war or shortly thereafter, a national government will come into existence at the centre which will be vested with full freedom in economic matters. The maintenance of the economic unity of India being, in our view, an essential condition of any effective planning, we have assumed for the purpose of our plan that the future government of India will be constituted on a federal basis and that the jurisdiction of the central government in economic matters will extend over the whole of India. We should, however, explain that this does not preclude the possibility of a regional grouping of provinces and States as an intermediate link in a federal organization. Such regional grouping will not disturb the economic unity of India, provided that, in important matters affecting economic development, the authority of the central government is not impaired. We draw attention to this aspect of the problem because we think that no development of the kind we have proposed will be feasible except on the basis of a central directing authority which enjoys sufficient popular support and possesses the requisite powers and jurisdiction.

3. *Planning Organization*

We contemplate that under the central government there will be a national planning committee in which the various interests concerned will be represented and to which the responsibility for drawing up plans will be delegated. The actual execution of the plans will be the function of a supreme economic council working alongside the national planning committee under the authority of the central government. The co-ordination of the duties assigned to these two committees and their relation to the various provincial and regional governments will be among the most important problems that will arise in

connection with the constitutional aspect of our proposals.

4. *Objective of Plan*

The principal objective of our plan is to bring about a doubling of the present *per capita* income within a period of fifteen years from the time that the plan comes into operation. Allowing for an increase in population of 5 million per annum, which is the rate disclosed by the last decennial census, we estimate that a doubling of the *per capita* income within a period of fifteen years will necessitate a trebling of the present aggregate national income. To achieve this increase, we propose that the plan should be so organized as to raise the net output of agriculture to a little over twice the present figure, and that of industry, including both large and small industries, to approximately five times the present output. This would still leave our economy mainly agricultural in the sense that the greater part of the population would continue to be engaged in agriculture and allied occupations although the present preponderance of agriculture would be considerably reduced.

5. *Industrial Development*

It is an important part of our proposals regarding industrial development that in the initial stages attention should be directed primarily to the creation of industries for the production of power and capital goods. Nothing has more seriously hindered the development of India's industrial resources during the war than the absence of these basic industries, and we consider it essential that this lack should be remedied in as short a time as possible. Apart from its importance as a means of quickening the pace of industrial development in India, it will have the effect of ultimately reducing our dependence on foreign countries for the plant and

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machinery required by us and, consequently, of reducing our requirements of external finance. The proposal, however, is subject to this important qualification that provision should be made at the same time for the manufacture within the country of the most essential classes of consumption goods, as otherwise a great deal of unnecessary hardship may be caused during the planning period. We suggest that, in the production of these essential consumption goods, the fullest possible use should be made of small-scale and cottage industries. This will, besides providing employment, reduce the need for purchasing expensive plant and machinery.

6. Difficulties Anticipated

We are well aware of the difficulties which may stand in the way of our objective being attained within so short a period. The execution of the plan will run counter to many deep-seated prejudices and traditions. In the initial stages it will call for a very large measure of personal discomfort and sacrifice. Political differences may make it difficult to set up the necessary constitutional machinery. The international situation after the war may be such as not to permit of the orderly continuance of constructive activities on this scale. If difficulties of this character supervene, the progress of the plan will be materially hampered. Nevertheless, we think that it is worth while placing before the country a plan which, given favourable conditions, can be realised. The difficulties we have indicated may delay the scheme but will not necessarily make it impossible of achievement. We have some hope that if the programme we have put forward makes an appeal to the country, that by itself will help in some measure towards securing the conditions necessary for its fulfilment. It may be pointed out that the fifteen-year period we have suggested is intended to cover only the execution of the plan and does not include

the time required for the necessary preparatory work, which may take about three to five years. Once the machinery required for executing the plan is properly organized, and given sufficient courage and energy in those responsible for carrying it out, we do not think that the attainment of our objective within the period indicated is an extravagant hope.

7. *Problem of Finance*

The estimates of capital expenditure contained in the memorandum are of such colossal dimensions that the whole scheme may appear impracticable to people whose minds are still dominated by orthodox financial concepts. In matters of this kind, the war has been a great educator. Lord Wavell, in a recent speech in London, remarked: "It has always seemed to me a curious fact that money is forthcoming in any quantity for a war, but that no nation has ever yet produced the money on the same scale to fight the evils of peace—poverty, lack of education, unemployment, ill-health." The answer to this question, which has puzzled many an inquiring mind since the commencement of the war, is that money or finance is not the master of a country's economy, but its servant and instrument. The real capital of a country consists of its resources in materials and man-power, and money is simply a means of mobilizing these resources and canalizing them into specific forms of activity. Looking at the problem from this angle, we are convinced that the capital expenditure proposed under our scheme is well within the limits of our resources and that, from a business point of view, such expenditure will constitute a sound and profitable investment for the country.

8. *Explanatory Remarks*

With regard to the several estimates of expenditure, production and income contained in the memorandum,

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it is necessary to explain that, in view of the inadequate data on which many of them are based, they are to be regarded merely as rough approximations and their value as more illustrative than absolute. Further, although most of the estimates are stated in terms of money, it is the quantum of commodities and services they represent that we have primarily in view. Money is used throughout as a measuring rod only; and in order to keep the measure uniform, we have based all money figures on the rupee at approximately the average price level which prevailed during the period 1931-39.

II

REQUIREMENTS OF A MINIMUM STANDARD

9. *Minimum Standard Defined*

The ultimate objective of any planning should be to increase the volume of India's economic production to the fullest extent which its natural resources would allow. The plan we propose, however, is limited to a period of 15 years and has the modest aim of securing a general standard of living which would leave a reasonable margin over the minimum requirements of human life. In order to give some idea of the standard of living at which we aim, we propose in this section to define in concrete terms what, in our opinion, are the minimum requirements of human life under existing conditions in India. These include, besides the physiological necessities of life like food, clothing and shelter, also some provision for medical relief and education. In a later section we shall discuss what further provision is required for a reasonable standard of living such as we aim at and on what lines a plan for securing this should be framed.

10. *Balanced Diet*

Although India is an agricultural country, a large proportion of its population does not get enough food to eat. A still larger proportion fails to obtain the right kind of food. Studies made by nutrition experts suggest that a well-balanced nutritive diet for an adult person in India should be as follows:

OUNCES PER DAY PER ADULT

Cereals	16	Fruits	2
Pulses	3	Fats and oils ..	1.5
Sugar	2	Whole milk ..	8
Vegetables ..	6	or Meat, fish and eggs	2.3

11. *Cost of Nourishment*

The energy value of this diet is 2,600 calories. Making allowance for some wastage in the kitchen and at the table, the *per capita* requirements of a balanced diet in India would amount to about 2,800 calories per day. The available supplies of food, even if they are equitably distributed, would, however, fall short of this by a large margin. To secure a balanced diet for our population, a considerable increase in our food production would therefore be necessary. It is estimated that at pre-war prices the cost of a balanced nutritive diet of the type mentioned above would be approximately Rs.65 (£4 17s. 6d.) per annum for a growing adult and very little less for a growing child. At this rate an annual expenditure of Rs.2,100 crores (£1,575 millions) would be required to keep our existing population, 389 millions, well nourished.

12. *Clothing Needs*

Next to food comes clothing, considered in its utilitarian rather than its social aspect. The quality of cloth required differs according to the climatic conditions

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of the country, the habits and manners of living of the population and its income. Conditions in these respects differ widely in the different parts of India and it is therefore difficult to fix any particular standard for the country as a whole. On the basis of consumption in other countries it is, however, possible to arrive at a rough standard. At the peak level of textile output, which was reached in 1928-29, the average *per capita* consumption of textiles, consumed largely in personal and household uses, amounted to 42 yards for the world as a whole. For some of the individual countries for which comparable data are available, the consumption of cotton textiles alone was as follows:

CONSUMPTION OF COTTON PIECE GOODS PER CAPITA IN 1929¹ (IN YARDS)

U.S.A.	..	64.0 ²	Japan	21.4
Canada	..	37.7	Egypt	19.1
Sweden	..	36.0	Brazil	18.9
Germany	..	34.0	Iraq	16.9
Malaya	..	30.6	India	16.1
Denmark	..	30.0	Greece.. ..	15.0

13. *Cost of Clothing*

In the light of these figures, the estimate made by the National Planning Committee of the minimum requirements of clothing in India, *viz.* 30 yards per person, may be regarded as reasonable. To reach this norm, India would require on the basis of the 1941 population figure 11,670 million yards of cloth and its cost at the rate of $3\frac{1}{2}$ annas ($3\frac{3}{4}$ d. approximately) a yard would amount to Rs.255 crores (£191 $\frac{1}{4}$ millions).

¹ *The World Textile Industry—Economic and Social Problems.*
Vol. 1, page 168.

² Sq. yds.

14. *Housing Needs*

Adequate shelter against sun and rain and against the inclemencies of weather is yet another of the essential primary needs of human life. On the basis that a person should have about 3,000 cubic feet of fresh air per hour, the accommodation required would be about 100 square feet of house room per person.¹ The quality of houses required, however, depends to a large extent on social traditions far more than on physical needs. "The house is not only a shelter from the weather and a place for preparing food and sleeping: it is also a centre of a complicated social ritual." The figure we have taken is the minimum determined by physical needs alone. The number of houses in India according to the 1941 census is 76 million: 10 million in towns and 66 million in villages. The number of persons per house, which was 5 in 1931, increased to 5.1 in 1941. It is not possible to indicate the average housing space available per person, although the information regarding industrial cities shows the existence of overcrowding of an extreme type. In the Bombay province, for example, the average floor space per person in industrial areas was 27.58 square feet in Bombay, 43.04 square feet in Ahmedabad and 24.03 square feet in Sholapur in 1938.

15. *Cost of Housing*

If we are to provide 100 square feet of house room per person, which has been mentioned above as the minimum needed, the average house should have an area of at least 500 square feet so that it can accommodate 5 persons. In rural areas the cost of building such a house is assumed to be in the neighbourhood of Rs.400 (£30) and in urban areas twice as much. In order that housing may come up to the standard we

¹ *Report of the Rent Enquiry Committee, Bombay*, Vol. III Part VI, page 21.

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have laid down, a fairly large proportion of the existing houses both in rural and urban areas should be rebuilt and substantial provision should also be made for new houses. On a rough estimate, the total expenditure required for this would be about Rs.1,400 crores (£1,050 millions). At 7½ per cent. of the total capital expenditure, including the value of existing housing, the yearly cost of maintenance would be Rs.258 crores (£193½ millions).

16. *Standard of Housing*

If the house is to serve its purpose also as a social centre, in addition to providing accommodation, it must conform to certain standards regarding site, type, ventilation, lighting, heating, waste disposal, water supply, etc. But these standards will vary according to a number of factors, such as climatic conditions, availability of land, traditions, etc., and will have to be fixed to suit local conditions.

17. *Present State of Health*

Apart from meeting the physiological needs of life mentioned above, an important aspect of the minimum standard of living which we wish to lay down for India is that every individual should be able to maintain a reasonable standard of health. At present the general standard of health in India is admittedly poor. The following figures would give some idea:

	Infant mortality: deaths under one year per 1000			Expectation of life. (years)	
	Birth rate per 1000	Death	live births.	Male	Female
Canada	20.3	9.6	61	58.96	60.73
U.S.A. . .	17.3	10.6	48	60.60	64.50
Germany	20.3	12.3	60	59.86	62.81
U.K. . .	15.3	12.2	53	60.18	64.40
Australia	17.7	9.9	38	63.48	67.14
Japan . .	27.0	17.6	114	46.92	49.63
India . .	33.0	21.8	167	26.91	26.56

18. *Needs of Public Health*

Satisfaction of the primary needs of life would go a long way towards attaining a reasonable standard of health for our population, but measures specially directed towards this purpose would be essential. These broadly fall into two categories: (i) preventive measures like sanitation, water supply, vaccination and anti-epidemic precautions, maternity and child welfare, etc., and (ii) curative measures like the provision of adequate medical facilities.

19. *Inadequate Preventive Measures*

Such preventive measures as have been adopted so far have touched but the fringe of the problem. Only in respect of vaccination against smallpox has some progress been made, but the number of deaths due to this disease still continues to be large. The average figure for the quinquennium 1935-39 was 67,130 in British India alone. "The fact that vaccination and re-vaccination should eliminate the disease altogether emphasizes the importance of making further efforts for the effective immunization of the people."¹ In respect of water supply it is known that out of the 1,471 towns in British India in 1939, only 253 towns with a population of 13 million had protected water supplies, and the position of conservancy and sanitation was no better. In rural areas the position is still worse. Provision for maternity and child welfare work both in urban and rural areas is extremely inadequate. The fact that more than 50 per cent. of the deaths that occurred in 1939 were among those who come within the scope of maternity and child welfare services fully bears this out.

¹ *Annual Report of the Public Health Commissioner with the Government of India for 1939*, page 20.

20. Lack of Medical Facilities

So far as medical facilities are concerned, in 1939 there were about 7,300 hospitals and dispensaries in British India with provision for about 74,000 beds. The average population served by each hospital and dispensary works out to about 41,000 and the proportion of population per bed is 4,000. The number of doctors and nurses in India is 42,000 and 4,500 respectively,¹ which means one doctor per 9,000 persons and one nurse per 86,000 persons. The comparative figures for the U.K. are one doctor per 776 persons and one nurse per 435 persons.

21. Minimum Health Standard

For a minimum standard of living the criteria which we should like to lay down in respect of preventive and curative measures include the following: (i) proper arrangements in respect of sanitation and water supply in rural and urban areas; (ii) a dispensary for every village; (iii) general hospitals and maternity clinics in towns; and (iv) specialized institutions for the treatment of tuberculosis, cancer, leprosy, venereal diseases, etc.

22. Sanitation and Water Supply

Sanitation and conservancy in rural areas depend largely on proper instruction and education and could be substantially improved by means of well-organized effective propaganda. In urban centres, however, special measures would be necessary. Arrangements for adequate water supply will be required not only in urban areas but also in villages, many of which suffer from scarcity of water. It is difficult to estimate the amount of capital expenditure that sanitation and water supply on this scale will involve, but a figure of 100 crores of rupees (£75 millions) will not be wide of the mark. At

¹ J. B. Grant: *The Health of India* (Oxford Pamphlets on Indian Affairs), page 24.

7½ per cent. the cost of maintenance would be Rs.7½ crores (£5⅝ millions) per annum.

23. *Village Dispensaries*

The village dispensary should be in charge of a qualified doctor assisted by two qualified nurses, one of whom at least should be a trained midwife. This staff would be able to carry out most of the preventive and curative services necessary for improving the health of the village. As the average population of a village according to the 1941 census is only 517, normally they would be able to attend to vaccination against smallpox and inoculation against other infectious diseases whenever they show signs of breaking out in an epidemic form. They would render adequate medical aid to the sick and also attend to maternity cases. They might also be entrusted with the work of medical inspection of the village school.

24. *Cost of Dispensaries*

The cost of building a dispensary with an area of about 1,200 square feet would roughly amount to Rs.1,000 (£75) and the initial equipment would cost an equal amount. The running expenses of the dispensary which would include the salary of the staff and the cost of medicines are likely to be in the neighbourhood of Rs.2,000 (£150), assuming that a certain amount of voluntary and part-time help of practising doctors would be available. The total cost of maintaining rural health on the basis would amount to:

Buildings and initial equipment ..	Rs.132 crores
	(£99 millions)
Running expenses per year ..	Rs.132 crores
	(£99 millions)
Maintenance of buildings and equip- ment at 7½ per cent. per year of capital expenditure	Rs.9.9 crores
	(£7.425 millions)

25. General Hospitals

For urban areas we would suggest on an average a hospital with 40 beds for every 10,000 persons. As the average population of a town in India is 18,365, this would mean generally two hospitals per town of 40 beds each or one hospital of 80 beds. In addition to meeting the needs of the local population, the general hospitals in towns should serve as centres for expert advice and specialized treatment to sick persons in neighbouring rural areas. The capital cost of a hospital of this nature with 40 beds would be in the neighbourhood of Rs.40,000 (£3,000), and the running expenses, which would include the salaries of doctors and nurses, expenses of indoor patients, etc., would amount roughly to Rs.28,000 (£2,100) per annum. Here again it is assumed that to some extent voluntary and part-time services would be forthcoming. The total cost of general hospitals in towns would thus amount to:

Buildings and initial equipment ..	Rs.22 crores (£16½ millions)
Running expenses per year ..	Rs.15 crores (£11½ millions)
Maintenance of buildings and equip- ment at 7½ per cent. per year of capital expenditure	Rs.1.5 crores (£1¼ millions)

26. Maternity Hospitals

Besides general hospitals, every town in India should have adequate provision for maternity services. In the year 1939 the number of maternal deaths arising out of childbirth amounted to 200,000, and it is considered that 80 per cent. of these deaths could have been prevented if adequate maternity services had been available. As the *Indian Medical Review* puts it, "it is the

right of every woman to have skilled attendance during pregnancy, labour and the puerperium.”¹ In rural areas the midwives attached to the dispensary should be able to render all necessary help in this respect to expectant mothers in their homes. But in towns it is necessary to have special institutions for this purpose. A maternity hospital with 30 beds should meet the requirements of the average population of a town in India in this matter. The cost of building such a hospital and providing it with initial equipment would be in the vicinity of Rs.30,000 (£2,250) and a sum of Rs.24,000 (£1,800) would cover its running expenses. The total cost of maternity clinics for all the towns in India on this basis would be:

Buildings and initial equipment ..	Rs.8 crores (£6 millions)
Running expenses per year ..	Rs.6 crores (£4½ millions)
Maintenance of buildings and equipment at 7½ per cent. per year of capital expenditure	Rs.60 lakhs (£450,000)

27. *Specialized Treatment*

Special institutions for the treatment of tuberculosis, cancer, venereal diseases, mental disorders, etc., would have to be provided at suitable places and would probably require accommodation for about 150,000 beds. The capital cost of housing these institutions and supplying them with equipment would on a very rough estimate amount to about Rs.19 crores (£14¼ millions) and would require a recurring expenditure of about Rs.11 crores (£8¼ millions). The cost of maintaining buildings and equipment would be Rs.1.5 crores (£1⅓ millions).

¹ *Indian Medical Review*, 1938, page 185.

28. Cost of Public Health

The total cost of the various health and medical services mentioned above would be:

	Non-recurring cost (Rs. crores)	Recurring cost (Rs. crores)
Sanitation, water supply, etc. . .	100 (£75,000,000)	7.5 (£5,625,000)
Rural dispensaries	132 (£99,000,000)	141.9 (£106,425,000)
General hospitals	22 (£16,500,000)	16.5 (£12,375,000)
Maternity clinics	8 (£6,000,000)	6.6 (£4,950,000)
Specialised institutions . .	19 (£14,250,000)	12.5 (£9,375,000)
Total . .	281 (£210,750,000)	185.0 (£138,750,000)

29. Minimum Educational Needs

That every person above the age of 10 should be able to read and write and to take an intelligent interest in private and social life is yet another of the constituents of a minimum standard of living which we should like to bring within the reach of every individual in the country. The percentage of literacy above the age of 5 in India to-day is 14.6. In the advanced countries of the world it is more than 80. "Extreme forms of poverty", it is maintained, "will prevail amongst the masses in India as long as the overwhelming majority of the Indian people are able neither to read nor write."¹

30. Primary Education: Capital Cost

To provide adequate facilities for primary education, it is necessary to have a school for every village at least up to five forms. Construction of suitable buildings

¹ W. M. Kotschnig: *Unemployment in the Learned Professions*, page 316.

with equipment for this purpose, consisting of two rooms, 20 ft. × 30 ft. each, in rural areas would cost nearly Rs.66 crores (49½ millions). In urban areas, assuming that a room of 20 ft. × 30 ft. is necessary for about 30 students and that the cost of buildings would be twice as high as that in rural areas, the cost of establishing primary schools would amount to Rs.20 crores (£15 millions).

31. *Primary Education: Recurring Cost*

The recurring expenditure on primary schools consists largely of the salaries of teachers, which are very low at present and which will have to be increased. According to some educationists it is possible to reduce the incidence of these salaries substantially by introducing suitable reforms such as increasing the number of students per teacher, introducing the part-time system, framing suitable curricula, etc. Increase in the number of students per teacher would alone reduce the cost by about 50 per cent. The League of Nations' Mission of Educational Experts which reported on the reorganization of education in China remarks: "In China as a whole there are 20.3 pupils to one teacher, whereas in many countries of a high standard of education there are 2 to 3 times as many. This should mean that in the same conditions and at the same expense, between 2 and 3 times as many pupils as are actually under instruction could be dealt with by the existing staffs of teachers, and in the present very difficult conditions not less than 50 to 60 pupils per teacher should be taken as basis."¹ But assuming that the present system continues, we calculate the recurring cost of making primary education compulsory to boys and girls between 6 and 11 years of age at an average expenditure per pupil of Rs.15

¹ Quoted by Mr. R. V. Parulekar in *Literacy in India*, page 113.

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(£1 2s. 6d.) in rural areas and Rs.25 (£1 17s. 6d.) in urban areas per annum.¹ The cost works out as follows:

Students in rural areas ..	44.1 million
Average cost per student per annum	Rs.15 (£1 2s. 6d.)
Total recurring cost per annum	Rs.66 crores (£49½ millions)
Students in urban areas ..	6.5 million
Average cost per student per annum	Rs.25 (£1 17s. 6d.)
Total recurring cost per annum	Rs.16 crores (£12 millions)
Total recurring cost in urban and rural areas	Rs.82 crores (£61½ millions)

To this, 7½ per cent. of the capital expenditure will have to be added for the maintenance of buildings, which would amount to Rs.6 crores (£4½ millions) per annum.

32. *Adult Literacy*

Adult education should aim at literacy for all those who have passed the primary school leaving age of 11 years but have not passed 50 and who have not become literate. It will consist of a short course, mainly part-time, of about 3 to 6 months' duration. It is general experience that adults acquire literacy much more quickly than children if they are given proper instruction. On the basis of experiments made after the inauguration of Provincial Autonomy, the cost of making an adult

¹ The average cost per student of primary, middle school and high school education which we have assumed in this memorandum is generally on the low side as compared with that adopted by Mr. Sargent in his report. The figures we have assumed for primary education are, however, 75 per cent. above the pre-war average.

literate, *i.e.* able to read and write, roughly works out to Rs.4 (6s.) per adult. Theoretically, the total number of illiterate adults on the basis of the 1941 census, which a scheme of adult education will have to tackle, would be about 200 million. In actual practice, however, the number would be smaller, as a large proportion of the adults will pass out of the 11-50 age range and some others may die before it is possible to provide them with the necessary facilities for acquiring literacy. These two factors will bring down the number of adults to be made literate to about 165 million if the programme is spread over 15 years. At the rate of Rs.4 (6s.) per adult, the cost of liquidating the illiteracy of our adult population will therefore amount to about Rs.66 crores (£49½ millions). This, however, will not be a recurring cost, since once the existing illiterate adults are made literate, further efforts in this direction would not be necessary. Adult education classes, which will have to be generally morning or evening classes, can be conducted in buildings provided for primary, secondary or higher education or at the places where the persons are working and would not, therefore, require any expenditure on buildings. The total cost of making the whole of our present population literate would thus amount to:

Primary education—			
Non-recurring cost	Rs.86 crores (£64½ millions)
Recurring	Rs.88 crores (£66 millions)
Adult education	Rs.66 crores (£49½ millions)

33. *Minimum Cost of Living*

The aggregate amount of income required to meet the barest requirements of human life, as set out in the

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foregoing paragraphs (which, however, exclude a number of small items such as fuel, etc.), would be as follows:

	Income required to be spent— round figures (Rs. crores)	
Cost of food	2,100	(£1,575 millions)
Cost of clothing	260	(£195 millions)
Recurring expenditure on housing	260	(£195 millions)
Recurring expenditure on health and medicine ..	190	(£142½ millions)
Recurring expenditure on primary education ..	90	(£67½ millions)
Total	2,900	(£2,175 millions)

34. *Income Below Minimum*

This means that, in order to secure a minimum standard of living, a *per capita* income of Rs.74 (£5 11s.) at pre-war prices is essential. That we are much below this minimum at present is indicated by the fact that according to the latest available estimate¹ of the national income of British India, which relates to the year 1931-32, our *per capita* income does not exceed Rs.65 (£4 17s. 6d.). The figure for 1939 will be lower still if we make allowance for the large increase in the population of British India, 5 million per annum since 1931, which is not accompanied by any significant increase in the total national dividend. It is, therefore, necessary to increase our national income above the present level by a substantial margin even if we aim at nothing more than to secure for our people their bare requirements as human beings.

¹ The estimate of national income and its distribution for British India which has been used in this memorandum is that made by Dr. V. K. R. V. Rao and published in *The National Income of British India, 1931-32.*

III

ECONOMIC PLAN EXPLAINED

35. *Low National Income*

The preceding discussion has shown that our present national income is not sufficient to support even a minimum standard of living. But if we are going to develop our resources according to a prearranged plan, we should certainly not be satisfied merely by providing for every person the minimum requirements of life. A planned economy must aim at raising the national income to such a level that after meeting the minimum requirements every individual would be left with enough resources for enjoyment of life and for cultural activities. Our present information, inadequate as it is, regarding the potential resources of the country in respect of raw materials, power and labour leads us to believe that given a systematic plan and adequate organization it is possible to raise our national income within a short time to a level considerably above that required for meeting the minimum needs of life. Comparative figures of *per capita* national income in 1931 for certain countries of the world are given below to indicate the disparity between India and other countries:

ANNUAL PER CAPITA INCOME IN Rs. ¹			
U.S.A. ..	1,406	France	621
	(£105 9s.)		(£46 11s. 6d.)
Canada ..	1,038	Germany	603
	(£77 17s.)		(£40 4s. 6d.)
U.K. ..	980	Japan	218
	(£73 10s.)		(£16 7s. 0d.)
Australia	792	Br. India	65
	(£59 8s.)		(£4 17s. 6d.)

¹ The figures except that for India are from *The Conference Board Economic Record*, August 3, 1939. The original dollar figures are converted at 1 \$ = Rs.2.289.

36. *Aim of Plan*

The objective we propose for a plan of economic development for India may be stated as follows. There should be a threefold increase in the total national dividend within a period of 15 years from the time the plan is put into execution. The aggregate income of British India as estimated in 1931-32 is Rs.1,766 crores (£1,324½ millions). This should be raised in 15 years to about Rs.5,300 crores (£3,975 millions). Assuming that the figure of *per capita* income calculated for British India is also applicable to the States, the range of increase in the total national dividend would be from Rs.2,200 crores (£1,650 millions) to Rs.6,600 crores (£4,950 millions).

37. *Increase in Per Capita Income*

A threefold increase in the total national dividend will result in an equivalent increase in the *per capita* income only on the assumption that our population over the planning period remains stationary. This assumption is, however, not likely to hold good. In the absence of adequate reliable data regarding fertility, it is extremely difficult to make any forecast about the future growth of our population over a period of years. But after balancing the various factors, we are inclined to believe that the rate of increase recorded during the last decade will generally hold good for the period of our plan. With the progress of the plan, both our birth rate and death rate would decline, but the balance of births over deaths is not likely to show any marked change. At the rate of 5 million per annum the population of India at the end of 1960, assuming the plan to start in 1945, will, therefore, be 489 million and a threefold increase in our total national dividend would in effect mean a *per capita* income of Rs.135 (£10 2s. 6d.) representing a doubling of the 1931-32 figure.

38. *A Modest Goal*

This might appear to be too modest a goal for a planned economy to achieve, especially in view of the fact that in the U.S.S.R., within a short period of 12 years since the beginning of the first Five-Year Plan, the national income is reported to have increased from 25 billion roubles to 125 billion roubles, *i.e.* fivefold. As our national resources are not as extensive and varied as those of the U.S.S.R., and as we are anxious to avoid the heavy cost in terms of human suffering which the U.S.S.R. had to pay to achieve this spectacular result, we must necessarily fix our objective at a lower figure.

39. *Balanced Economy*

The proposed threefold increase in India's total national dividend will be brought about in such a way that the present overwhelming predominance of agriculture would be reduced and a more balanced economy established. According to the national income figures for 1931-32, the contribution of industry, agriculture and services to the total national dividend of British India is estimated at 17, 53 and 22 per cent. respectively.¹ (About 8 per cent. of the income has not been classified under any of these categories.) We propose a plan of development under which the respective percentages might be changed roughly to 35, 40 and 20 for the whole of India. On the basis of these percentages, the threefold increase in the national income which is aimed at would involve the following increments in the net

¹ As agricultural prices in 1931 were very low on account of the general economic depression, these proportions would be different in normal times. The proportion of income from agriculture would be higher and that from industry and services would be lower.

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income from industry, agriculture and services:

	Net income in 1931-32 (Rs. crores)	Net income expected after 15 years (Rs. crores)	Percentage increase
Industry . .	374 (£280½ millions)	2,240 (£1,680 millions)	500
Agriculture	1,166 (£874½ millions)	2,670 ¹ (£2,002½ millions)	130
Services . .	484 (£363 millions)	1,450 (£1,087½ millions)	200

40. *Agricultural Character Unchanged*

At first sight the percentage increase in industrial income which this plan involves might appear to be disproportionately large as compared with the increase in agricultural income. But it has to be borne in mind that our industrial potentialities have to a great extent remained unexploited so far and adequate provision to make up this lag in industrial development would naturally mean a large percentage increase over the present level. On the other hand, as the demand for food crops which form the bulk of our agricultural products is comparatively inelastic, even after taking into account the probable increase in population and the higher level of income which the plan will bring about and the larger demand for industrial raw materials, it is not likely that more than a 130 per cent. increase will be absorbed within the country. It is, however, necessary to mention that, although ultimately the contribution of agriculture to our national dividend will be only 40 per cent. as compared with 53 per cent. in 1931-32, it will not change the essentially agricultural character of

¹ It is necessary to point out that this figure is calculated on the basis of Dr. Rao's estimate for 1931-32, which mainly takes into account harvest prices, while the value of minimum food requirements which we have estimated in paragraph 11 is based on retail prices.

our economy. From the point of view of employment, agriculture will continue to employ the greater part of our population. Even the U.S.S.R., in spite of the tremendous development of industries which she has achieved since the inauguration of the first Five-Year Plan in 1928, has not been able to reduce to any marked degree the percentage of population employed in her agriculture.

41. *Industries Classified*

The industries which an economic plan for India would seek to develop may be classified into two principal categories: (i) basic industries; and (ii) consumption goods industries.

42. *Basic Industries*

Basic industries, which would get priority over the other type of industries in the earlier years, would include among others the following principal groups:

Power—electricity.

Mining and metallurgy—iron and steel, aluminium, manganese, etc.

Engineering—machinery of all kinds, machine tools, etc.

Chemicals—heavy chemicals, fertilizers, dyes, plastics, pharmaceuticals, etc.

Armaments.

Transport—railway engines and wagons, ship-building, automobiles, aircraft, etc.

Cement.

43. *Importance of Basic Industries*

These industries are the basis on which the economic superstructure envisaged in the plan will have to be erected. It is obvious that in modern times no industry

can be established without power, machinery, chemicals, etc. Similarly, without fertilizers it is difficult to imagine any progress in agriculture. In the absence of adequate shipping and other forms of transport, economic life especially in a country of the dimensions of India will remain stagnant. But for the lack of most of these industries, India would not have been left so far behind other countries of the British Empire such as Canada and Australia in the matter of industrial development in response to war conditions. We consider it essential for the success of our economic plan that the basic industries, on which ultimately the whole economic development of the country depends, should be developed as rapidly as possible.

44. *Production of Power*

We have deliberately placed the production of power first in the list of basic industries because we believe that the development of our industries, both large- and small-scale, as also of agriculture and transport, will be determined to a large extent by the development of electricity. The rapid economic development of the U.S.S.R. and Japan during the pre-war period and of Canada during the present war can ultimately be traced to the development of electricity in these countries. In fact in the U.S.S.R. a fifteen-year plan for the electrification of the country, the *Goelro*, was drafted as far back as in 1920, and it was only when the success of this plan was established beyond doubt that the ambitious five-year plans were put into execution. The scope for the development of hydro-electric energy in particular is very large in India. Its potential reserves have been estimated at about 27 million kilowatts, out of which only half a million kilowatts have been developed so far.

45. *Consumption Goods Industries*

Some of the principal consumption goods industries which should be further developed in India are:

- Textiles—cotton, silk and wool.
- Glass industry.
- Leather goods industry.
- Paper industry.
- Tobacco industry.
- Oil industry, etc.

46. *Consumer's Choice*

The list of consumption goods industries given above is only illustrative. The nature and kind of consumption goods industries to be developed will ultimately be dependent upon the income of the people. As income increases, the percentage of expenditure on different classes of consumption goods will show marked variations. For example, demand for articles of consumption like furniture, books, artware, etc., which will be relatively small at a low income level, will increase as the general level of income rises. What classes of consumption goods industries should be developed will naturally be decided from time to time, as the plan progresses, in the light of variations in the demands of consumers. As far as is consistent with planning, the free choice of consumers in respect of consumption goods should suffer no restriction.

47. *Scope for Small Industries*

It is an essential part of our plan for the organization of industries that adequate scope should be provided for small-scale and cottage industries along with large-scale industries. This is important not merely as a means of affording employment but also of reducing the need for capital, particularly of external capital, in the early

stages of the plan. It is difficult to define the considerations on which the choice between large- and small-scale industries and cottage industries should be determined. The factors involved in the choice are numerous and often conflicting. But generally it may be stated that while in basic industries there is little scope for small industrial units, they have an important and useful place in consumption goods industries where their function is in many cases complementary to that of large units.

48. *Capital for Industries*

It is extremely difficult to make an estimate of the amount of capital which India would require to carry out the programme of industrial development outlined above. A large number of the industries proposed would be new to the country and the proportion of capital required by each of them to the net product which it is likely to contribute would show marked variations. It may be explained that by the "net product" of an industry in this context is meant its gross production less the cost of raw materials and power consumed by it. And "capital" includes not merely paid-up capital but also general reserves and borrowed funds. In the nature of things some industries like the hydro-electric industry are bound to require in proportion to their net product a much higher proportion of capital than, say, textiles. The proportion of capital employed will also vary according to the extent to which capitalistic methods of production are employed and technological advances are made use of.

49. *Wide Variations in the Ratio*

No figure either of valuation of capital employed in existing industries in the country or of their net product are available. But the ratios of capital employed to net product worked out on the basis of information

given in the balance sheets for the Bombay cotton textile industry, the Associated Cement Companies and the Tata hydro-electric group are as follows:—

	Cotton textile	Cement	Hydro-electricity
1937	2.13	3.12	9.19
1938	2.62	2.11	7.80
1939	3.73	2.53	8.23

50. *A Low Ratio Assumed*

Taking into account the fact that while India has plenty of labour, her capital resources are comparatively small, we think that industries should be organized in such a way that over the whole planning period the ratio of capital including land and buildings to net product would not be too high. Provision for small-scale and cottage industries in the industrial organization of the future has been suggested by us partly with this object in view. Assuming a ratio of 2.4, which as compared with similar ratios in other countries is a low proportion, the total amount of capital required to increase our net industrial output to Rs.2,240 crores (£1,680 millions) as visualised in the plan would be in the neighbourhood of Rs.4,480 crores (£3,360 millions). In this connection it may be mentioned that the amount of capital invested in our industries, excluding railways and other forms of transport, in the pre-war period has been estimated at about Rs.700 crores (£525 millions).

51. *Agricultural Development*

In the proposed plan we have aimed at increasing our agricultural production by 130 per cent. The target has deliberately been fixed low. Our idea is that in respect of agricultural commodities India should as far as possible aim at feeding her own population adequately and should not aspire in the initial years of planning to export to foreign markets. Our plan for

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agricultural development aims not merely at increasing production generally but also at increasing the production of those crops which are necessary for feeding the population. This would necessarily involve a readjustment of the areas under cultivation of different crops. Areas under commercial crops like jute, tea, cotton, oilseeds, etc., the fortunes of which are to a substantial extent dependent on foreign trade and which have introduced a serious element of uncertainty in our economic life, would have to be adjusted to the conditions of international trade that might prevail in the post-war period. The substitution of a large proportion of the existing short staple cotton by long staple varieties and the development of cotton textile and oil-crushing industries within the country would, however, reduce the dependence of these crops on foreign markets. In respect of food crops it is not only desirable that their production should be increased but the proportion of areas under cereals, pulses, vegetables, fruit, etc., would have to be fixed in relation to the requirements of a nutritive diet.

52. Reforms Proposed

Increase in agricultural production, however, presupposes certain fundamental reforms. The most important question to be solved is that of the size of agricultural holdings. The average holding at present is not more than three acres scattered over the village in tiny fragments. Although there may be definite limits to the advantages arising out of consolidation of holdings and increase in their size, it is one of the main reforms which would be necessary for the adoption of intensive farming. To bring it about, co-operative farming appears to present less difficulties than any other method that may be suggested. It increases the size of the holding for purposes of cultivation without depriving the culti-

vators of their right to the ownership of their existing holdings. In order that co-operative farming should come into vogue as early as possible, some measure of compulsion appears desirable.

53. *Rural Indebtedness*

It is also necessary to liquidate the burden of agricultural indebtedness. The debt which was estimated at Rs.1,200 crores (£900 millions) before the war has since been probably reduced to a considerably smaller figure as a result of the favourable prices realized by agriculturists during the last two years. It is perhaps possible to reduce this further by means of conciliation. The liquidation of debt should be arranged principally through co-operative societies, which would require to be suitably organized for the purpose and provided with sufficient long-term finance. It may be pointed out that the finance required for this is not included in our estimate of capital expenditure since the debt of the agriculturist represents the savings of another class and these savings would themselves be available directly or indirectly for financing co-operative societies.

54. *Soil Erosion*

In addition to the size of holdings and rural indebtedness, there is a third problem the seriousness of which has not yet been fully realized but which will need attention if our agriculture is to be improved. This is the problem of soil erosion. Every year large quantities of valuable top soil are washed away by rain never to come back. If this process goes on, millions of acres of land will be permanently lost for cultivation. It is essential to check this evil in time by terracing arable lands, launching schemes of afforestation and adopting other measures suitable to conditions in different tracts. For soil conservation and other permanent improvements

to land, a sum of about Rs.200 crores (£150 millions) should be provided as capital outlay and Rs.10 crores (£7½ millions) as recurring expenditure.

55. Ways of Increasing Output

When these three fundamental questions, viz., the size of holdings, indebtedness, and soil erosion, have been tackled, agricultural production in India can be increased by (i) extending the area under cultivation or by (ii) improving the yield per acre or by (iii) a combination of both. Although at present 18 per cent. of the area in British India, 94 million acres, is classified as cultivable waste, it is extremely doubtful whether much of it is really cultivable. The question deserves to be thoroughly investigated.

56. Yield per Acre

Improvement in yield, on the other hand, appears to have great possibilities. The following comparative figures are significant:

YIELD PER ACRE IN TONS—1939-40

	Rice	Wheat	Sugar cane	Cotton
U.S.A. ..	1.01	0.37	20.06	0.11
Canada ..	—	0.52	—	—
Australia ..	—	0.42	—	—
Japan ..	1.61	—	—	—
Egypt ..	—	—	—	0.23
Java ..	—	—	54.91	—
India ..	0.35	0.32	12.66	0.04

57. Irrigation

Improvement in the yield per acre can only be brought about by better methods of farming which would include irrigation, better rotation of crops, use of better varieties of seeds, manure, improved types of implements, etc. Of the total area of 209 million acres

under cultivation in British India in 1938-39, only 54 million acres were irrigated—28 million acres by canals, 6 million by tanks, 13 million by wells and 7 million by other sources. It is necessary to increase the area under irrigation substantially if the yield of our crops is to be improved. We estimate the increase required at 200 per cent. in the area irrigated by canals and by all the other means combined. The total capital outlay on the existing canals amounted to Rs.153 crores (£114 $\frac{3}{4}$ millions) in 1938-39 and the annual working expenses were in the neighbourhood of Rs.5 crores (£3 $\frac{3}{4}$ millions). On this basis the capital cost of the additional canals would work out to Rs.303 crores (£227 $\frac{1}{4}$ millions) and their maintenance would require a sum not exceeding 10 crores of rupees (£7 $\frac{1}{2}$ millions) per annum. Construction of new canals to this extent will, however, involve the erection of expensive dams for impounding water. In view of this, the amount of capital required for the construction of canals may be increased to Rs.400 crores (£300 millions). It may be mentioned incidentally that in constructing new canals the possibility of their being used for the production of hydro-electric power should not be lost sight of. The cost of constructing tanks, wells, etc., to irrigate another 48 million acres may be roughly estimated at about Rs.50 crores (£37 $\frac{1}{2}$ millions). Maintenance charges for this form of irrigation would be relatively small.

58. *Model Farms*

In order to popularize improved methods of cultivation and dairy farming and to educate the cultivator in their use, a large extension of model farms would be necessary. On the basis of one farm for 10 villages, the number of farms required would be about 65,000. Besides educating the cultivator in the use of improved methods of farming, these farms would be expected

to provide improved varieties of seed and manure, agricultural implements, bullocks, etc., and generally to help agriculturists. As improvement in the yield of agriculture will largely depend on the introduction of fertilizers, both organic and inorganic, it will be an important responsibility of the model farm to give proper instruction to the farmer regarding their use. Each of these farms should also be provided with a veterinary branch. The cost of a farm established on these lines may be estimated at Rs.50,000 (£3,750)—Rs.30,000 (£2,250) on account of capital and Rs.20,000 (£1,500) on account of working expenses.

59. *Working Capital*

In addition to the amounts indicated above, it is necessary to provide for the working capital required to finance current agricultural operations. We estimate that a sum of Rs.250 crores (£187½ millions) would be sufficient to finance the increase in agricultural output expected under our scheme.

60. *Capital for Agriculture*

The total amount of capital required for increasing agricultural production to the target figure is shown below:

	Non-recurring expenditure (Rs. crores)	Recurring expenditure (Rs. crores)
Soil conserva- tion, etc. . .	200 (£150 millions)	10 (£7½ millions)
Working capital . . .	—	250 (£187½ millions)
Irrigation—		
Canals . . .	400 (£300 millions)	10 (£7½ millions)
Wells . . .	50 (£37½ millions)	—
Model farms	195 (£146½ millions)	130 (£97½ millions)
	<u>845 (£633½ millions)</u>	<u>400 (£300 millions)</u>

61. *Transport and Communications*

An increase in the volume of industrial and agricultural production as envisaged in the previous paragraphs will result in a large movement of goods and services within the country. The increase in the net income from trade and services which we anticipate is about 200 per cent. Internal trade may well be expected to increase to an extent which would necessitate a large expansion of the means of communication, particularly railways, roads, shipping and civil aviation. In all these spheres India is seriously deficient. India with an area of approximately 1,580,000 square miles has about 41,000 miles of railway, while Europe, excepting the U.S.S.R., with an area of 1,660,000 square miles has 190,000 miles of railway. Similarly, in British India the proportion of road mileage to area works out at 35 miles per 100 square miles. The corresponding figure for the U.S.A. is 100 and for the U.K. 200. Coastal shipping has been even more seriously neglected. Taking into account the fact that railways have received comparatively more attention in India and that in future the necessity of developing communications in rural areas would be more urgent, we should aim at an increase of 21,000 miles in railways and 300,000 miles in roads. This would mean an increase of 50 per cent. over the existing railway mileage and an increase of 100 per cent. in the mileage of roads in British India alone. For the development of shipping, our aim should be to improve the small natural harbours that are scattered along India's extensive coast-line and to provide them with loading and unloading facilities. As regards civil aviation, since the expenditure likely to be incurred at the present stage will be relatively small, we have included no specific proposals regarding it.

62. *Railways*

The total route mileage of railways in India was

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41,000 miles in 1938-39 and the total capital at charge was Rs.848 crores (£636 millions). Assuming that the ratio of capital to route mileage remains the same, the capital cost of adding about 21,000 miles of new railway line in this country would roughly amount to Rs.434 crores (£325½ millions). Maintenance charges at the rate of about 2 per cent. would work out to Rs.9 crores (£6¾ millions) per annum.

63. *Roads*

The length of existing roads in British India is in the neighbourhood of 300,000 miles. Of these 74,000 miles are metalled and 226,000 miles are unmetalled. The programme of doubling this mileage in 15 years is intended to cover mainly village roads and the humbler district roads. Our idea is that all important villages should be connected with the main highways of trade so that "no village with a population of 1,000 and over should be more than, say, a mile or half a mile from a public road."¹ If side by side with this road development the bullock cart, which is bound to remain the principal means of vehicular traffic in rural areas, is also improved, especially by making the use of pneumatic tyres universal, it would go a long way towards reducing the cost of maintenance. As villages are not likely to have heavy traffic, we suggest that the roads connecting them with traffic roads or trunk roads should be ordinary metalled roads. The use of pneumatic tyres for bullock carts should make them quite suitable for such roads. On an average the cost of a metalled road, 18 feet wide, is estimated at Rs.10,000 (£750) per mile. On this basis the cost of constructing 300,000 miles of additional road mileage in India would amount to Rs.300 crores (£225 millions). The cost of maintenance would be Rs.35 crores (£26¼ millions).

¹ Presidential address of Sir Kenneth Mitchell to the eighth session of the Indian Roads Congress, 1943.

64. *Reconstruction of Existing Roads*

If India is to have an adequate road system in future it is necessary, in addition to constructing this new mileage of roads, to metal the 226,000 miles of ordinary earth roads that are being used for vehicular traffic at present. The cost of reconstructing these roads at the rate of, say, Rs.5,000 (£375) per mile would amount to Rs.113 crores (£84½ millions). If they are reconstructed, the cost of their maintenance will be less than what is incurred at present.

65. *Shipping*

For a long time past, very few ports in India except Bombay, Calcutta, Madras and Karachi have had adequate shipping facilities. In recent times several smaller ports, principally in Indian States, have been developed, but still the number of ports suitable for shipping is very small. If shipping is to occupy its legitimate place in the transport system of the future, it is necessary to provide more harbours suitable for small ships. A capital expenditure of about Rs.50 crores (£37½ millions) may be estimated for the purpose. At 10 per cent. the maintenance charges would amount to Rs.5 crores (£3¾ millions) per annum.

66. *Cost of Transport*

The total cost of increasing rail and road mileage and improving ports would thus be:

	Non-recurring expenditure (Rs. crores)	Recurring expenditure (Rs. crores)
Railways ..	434 (£325½ millions)	9 (£6¼ millions)
Roads—		
New construction	300 (£225 millions)	35 (£26¼ millions)
Reconstruction ..	113 (£84½ millions)	—
Ports	50 (£37½ millions)	5 (£3¾ millions)
Total ..	897 (£672¼ millions)	49 (£36¾ millions)

67 Co-operation of the People

In the execution of a comprehensive plan of economic development, it is essential that we should be able to count on the willing co-operation of the people. This will be possible only if the masses are able to read and write and are in a position to understand for themselves the broad implications of the developments embodied in the plan. The execution of a plan which aims at an all-round development will also require a huge personnel trained for technical posts in agriculture, industry and trade and for general administration. Provision of primary education, which has been mentioned as one of the essential requirements of a reasonable standard of living, would under Mr. Sargent's scheme require about 1,800,000 teachers in British India alone. Provision of adequate medical help would need a large number of doctors and nurses. As our natural resources such as minerals, hydro-electric power, soil, etc., are not yet properly surveyed, extensive surveys¹ will have to be undertaken to ascertain their quantity, quality and distribution and a large number of research stations will be required to carry out investigations. Some idea of the personnel required for large-scale economic planning may be gathered from the following statement relating to Soviet Russia in 1939:²

¹ Sir Cyril Fox states: As a result of 97 years' work carried out by officers of the Geological Survey of India, it has been found that an average of 500 square miles can be accurately surveyed each year, and that the average service in the field is about 10 years per geologist. Roughly, 100 geologists in all have been so employed since 1846, so that theoretically only 500,000 square miles could have been examined in any detail in the time, and there remain over a million square miles still to scrutinise.

² E. Strauss: *Soviet Russia*, page 317.

Managing staff of Soviet economy—	
Heads of administration, etc.	450,000
Managers of State industry	350,000
Managers of State and collective farms	582,000
Others	369,000
Engineers, architects	330,000
Technicians	906,000
Teachers, research workers	1,049,000
Accountants, economists, statisticians	2,439,000
Others	3,116,000
Total Soviet intelligentsia	9,591,000
Total Soviet population	170,000,000

68. *Programme of Education*

To achieve mass literacy and to secure a sufficient number of educated administrators and trained technicians, a comprehensive programme of education is necessary. This should cover the following main aspects:

- Primary education.
- Adult education.
- Secondary and vocational education.
- University education.
- Scientific education and research.

69. *Adult Education*

The expenditure necessary to provide universal primary education and to secure literacy for adults has already been indicated in paragraph 32. As regards adult education, something more is necessary under a plan of development than the minimum provision suggested in that paragraph. The content of adult education should be widened so that it will make “every possible member of a state an effective citizen and thus give reality to the ideal of democracy.” To achieve this, a scheme of adult education must also provide for cultural and vocational

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education besides the teaching of the three R's. We estimate the cost of this per adult roughly at Rs.2¹ (3s.) and the total at Rs.33 crores (£24³/₄ millions). This will bring the aggregate cost of adult education, including the provision made in paragraph 32, to Rs.99 crores (£74¹/₂ millions).

70. *Secondary Education*

It is necessary to split up secondary education into two parts: middle school and high school education. The former is considered as important as primary education. "There is little hope of permanently improving the conditions of village life and of making the rural population responsive to fruitful ideas unless the younger generation is educated beyond the primary stage up to an age when boys and girls realize that they are becoming social and economic assets to the community."² All primary school students should, therefore, be given a course of middle school education for three years in order to make them useful citizens. Approximately, the expenditure on accommodation for middle schools will be half that for primary schools. For high schools, the accommodation required would be mainly in the bigger villages and urban areas and its cost may be calculated on the basis of building costs in urban areas. Mr. Sargent suggests that "roughly one child in every five will be able with profit to enter the high school stage." The likely number of high school students on this basis would be round about 10 million. An approximate estimate of recurring expenditure on secondary education may be made by applying the average cost per student in middle schools and high schools in the country during the pre-war period. The

¹ Figure based on Mr. Sargent's estimate.

² *Report on Vocational Education in India*, page 13.

total expenditure on middle school and high school education would then be as follows:

Middle schools in rural areas— buildings and equipment ..	Rs.34 crores (£25½ millions)
Middle school students in rural areas	22 million
Average cost per student per annum	Rs.22 (£1 13s.)
Cost of middle school education in rural areas	Rs.49 crores (£36¾ millions)
Middle schools in urban areas— buildings and equipment ..	Rs.11 crores (£8½ millions)
Middle school students in urban areas	3.3 million
Average cost per student per annum	Rs.31 (£2 6s. 6d.)
Cost of middle school education in urban areas	Rs.10 crores (£7½ millions)
High schools—buildings and equipment	Rs.33 crores (£24¾ millions)
Number of high school students	10 million
Average cost per student per annum	Rs.64 . (£4 16s.)
Cost of high school education ..	Rs.64 crores (£48 millions)
Cost of maintenance of middle school and high school build- ings at 7½ per cent. of capital expenditure	Rs.6 crores (£4½ millions)

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71. *University and Technical Education*

For vocational education,¹ university education and scientific education and reasearch, the data necessary for a detailed calculation are lacking. We propose, therefore, to take roughly 5/1000ths of the national income per year as a comprehensive measure of the expenditure which would be required. This would amount roughly to Rs.10 crores (£7½ millions) in the first year of the plan and to Rs.30 crores (£22½ millions) in the last year. It may be mentioned that the total expenditure on scientific education and research amounts to 1/1000th of the national income in the U.K., 6/1000ths of the national income in the U.S.A. and 10/1000ths of the national income in the U.S.S.R. All told, the amount of expenditure on education would be:

	Non-recurring expenditure (Rs. crores)	Recurring expenditure (Rs. crores)
Primary education	86 (£64½ millions)	88 (£66 millions)
Adult education	99 (£74½ millions)	—
Secondary educa- tion	82 (£61½ millions)	129 (£96¼ millions)
University educa- tion, scientific education and research ..	—	average 20 (£15 millions)
Total ..	267 (£200¼ millions)	237 (£177¼ millions)

72. *Public Health*

The expenditure necessary under public health has been indicated in paragraph 28. No further provision is necessary under a 15-year plan.

¹ The average cost per pupil per annum in the technical and industrial schools in the U.P. in 1937 ranged from Rs.155 (£11 12s. 6d.) to Rs.869 (£65 3s. 6d.), although there was a good deal of concentration between Rs.200 (£15) and Rs.300 (£22 10s.). The Industrial Commission, 1916-18, estimated that the average cost per pupil in industrial schools would be about Rs.200 (£15) and that they could be established with a capital of Rs.500 (£37 10s.) per student.

73. *Allowance for Increase in Population*

In estimating the capital outlay on education and public health, we have not taken into account the probable increase in population during the period of the plan. This is because we have not made any allowance in our estimate for the expenditure which has already been incurred on education and public health up to now, and we assume that this amount would be sufficient to cover the expenditure due to increase in population.

74. *Cost of Additional Housing*

In the case of housing, however, there is no such reserve in the estimate given in paragraph 15 out of which provision may be made for an increase in population. In estimating the capital expenditure on house construction during the period of the plan, we must, therefore, take into account the additional housing necessary for increase in population. A capital outlay of about Rs.800 crores (£600 millions) would be required for this purpose. The total amount of capital required for bringing existing housing up to the minimum standard we have laid down and for providing new houses to meet an increase in population would, therefore, amount to Rs.2,200 crores (£1,650 millions). At 7½ per cent. of the total capital expenditure, including the value of existing housing, the cost of maintenance would be Rs.318 crores (£238½ millions.)

75. *Miscellaneous Capital Expenditure*

For miscellaneous capital expenses which have not been specifically mentioned, a sum of Rs.200 crores (£150 millions) might be provided. No separate figure for maintenance charges under this head seems necessary.

76. Cost Classified

The total expenditure which the plan is likely to involve is summarized below:

	Non-recurring expenditure (Rs. crores)	Recurring expenditure (Rs. crores)
Industry ..	4,480 ¹ (£3,360 millions)	—
Agriculture..	845 (£633½ millions)	400 (£300 millions)
Communica- tions ..	897 (£672½ millions)	49 (£36½ millions)
Education ..	267 (£200½ millions)	237 (£177½ millions)
Health ..	281 (£210½ millions)	185 (£138½ millions)
Housing ..	2,200 (£1,650 millions)	318 (£238½ millions)
Miscellaneous	200 (£150 millions)	—
Total ..	9,170 (£6,877½ millions)	1,189 (£891½ millions)

77. Total Capital Required

Throughout this section we have shown recurring and non-recurring expenditure separately. We have made this distinction with the object of indicating how the capital expenditure is distributed and how it has been arrived at. In view of the fact that income from agriculture and industry and the revenue required for such services as education, health and communications may not be available in sufficient amount in the initial years, we have thought it desirable to include in our estimate of the total amount of capital which the plan is likely to require, the recurring charges for one year in respect of the completed plan. On this basis the total capital requirements of the plan we have outlined would amount to about Rs.10,000 crores (£7,500 millions) distributed as follows:

¹ The ratio of 2.4 which we have assumed for estimating the total amount of capital required for industrial development includes both fixed capital and working capital. The figure of working capital is not therefore separately calculated.

		(Rs. crores)	
Industry	4,480	(£3,360 millions)	
Agriculture	1,240	(£930 millions)	
Communications	940	(£705 millions)	
Education	490	(£367½ millions)	
Health	450	(£337½ millions)	
Housing	2,200	(£1,650 millions)	
Miscellaneous	200	(£150 millions)	
Total	10,000	(£7,500 millions)	

IV

SOURCES OF FINANCE

78. *External and Internal Finance*

In examining the sources from which the finance required for the plan may be obtained, it is important to distinguish between external finance and internal finance. External finance is the finance available for payment to foreign countries for goods and services imported from them, while internal finance is that required within the country for the mobilization of our resources. In the initial years of planning, India will be dependent almost entirely on foreign countries for the machinery and technical skill necessary for the establishment of both basic and other industries. As the plan develops, our dependence on foreign countries in this matter should steadily decline. The imports of machinery and technical skill inevitable in the initial years of planning would require a large amount of external finance, the raising of which constitutes an important problem in a plan of economic development. Internal finance on the scale which we consider necessary will also raise serious difficulties, but in a planned economy these would not be insurmountable. The sources of external and internal finance which would be available to us are:

External finance:

The hoarded wealth of the country, mainly gold.
Our short-term loans to the U.K.—sterling securities held by the Reserve Bank of India.
Our favourable balance of trade.
Foreign borrowing.

Internal finance:

Savings of the people.
New money created against *ad hoc* securities, *i.e.* on the inherent credit of the government.

79. *Hoarded Wealth*

The volume of hoarded wealth in India has been estimated at about Rs.1,000 crores (£750 millions) after allowing for the recent exports of "distress" gold. A part of this should become available for capital investment if, as is assumed at the beginning of this memorandum, a national government comes into power in which people have full faith and if suitable means are adopted for attracting hoards from their place of concealment. The amount available from this source may be estimated at not more than Rs.300 crores (£225 millions).

80. *Sterling Securities*

Our sterling securities in the Banking and Issue Departments of the Reserve Bank of India amount to about Rs.800 crores (£600 millions) at the moment. If the war continues for a year or two and His Majesty's Government continue to make purchases from India on the same scale as they have been making them hitherto, the amount is likely to increase to Rs.1,000 crores (£750 millions). This could be utilized for importing the capital goods required at the beginning of the plan.

81. *Balance of Trade*

As a result of the general policy of directing agricultural production primarily with a view to meeting the internal demand which we advocate in this plan, our export trade is likely to diminish in future. Side by side, the development of consumption goods industries and food crops within the country will bring about a reduction in the volume of imports. Our favourable balance on normal trade account is not, therefore, likely to shrink below Rs.40 crores (£30 millions) per annum which, because of the repatriation of most of our sterling debt, will be available as external finance. The total amount which might be expected from this source in 15 years will, therefore, be about Rs.600 crores (£450 millions).

82. *Foreign Borrowing*

India's credit in foreign capital markets is now very high and she can, therefore, borrow substantial amounts of capital if she so wishes in these markets, especially in America. Such capital, if it is not accompanied by political influence or interference of foreign vested interests, should not be unwelcome. Even if India resorts to "created money" as she is likely to, since this finance is to be employed for promoting an expansionist economy, its effect on her credit in foreign markets would not be so serious as it otherwise would be. By giving priority to basic industries in our programme of development and by using our sterling balances in the initial stages for importing the necessary plant, machinery and technical experts, it is, however, possible to curtail our requirements of external finance. As the plan proceeds, India would be able to satisfy her requirements of heavy machinery and other capital goods from her own industries. We may put the figure of foreign loans at about Rs.700 crores (£525 millions).

83. *Savings in Foreign Countries*

An important source of finance which would assume considerable proportions as national income grows, is the volume of savings within the country. The percentage of savings to national income in some foreign countries is given below:¹

	U.K.	U.S.A.	Germany	Japan	Russia
1900-10	12.2	14.3	19.1	—	8.2
1919-24	8.1	12.2	—	21.9	—
1925-30	7.6	10.9	7.7	19.8	7.8
1934-37	7.0	5.0	11.8	21.9	14.2

84. *Savings in India*

In India, taking into account the fact that the present standard of living is extremely low and that no provision has been made for the increased taxation which a planned economy would necessitate, we do not assume that more than 6 per cent. of the national income on an average would become available for investment during the period of the plan. On this basis the total amount which could be obtained over the whole period from the savings of the people would be in the neighbourhood of Rs.4,000 crores (£3,000 millions).

85. *“Created Money”*

We have estimated the savings which would be available for investment at a conservative figure. It is possible that a larger percentage of the national income than we have estimated may be forthcoming as savings. If this possibility, however, does not materialize, a large part of the capital required, about Rs.3,400 crores (£2,550 millions) would have to be created by borrowing against *ad hoc* securities from the Reserve Bank. New money to this extent can be created only if people have full

¹ Colin Clark: *The Conditions of Economic Progress*, page 406

confidence in the resources and *bona fides* of the government that creates it. There is nothing unsound in creating this money, because it is meant to increase the productive capacity of the nation and in the long run is of a self-liquidating character. At the end of the period, the general level of prices would in all probability be lower than at the beginning of the plan. During the greater part of the planning period, however, financing of economic development by means of "created money" on this scale is likely to lead to a gap between the volume of purchasing power in the hands of the people and the volume of goods available. How to bridge this gap and to keep prices within limits will be a constant problem which the planning authority will have to tackle. During this period, in order to prevent the inequitable distribution of the burden between different classes which this method of financing will involve, practically every aspect of economic life will have to be so rigorously controlled by government that individual liberty and freedom of enterprise will suffer a temporary eclipse.

86. Sources of Finance Summarized

The amount of capital which we expect to get from the various sources mentioned above is summarized below:

<i>External finance:</i>		
(Rs. crores)		
Hoarded wealth ..	300	(£225 millions)
Sterling securities ..	1,000	(£750 millions)
Balance of trade ..	600	(£450 millions)
Foreign borrowing	700	(£525 millions)
	———— 2,600	————— (£1,950 millions)

<i>Internal finance:</i>		
Savings ..	4,000	(£3,000 millions)
“Created money” ..	3,400	(£2,550 millions)
	----- 7,400 -----	(£5,550 millions)
 Total ..	 10,000	 (£7,500 millions)

87. *Method of Raising Finance*

Our object in this section has been to indicate the sources from which the capital expenditure required for the plan may be met. The precise form in which the capital may be raised, whether by the state in the shape of taxation or government borrowings or by private voluntary investment, is a question which can only be considered, when the plan is ready for execution, in the light of conditions then prevailing. It will depend among other things on the role to be assigned to the state in the future economy of the country and also on the position of the money market after the war.

88. *Finance, only a Camp Follower*

It is necessary to emphasize that in a planned economy we are primarily thinking in terms of commodities and services. Money or finance is therefore completely subservient to the requirements of the economy as a whole and must be treated merely as a means of mobilizing the internal resources of the country in materials and man-power.

V

STAGES OF DEVELOPMENT

89. *Determination of Stages*

In determining the stages by which the plan is to be completed, the following factors should be taken into account: (i) the extent to which natural resources,

labour, capital goods and managerial ability could be made available; (ii) the necessity of giving priority to certain kinds of development over others for the success of the whole plan; and (iii) the importance of avoiding too great a strain on the country's economy in the execution of the plan.

90. *Adequacy of Resources*

Regarding (i) it may be stated that it will be an essential part of the plan to make a thorough survey of our soils, water-power resources, geological wealth, etc. On the basis of available information, which is admittedly incomplete, it is probable that most of the raw materials required for the plan outlined in this memorandum would be available within the country in requisite quantities. In respect of labour, capital and managerial ability, the situation would be somewhat different in the initial years. We have plenty of unskilled labour in the country, but in addition to this, a large supply of skilled labour and trained technicians will be necessary. This will become available as in Russia and Poland when the schemes for their recruitment and training, which in themselves would be an important part of the plan, are complete and put into operation. But till this supply is forthcoming, India will have to import foreign technicians. The plan will, therefore, have to be arranged in such a way that the schemes undertaken in the earlier years can be carried out with a minimum of skilled labour. For capital goods, mainly machinery, India will have to depend on foreign countries for a longer time and to a larger extent than for labour; our ability to secure these from foreign countries would be determined mainly by the extent of our foreign resources. As to managerial ability, which is an important factor in modern business organization, no serious difficulty need be anticipated in rendering the country self-sufficient within a short period.

91. *Priority for Basic Industries*

In carrying out the stages of development, we shall have to pay special attention to basic industries, such as the manufacture of machinery, chemicals, etc. On these industries will depend the development not only of all other industries but of the whole economic life of the country. Till these industries are developed, we shall naturally be at the mercy of foreign countries. To shorten this period of dependence it is necessary to give priority to basic industries over other industries and thus to speed up development.

92. *Needs of Consumers*

Planning without tears is almost an impossibility. But we can learn some lessons from the Russian experiment and avoid the errors to which planners in their over-enthusiasm are liable. Two features of the Russian Plans which caused misery and hardship to the masses were: (i) their over-emphasis on heavy industries and indifference to consumption goods industries, and (ii) their enthusiasm for building huge industrial plants which took years to come into operation. It is necessary in India to pay special attention to basic industries, but it should be our aim simultaneously to develop consumption goods industries so as to meet at least our essential requirements. Similarly, we should try, as far as possible, to build our industrial units on a scale which is not larger than is strictly necessary for economical working so that they can come into production within a short time and lend themselves more easily to regional distribution.

93. *Imperfections in Early Stages*

In the light of these considerations, we give in the next paragraph a rough outline of the stages by which the economic plan should be carried out. In the nature

of things, any such programme must be full of imperfections. "In the first years, indeed, only bad plans can be drawn up, since there is no stable basis on which one can rely and all the problems must be solved simultaneously. But as time goes on, the ground is cleared more and more and the number of problems diminishes."¹

94. Three-Five-Year Plans

For purposes of execution, the plan outlined in this memorandum should be subdivided into three plans, each covering a period of five years. The expenditure to be incurred during each of these plans, as estimated in paragraph 77, is indicated below.

	First plan		Second plan		Third plan		Total	
	(Rs. crores)	(£ mills.)	(Rs. crores)	(£ mills.)	(Rs. crores)	(£ mills.)	(Rs. crores)	(£ mills.)
Industry	[790]	(592½)	[1,530]	(1,147½)	[2,160]	(1,620)	[4,480]	(3,360)
Basic industry	480	(360)	1,200	(900)	1,800	(1,350)	3,480	(2,610)
Consumption goods industry	310	(232½)	330	(247½)	360	(270)	1,000	(750)
Agriculture ..	200	(150)	400	(300)	640	(480)	1,240	(930)
Communications	110	(82½)	320	(240)	510	(382½)	940	(705)
Education ..	40	(30)	80	(60)	370	(277½)	490	(367½)
Health	40	(30)	80	(60)	330	(247½)	450	(337½)
Housing	190	(142½)	420	(315)	1,590	(1,192½)	2,200	(1,650)
Miscellaneous ..	30	(22½)	70	(52½)	100	(75)	200	(150)
Total	1,400	(1,050)	2,900	(2,175)	5,700	(4,275)	10,000	(7,500)

95. Plans Explained

In the initial period the total amount to be spent has been deliberately kept low because the material resources and personnel available at the beginning of the plan would be comparatively small. With the development of the plan, both material resources and personnel

¹ Ferdynand Zweig: *The Planning of Free Societies*, page 125. Also see his following statement: "Every beginning in planning must be bad, and the time needed for its improvement is considerable. This point is extremely important, because the antagonists of planning experiments try to kill them at the start by airily pointing out the failures and defects inevitable during their teething stages."

would become available in rapidly increasing proportions and the tempo of progress would be accelerated. While the first five-year plan will be handicapped by the fact that there will be no previous preparation in anticipation of its requirements, the second and third plans would have their requirements studied in advance and adequate preparations made for their inauguration. Although the first plan will therefore start almost *in vacuo*, it will lay the foundation for the second plan which in its turn will be the basis for the third one. In allocating the amount of capital expenditure to be incurred during each of the three stages, we are mainly guided by this consideration. To put it briefly, we have planned the expenditure to increase in geometric progression.

96. *Consideration for Consumer*

The developments in the different sections of the plan have been mapped out generally in accordance with the considerations discussed earlier in this part. For instance, it will be seen that even in the first five-year plan, side by side with basic industries, we have provided a comparatively large amount of capital for the development of consumption goods industries also. The importance of this will be understood if we realize that in the first five-year plan a substantial part of this capital will have to be spent in foreign countries for importing the necessary equipment which will not be available in the country. This will mean a reduction in the limited volume of external finance which is available to us and which is essential for the establishment of basic industries. In the succeeding stages the capital equipment required by consumption goods industries would be supplied to an increasing extent by our own industries and the dependence on external finance would be reduced. It is also necessary to emphasize that in the production of "consumption goods we presume that small-scale

and cottage industries which require a comparatively small amount of capital equipment would play an important part.

97. *Basic Industries and Consumption Goods*

The ratio between the capital outlay on basic industries and consumption goods industries over the whole period is roughly 3.5, which is much smaller than in the case of the U.S.S.R. This brings out the fact that we have given more attention to consumption goods in our plan.

98. *Progress of Basic Industries*

The total expenditure on basic industries over the whole period is estimated at Rs.3,480 crores (£2,610 millions). A large proportion of this will have to be spent on the import of foreign capital equipment. The total amount of external finance which is likely to be available to us is, however, in the neighbourhood of Rs.2,600 crores (£1,950 millions) only. The expenditure on basic industries during the first two plans which amounts to Rs.1,680 crores (£1,260 millions) is well within the limits of our external finance, and we presume that the basic industries which would be developed in the first two plans would be such as would themselves produce a substantial proportion, if not the whole, of the capital equipment needed for the basic and consumption goods industries to be developed in the third period.

99. *Balanced View*

While fixing targets for the development of agriculture, communications, education, health and housing, we have attempted, as far as possible, to strike a balance between the requirements of each stage of development and the resources and personnel available during that stage.

MEMORANDUM OUTLINING
A PLAN OF ECONOMIC DEVELOPMENT
FOR INDIA
PART II

CONTENTS OF PART TWO

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NOTE

The Authors regret that Sir Ardeshir Dalal, who was a signatory to Part I of the PLAN, is unable to sign this part, owing to his appointment as Member for Planning and Development in the Government of India. They wish to express their keen appreciation of his valued contribution towards the preparation of this memorandum before his assumption of office in August 1944.

December 1944

I

INTRODUCTORY

1. *Preliminary*

Our first memorandum dealt chiefly with the problem of production. Both logically and as a matter of practical necessity, the question of production must come before that of distribution in a plan of economic development. This is because in a country of comparatively low production such as India, no system of distribution, however meticulously framed, will help to raise the standard of living unless production is vastly increased. But it does not follow that increased production will necessarily remedy the problem of poverty if it is not based on a proper system of distribution. The present memorandum sets out our views regarding distribution and also the allied question of the part to be assigned to the State in a planned economy.

2. *Line of Approach*

Our approach to these problems is twofold. On the one hand, we recognize that the existing economic organization, based on private enterprise and ownership, has failed to bring about a satisfactory distribution of the national income. On the other hand, we feel that in spite of its admitted shortcomings, it possesses certain features which have stood the test of time and have enduring achievements to their credit. While it would be unwise to blind ourselves to the obvious weaknesses of the present system, we think it would be equally a mistake to uproot an organization which has worked with a fair measure of success in several directions.

3. *Twin Foundations of Economic Structure*

Briefly, we plan for change but we also plan for stability and orderly development. It is our firm belief that if the future economic structure of the country is to function effectively, it must be based on these twin foundations. It must provide for free enterprise, but enterprise which is truly enterprising and not a mere cloak for sluggish acquisitiveness. It must ensure at the same time that the fruits of enterprise and labour are fairly apportioned among all who contribute to them and not unjustly withheld by a few from the many.

II

DISTRIBUTION OF THE NATIONAL INCOME

4. *Production and Distribution Closely Related*

The primary object of the plan of economic development outlined in the previous memorandum is to improve the standard of living of the masses. In fact, increased production will be meaningless unless it is directed towards the eradication of poverty. Logically, an improvement in the general standard of living, therefore, involves both increased production and equitable distribution, and although we have dealt with them separately, they are closely interrelated and react on each other.

5. *Disparities of Income*

At present our production is very small and it is not equitably distributed. The average *per capita* income of Rs.65 (£4 : 17 : 6) in 1931-32, to which we have referred in our first memorandum, is an arithmetical average

which bears little relation to the income realized by the majority of the population, which must be considerably below this figure. The *per capita* average itself varies from Rs.51 (£3 : 16 : 6) to Rs.166 (£12 : 9s.) in rural and urban areas respectively. In 1931-32 one-half of the total urban income was in the hands of less than 10 per cent of urban workers and "even among the comparatively well-to-do class, whose annual incomes exceed Rs.2000 (£150) a year, 38 per cent of their number could claim only 17 per cent of their total income, while a little more than 1 per cent were in possession of as much as 10 per cent of their total income". In rural areas, the income of the majority of the people must have been less than the average of Rs.51 (£3 : 16 : 6). This is because farmers holding less than 2 acres of land form a large proportion of the cultivating class. Moreover, the agricultural labourer, whose wage is sometimes as low as 2 to 3 annas (2d. to 3d.) a day, and the cultivator, are generally without any work for 3 to 6 months in the year. The increase in population since 1931 must have considerably increased the pressure on this class.

6. *Equitable Distribution*

In so far as the volume and nature of production are ultimately determined by the consumer demand, gross inequalities in income tend to retard the development of a country's economic resources. They prevent the needs of the vast majority of the population from exercising any influence on the volume of production, which has naturally to be restricted, and lead to social cleavages and disharmony. Productive resources under these conditions tend to be devoted to satisfying the demands of the well-to-do classes while large numbers of people remain inadequately fed, clothed, housed, educated and

medically cared for. The large increase in production which is postulated in the plan will be difficult to achieve if the present disparities in income are allowed to persist. To this extent, therefore, equitable distribution is necessarily implied in a plan for increased production. A policy which specifically aims at securing this object should have a double purpose : i) to secure to everybody a minimum income essential for a reasonable standard of living and (ii) to prevent gross inequalities in the incomes of different classes and individuals.

7. Ownership of the Means of Production

Concentration of the means of production in the hands of a small group of people has been considered one of the potent causes of the inequalities of income which prevail in the world at present, as it is also to some extent an incidental result of such inequalities. In the U.K., for example, it is estimated that 1 per cent of the persons above twenty-five derive from their property rights about 20 per cent of the total income of the country. "Unequal distribution of incomes from property makes for unequal distribution of incomes as a whole, not only directly through its existence, but also indirectly through its effect on other incomes." To secure an equitable distribution of income, it is therefore necessary gradually to reduce the existing inequalities of wealth and property and to decentralize the ownership of the means of production. Imposition of death duties and other similar levies, if undertaken in pursuance of well-defined social objectives, by a government fully responsible to the people, would contribute towards achieving the first object. Reform of the system of land tenures which we suggest would further help progress in the same direction. In the sphere of industry, we have

already indicated in our previous memorandum that the fullest possible scope should be provided for small-scale and cottage industries, particularly in the production of consumption goods. The process of decentralization would be further advanced by encouraging the widespread distribution of shares in joint-stock companies, by regional distribution of industries and through the development of cooperative enterprises. Control by the State, accompanied in appropriate cases by State ownership or management of public utilities, basic industries, etc., will also tend to diminish inequalities of income.

8. *Total Abolition of Inequalities Undesirable*

It is necessary, however, to make clear that although gross inequalities are undesirable, total abolition of inequalities, even if feasible, would not be in the interest of the country. Subject to the provision of a basic minimum, it is desirable to leave enough scope for variations in income according to ability and productivity. This will provide the necessary incentive for improvement in efficiency which is an important factor in the progress of a planned economy. Even in Soviet Russia, after the first flush of enthusiasm for the equalitarian ideal had passed, variations in industrial incomes have been allowed as an important motivating factor making for efficiency. The encouragement given to *Stakhanovism* is an indication of the change that is rapidly coming about. There is much force in what Lord Keynes says on the point : " I believe that there is social and psychological justification for significant inequalities of incomes and wealth, but not for such large disparities as exist to-day. There are valuable human activities which require the motive of money-making and the environment of private wealth ownership

for their full fruition. Moreover, dangerous human proclivities can be canalized into comparatively harmless channels by the existence of opportunities for money-making and private wealth, which, if they cannot be satisfied in this way, may find their outlet in cruelty, the reckless pursuit of personal power and authority, and other forms of self-aggrandisement.”¹

9. *Rewards to Factors of Production*

Side by side with the decentralization of production and control, ownership or management of public utilities and basic industries by the State, it is also necessary to adjust the rewards of the various factors of production so as to further the reduction of gross inequalities. As a general rule, these rewards, *viz.* wages, interest and profits, should continue to be determined on the basis of demand and efficiency as at present, subject to the overriding consideration that wages should not fall below a certain minimum and that interest rates should be controlled with a view to maintaining full employment. Profits should be kept within limits through fixation of prices, restriction of dividends, taxation, etc. But care should be taken to leave sufficient incentive for improvement in efficiency and expansion of production.

10. *Measures to Secure a Minimum Standard*

To secure a minimum standard of living we propose two classes of measures : (i) those that would raise the general level of income and (ii) those that would reduce

¹ *The General Theory of Employment : Interest and Money*, p. 374.

the burden of individual expenditure on consumption goods and services, *i.e.* the cost of living.

11. *Income Level*

The measures which we have in view for increasing the general level of income and which we explain in more detail in the paragraphs that follow are :

- (1) provision of full employment ;
- (2) increase in efficiency ;
- (3) improvement in urban and rural wages ;
- (4) security of agricultural prices and development of multi-purpose cooperative societies, and
- (5) reform of the land system.

12. *Full Employment*

Of all the measures that we suggest for raising the general level of income in India, provision of fuller scope for employment is the most important. Although no reliable information regarding the extent of unemployment or under-employment in India is available, it is recognized that lack of employment is one of the major causes of the poverty of our people. Provision of full employment for the working part of the population would no doubt present formidable difficulties, but without it the establishment of a decent standard of living would remain merely a pious hope. "If the giant Idleness can be destroyed, all the other aims of reconstruction come within reach. If not, they are out of reach in any serious sense and their formal achievement is futile."¹ In general terms, provision of full employment means ensuring for every grown-up person suitable opportunities for earning his or her livelihood, that is, a recognition of the individual's right to work, increased mobility of

¹ Sir William Beveridge, *Pillars of Security*, p. 43.

SECTION 13

labour being an essential condition for achieving this object.

13. *Employment in Industry*

We expect that the industrial expansion which we have suggested in our previous memorandum will absorb a part of the working population when the plan is completed. In order that the new industries which would be established in the country should provide the maximum volume of employment, we have suggested a comparatively low ratio of capital intensification, *i.e.* a smaller proportion of capital per worker than is usually met with in industrialized countries, and the fullest possible development of small-scale and cottage industries. In this respect India will do well to take a leaf from the experience of Japan, where, as in India, labour is comparatively plentiful and capital scarce. Statistical investigations show that about one-half of the persons employed in the manufacturing industry of Japan in 1930 were in workplaces employing under 5 persons each and about 70 per cent were in workplaces employing under 50 persons. According to the information compiled by the Ministry of Commerce and Industry, workplaces employing between 5 and 30 workers accounted for 29 per cent of the employment and 19 per cent of the output in manufacturing industry. The industrial cooperatives which have been recently developed in China might also prove a useful guide to India in this respect. Besides employment in industries, a large part of the population will be absorbed in trade and other services, which will necessarily increase in the wake of increased production and rising standards of living. And yet this will barely touch the problem of "disguised unemployment" in agriculture, which is the crux of the situation.

14. *Seasonal Unemployment in Agriculture*

The agriculturist and the agricultural labourer are generally without work for periods extending from 3 to 6 months in the year at present. This unemployment occurs at intervals and is of a seasonal character. Provision of work during these periods of seasonal unemployment is of importance if a policy of full employment is to be successful. The steps which we contemplate for achieving this object are : (i) introduction of mixed farming, *i.e.* cultivation accompanied by dairy farming, market gardening, etc., (ii) cultivation of more than one crop in a year with the help of better irrigation facilities and increased use of manures, and (iii) provision of subsidiary industries which the cultivator can take up when he has no work on the farm. Among such subsidiary industries may be mentioned the following : spinning and weaving, shoe making, paper making, tanning, gur making, soap making, oil crushing, fruit preserving, basket weaving, flour and starch making, etc.

15. *Occupational Distribution*

The pattern of occupational distribution when the plan is completed would naturally be different from what it is to-day. Even where complete statistical data regarding existing occupational distribution and future demographic trends are available, it is difficult to forecast with reasonable accuracy the nature of the occupational pattern that might develop after a period of fifteen to twenty years. For India this is specially difficult because the occupational tables for the 1941 census are not yet published. Some indication, however, of the occupational pattern that will result when the plan is completed may be attempted on certain broad assumptions. We assume that the proportion of population engaged in different

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occupations when the plan begins to operate will be the same as in 1931 and that our population may continue to increase at the rate of 5 millions per annum, which is the average rate of increase for the decade covered by the 1941 census. The volume of employment in industry which the investment programme envisaged in the plan would provide, is calculated on the basis of a capital equipment of Rs.1500 (£112 : 10s.) per worker and is added to the number of persons employed in industry in 1947 when the plan might come into operation. The ratio of capital equipment per worker seems reasonable if allowance is made for the fact that small-scale industries would have an important scope in the economic development of the country and that adoption of shift working would be necessary with a view to economizing capital and providing as much employment as possible. According to the 1931 census, the number of persons employed in services such as public administration, trade, transport, professions, etc., was 80 per cent of that in industry. The development of social services like education and public health on the scale suggested in the plan and the needs of general administration and defence would, on the completion of the plan, absorb a much larger number of people in services than at present. The general economic development of the country would also lead to a substantial increase in trade and transport. However, since the development in services which we have postulated in our previous memorandum is proportionately much less than in industries, it is reasonable to assume that the total employment in services when the plan is complete would be about 60 per cent of that in industry. The rest of the population would be dependent on agriculture. On these assumptions, the distribution of working population according to the principal occupations in 1962, that is, in the year

following the completion of the plan, would be somewhat as follows, as compared with that in 1931 :

OCCUPATIONAL DISTRIBUTION IN 1931 AND 1962

	1931		1962	
	Millions	Per cent	Millions	Per cent
Agriculture	106.3	72	129.7	58
Industry	22.1	15	57.9	26
Services*	19.2	13	34.7	16
Total working population	147.6	100	222.2	100
Total population	338.1	..	494.0	..

16. *Temporary Unemployment*

It should not be forgotten that a policy of full employment, even if successfully carried out, does not necessarily imply in practice that every person willing to work is always employed. In the first place, owing to the inherent imperfections in the working of a social policy, which has to take into account a number of incalculable factors, a small percentage of population would always be without work. Secondly, certain trades like the building trade, being seasonal in character, give rise to seasonal unemployment. Finally, owing to constant changes in the technique of production and to variations in demand, large numbers of employed workers are constantly being displaced. The number of persons who would be without work at any particular time owing to these causes could, however, be reduced to manageable dimensions if a well-thought-out policy of employment was in existence. When the plan is sufficiently advanced

* This category includes trade, transport, government administration, professions and domestic service. Persons living on their own incomes or engaged in unproductive occupations, whose number was 1.8 millions in 1931, are also added to this category for the sake of convenience.

and economic conditions are to a certain extent stabilized, it ought to be possible to devise schemes of relief such as unemployment insurance for workers subject to unexpected and prolonged periods of unemployment. Government's public works programme, in respect of both new construction and repairs, should be regulated with a view to reducing the volume of seasonal and temporary unemployment. For those who are unemployed because of technological changes, suitable courses of training to fit them for new jobs should be framed. We believe that during the progress of the plan the amount of construction work, which the investment programme would involve, would itself provide a very substantial increase in the scope for employment.

17. *Increase in Efficiency*

As a result of the spread of general and technical education among workers, better organization of industries, especially small-scale and cottage industries, better organization of agriculture and trade, fuller use of cattle power, provision of cheap electricity, improved tools and appliances and fertilizers, etc., the general efficiency of production is bound to record a marked improvement at the end of the planning period. Under a system of decentralized production, the benefits of higher efficiency will be increasingly available to the smaller producer and the worker in the form of a corresponding increase in their incomes. Since a higher standard of living arises largely from increased productivity of labour, improvement in efficiency of production is a material factor in raising the general level of well-being.

18. *Urban and Rural Wages*

If every person is to be assured a minimum standard of living, it automatically follows that the general level of

wages must increase and that the wage rates of industrial and agricultural labour must be gradually adjusted so that the present disparity between them is reduced. The process of improvement must necessarily begin with the wages of agricultural labourers, whose number was 30 millions in 1931. It must be borne in mind that industrial wages, and with them the living standards of industrial workers, cannot be advanced beyond a certain limit unless at the same time the standard of living of the rural population is also substantially improved. Generally speaking, the daily wages of agricultural labour under pre-war conditions may be said to range from 2 to 5 annas (2d. to 5d.) a day for men, 1½ to 4 annas (1½d. to 4d.) for women, and 1 to 2 annas (1d. to 2d.) for children. The average wage of unskilled agricultural labour in 1939 was 5 annas (5d.) per day in the Bombay province and 2 annas 9 pies (2¾d.) per day in the U.P. Even at these low rates the agricultural labourer hardly found employment all the year round. Obviously, a number of these workers exist below the subsistence level, always an easy prey to epidemics and famines. When the developments in agriculture which we have broadly indicated in our previous memorandum have taken place and the reforms in the land system which we suggest elsewhere in this memorandum have been carried out, it will be necessary to fix minimum rates of wages for agricultural labour on a regional or local basis. With the development of cooperative farming, the enforcement of a minimum agricultural wage, which otherwise might present formidable obstacles, would become less difficult.

19. *A Minimum Wage*

Although the establishment of a basic minimum wage for all occupations cannot be considered at this stage, a beginning may be made in certain well-established

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industries like cotton textiles, sugar, cement, engineering, jute, mining, etc. In the initial stages, the minimum below which wages should not be allowed to fall should be related to the normal wage-level prevailing in each industry. The minimum should be revised from time to time till it corresponds with a reasonable standard of living. The fixation of a minimum wage and its subsequent revision should be entrusted to a Standing Committee constituted for each industry, consisting of representatives of employers and workers and a few independent persons.

20. *Agricultural Prices*

Large fluctuations in the prices of agricultural commodities have been among the most important factors which have prevented agriculturists from making more sustained efforts to improve the yield of the land. To check these fluctuations in future and to assure to the cultivator a measure of security in respect of the prices of his crop, we suggest that for the principal agricultural crops, the government should adopt a policy of fixing fair prices. In fixing a fair price, account should be taken of the cost of living in the area concerned as well as the cost of production. It would be necessary for enforcing these prices to build up adequate commodity reserves which could be utilized to check violent fluctuations. To prevent a depression in the prices of specific agricultural commodities as a result of foreign imports, the volume of imports should be regulated by means of tariffs or by fixing quotas. It is possible that a large variety of agricultural crops may in future be subject to international agreements. Such agreements, provided in respect of them India is accorded representation on an independent footing, may be expected to lead to a fair measure of stability at a reasonable level in the prices of some of our staple crops.

21. *Cooperative Societies*

Another factor which prevents the cultivator from improving his output and consequently his income is that, because of the handicaps which he suffers in respect of the marketing of his crop, his realizations fall considerably short of the prices which he might otherwise secure. There are several reasons for the large differences observed in respect of most of our agricultural crops between the price paid by the consumer or exporter and the price realized by the cultivator. As the holding power of the cultivator is generally small, he has to part with his crop almost immediately it is harvested, and it is well known that prices during harvest-time are at their lowest, except of course in times of abnormal demand. Very often the purchaser is the money-lender himself, to whom the crop is sold under a tacit understanding, previously entered into, at what is generally an uneconomic rate for the cultivator. Only a small proportion of the cultivators take their produce to the marketing centres for sale. In most cases, for lack of adequate facilities for storage and finance, it is sold in the village itself, which prevents the cultivator from securing a better price. If multipurpose cooperative societies are established, the difficulties which the cultivator is experiencing at present in marketing his crop, particularly in the matter of adequate finance and storage facilities, would be removed, and his share in the price paid by the final consumer increased. Special attention should, therefore, be devoted to this type of society, which so far appears to have found little encouragement in the Indian cooperative movement. Development of communications, standardization of weights and measures, regulation of markets, spread of commercial intelligence, etc., would further help the primary producer to realize his due share of the price.

22. Land Tenures

Along with the development of cooperative farming and irrigation, prevention of soil erosion and water-logging, afforestation, etc., a fundamental reform which is necessary, if the target for agricultural production which we have laid down is to be reached and if the income of the cultivator is to be raised, is the reform of the land system. Ownership of the land and its taxation, that is, land tenure and land revenue, are the two principal problems which require to be tackled in this connection. As regards ownership, the systems of land tenure which prevail in India to-day can be roughly classified under three categories, viz. : (i) the Ryotwari system under which land is held directly under the government by individual cultivators who are responsible for the payment of land revenue, (ii) the Mahalwari or joint village system under which village estates are held by co-sharing bodies, the members of which are treated as jointly and severally liable for the land revenue, and (iii) the Zamindari system under which one person or a few joint owners hold the land and are responsible for the payment of land revenue on the whole estate. The last two categories are essentially similar in character. According to whether the revenue is fixed permanently or is amenable to periodic revisions, the land tenure system is also classified as Permanent and Temporary, but that is not relevant from our point of view. The area under the Ryotwari and the Zamindari and Mahalwari systems in British India is shown below :

	(Area in thousand acres)	
Ryotwari	183,034	36 per cent
Zamindari and Mahalwari	326,998	64 „
	510,032	100 „
Total		

Farming in India is predominantly tenancy farming.

Most of the cultivators are tenant farmers who acquire land on lease from the Zamindars or bigger ryots on payment of rent. In this connection it is necessary to realize that all the land held under the Zamindari system is not, as is sometimes contended, let out for cultivation to tenant farmers, nor is all the land held under the Ryotwari system cultivated by peasant proprietors. In the United Provinces for instance, which is a Zamindari province, as much as one-fifth of the total cultivated area of 35 million acres is cultivated by the landowners themselves. On the other hand, in the Punjab, which is mainly a land of peasant proprietors, the western part of the province is the stronghold of the landlord and the landlord is too often an absentee. Contrary to the common belief the actual cultivator under the Zamindari system, who in the large majority of cases is the occupancy tenant, is for all practical purposes the proprietor of the land he cultivates. His rent is fixed save to the very limited extent to which enhancement is possible under certain conditions; his holding is both heritable and transferable. The various Tenancy Acts have in effect deprived the Zamindar of a considerable part of his proprietary right over the soil and rendered him to that extent a mere collector of rent. Similarly, the incidence of rent under the Zamindari system often compares favourably with rents prevailing in the Ryotwari areas.

23. *Ryotwari System*

As a general proposition it is nevertheless true that under the Zamindari system the landlord has largely become a mere rentier and that the system as such has ceased to serve any national interest. Nowhere in India has the system created, as was expected of it, a class of landlords willing to supply capital for the improvement of the land and the extension of cultivation.

Although the Ryotwari system is not altogether free from the evils commonly associated with the Zamindari system, it has the great advantage of bringing the actual cultivator directly in contact with the State. This gives to the cultivator a better status and awakens the State to its responsibilities in the matter of cooperative farming, irrigation, prevention of soil erosion, etc., without which even under a Ryotwari system no agricultural improvement would be possible. The Floud Commission which recently reported on the land revenue system of Bengal has, after a thorough examination of the question, recommended the introduction of the Ryotwari system in the place of the existing Zamindari tenures. We suggest the gradual application of this recommendation to the Zamindari areas in the whole of India where the landlord is not directly interested in the cultivation of the land he owns. As a first step, "the State should take over the landlord's functions and pay the landlord a fair rent for the land, deducting therefrom the expenses incidental to the discharge of these duties. Later on, when the State is in a better position, this may be commuted into a lump-sum payment and the landlord's claim thus finally extinguished. For the immediate present, the link between the landlord and the tenant should be broken."¹ Side by side it would also be necessary to check the transfer of land from cultivators to non-cultivators and to control rents with a view to reducing the attractiveness of land to speculative investors.

24. *Land Revenue*

Along with the establishment of a class of peasant proprietors an urgent reform of the system of land

¹ Sir Manilal B. Nanavati and J. J. Anjaria, *The Indian Rural Problem*, p. 349.

revenue is also called for. At present the assessment of land revenue is not based on a uniform system. In certain areas the basis of assessment is rent while in others it is the net produce. There is also no provision for introducing variations in assessment according to price changes, while at the same time the Settlement Officers who assess the revenue have the discretion to modify the basic principles by introducing a number of miscellaneous considerations. As a result, the incidence of land revenue shows marked variations in different areas. It is also fairly heavy. The reform of the present system would therefore lie mainly in the direction of making the basis of assessment uniform all over the country so as to secure equality in the incidence of revenue, while retaining a certain measure of elasticity by a provision to vary the assessment from time to time in accordance with the trend of prices. The pitch of assessment should also be lowered. The general trend in other countries is to treat agricultural incomes in the same fashion as other incomes and to apply to them the principles of income tax—an exemption limit and a graduated scale of taxation. It is hardly possible at the present stage to determine how far it would be practicable in the exigencies of public finance to fix an exemption limit for agricultural income. But we consider that agricultural income above a certain level must be subject to income tax like other incomes. This has already been done in Bihar and Bengal.

25. *Income Distribution in 1962*

As a result of the measures indicated above, the lower incomes would record a steady improvement and consequently the income structure of the country would be more broad-based. For individual earners this improvement would arise from increased output as well as better prices. The cumulative effect of the measures proposed

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on the incomes of the different occupational classes is roughly indicated in the table given below. The table is based on the occupational pattern given in paragraph 15 and on the estimated income from agriculture, industry and services at the end of the plan. It is assumed that persons following agriculture as their principal occupation would also secure through subsidiary occupations 5 per cent of the income from industry and services.

AVERAGE INCOME PER OCCUPIED PERSON

	1931	1962	Percentage Increase in 1962
	Rs.	Rs.	
Agriculture	114 (£8 : 11s.)	220 (£16 : 10s.)	93
Industry .	161 (£12 : 1 : 6)	368 (£27 : 12s.)	129
Services .	264 (£19 : 16s.)	397 (£29 : 15 : 6)	50

26. *Cost of Living*

The suggestions made so far are calculated to increase the incomes of those who are at present below the subsistence level. The measures which we propose for reducing the cost of living fall into two categories :

- (i) provision of free social services, *e.g.* primary and middle school education, adult education and medical treatment, and
- (ii) provision of essential utility services, *e.g.* electricity and transport, etc., at low cost.

27. *Free Social Services*

In our previous memorandum we have proposed a comprehensive scheme of education and medical relief. In order that every person, whatever his means, should

be able to secure the benefits of education and medical relief, we have suggested that primary, middle school and adult education and medical treatment both in rural dispensaries and in hospitals should be provided free of charge. This would mean a considerable relief in the cost of living.

28. *Utility Services*

At present essential utility services such as electricity, gas, transport, etc., are supplied on a comparatively limited scale and for the majority of people at a cost which they cannot afford. We have proposed a large increase in the supply of these services and it is an essential part of our plan that their cost to the consumer both for domestic use and for cottage and rural industries should be as low as possible and within the means of the bulk of the population. In order to achieve this object, we propose that these services should be subsidized by the State to such extent as may be necessary and the margin of profits in such services should be subjected to control.

29. *National Relief Fund*

It is possible that in spite of these measures, owing to unforeseen causes such as a failure of the monsoon or any other natural calamity, conditions of living for large sections of the population may suffer a serious set-back. To meet such emergencies we suggest the creation of a National Relief Fund on the lines of the present Famine Relief Fund, but larger in resources and in scope, to be utilized as and when the need arises. A part of this fund should be held in the form of consumption goods which could be mobilized for instantaneous relief in times of emergency.

30. *Social Security*

We are aware that our proposals do not constitute a complete scheme for providing security of income or freedom from want, which must be the ultimate objective of economic planning. There are several contingencies such as sickness, old age, technological unemployment, etc., which are not specifically covered by these proposals. These contingencies cannot be met except by a comprehensive scheme of social insurance. Although the need for such a scheme is urgently felt in India, we do not think that it will be possible to introduce it (i) until a policy of full employment has had time to work itself out, and some approximation is made to a position of stable employment for the greater part of the population, *i.e.* until the risks insurable are reduced to manageable proportions, and (ii) until the average individual income has risen sufficiently high to meet the contributions necessary under a scheme of insurance. We, however, suggest that as in the case of fixing a minimum wage, a beginning in the direction of social insurance may be made by introducing sickness insurance and holidays with pay for workers in organized industries. The scope of the existing legislation in respect of maternity benefits should also be widened by making it applicable to all industrial establishments coming under the Factories Act in the whole of India.

31. *Taxation of Income*

The policy we have outlined so far is mainly intended to secure the first objective of an equitable distribution of national income, *viz.* to assure to every person a minimum standard of living. To a considerable extent it will also help to reduce gross inequalities of income, which is the second objective. The most important method, however, of preventing gross inequalities is

direct taxation, which in effect transfers income from the comparatively richer classes of society to the poorer. A steeply graduated income tax which would keep personal incomes within limits would obviously be the most important weapon for this purpose in the fiscal armoury of the country. But in any such scheme of taxation, consistently with the development programme envisaged in the plan, it is necessary to emphasize that adequate remission should be granted in respect of the depreciation of the assets employed in production, and that incomes ploughed back for increasing industrial or agricultural production should also be granted similar remission. Further, in the taxation of personal incomes, distinction should be made between earned and unearned income, so as to make the latter taxable at a higher rate. As a means of correcting the existing inequalities of wealth, the device of death duties, which has been successfully utilized in other countries, might also be adopted. The advisability of taxing inherited estates more severely at the second and later transfers than at the first would be a further step in the same direction. It is obvious that India's fiscal system will have to place more and more reliance on direct taxation in future if the increase in the cost of administration which planning will involve is to be met and if provision is to be made for free social services like education, medical treatment, etc., and subsidies for essential utility services.

32. *Regional Development*

Throughout our investigations we have assumed that a programme of economic development of the kind we envisage should include the whole of India—the States as well as British India—in its scope. A territorially unbalanced economy will result in an imperfect utilization

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of the country's resources and also prevent its purchasing power from developing *pari passu* with the estimated increase in production. Not merely in the matter of industrialization but in almost every other line of development covered by our plan, the States, with certain notable exceptions, have tended to lag behind most parts of British India. We consider it a matter of the greatest importance for the future of India that economic progress should be so planned that, as far as circumstances permit, the targets as well as the pace fixed for the plan should have uniform application to British India and to the States. The objectives we have outlined are of equal importance to both, and, further, the development of each is to a large extent conditioned by that of the other. It follows therefore that if a plan of economic development for India is to achieve its aim to any tangible extent, it should proceed on the principle that in the results it seeks to achieve and consequently in the sacrifices it demands, British India and the States should share alike. Although the States represent two-fifths of the territory and one-fourth of the population of India, it must be recognized that industrial investment in the States, as also in backward areas in British India, remains disproportionately low. It is clear therefore that there is much leeway to be made up. Unless this disparity is remedied, a proper regional distribution of economic development will be difficult to secure. Meanwhile any unequal distribution of financial burdens between manufacturing concerns in British India and the States will operate to prevent a healthy all-round industrial development, since natural advantages under such circumstances will be swamped by the adventitious benefits resulting from differences in local measures of taxation.

33. *Conditions for Heavy Taxation*

Taxation on the scale we have proposed will place a very heavy burden on the country and will be justified only if its utilization for the purposes for which it is intended is fully guaranteed by a national government responsible to the people of the country. It is necessary to emphasize this fact because, as experience has often shown in the past, it is a dangerous thing to vest large powers of taxation in a foreign government bred in traditions of imperialistic exploitation. Both our plan of development and our proposals for meeting its cost imply the existence of a responsible national government as an essential condition. Unless this condition is satisfied, there can be no assurance that planning will be directed either along right lines or towards right ends, or that the resources released for the purpose will be wisely and fruitfully expended.

III

THE STATE AND ECONOMIC ORGANIZATION

34. *Choice of Economic Organization*

The nature and scope of the measures necessary to secure an equitable distribution of the national income depend to a large extent on the lines on which production is organized. This in its turn is influenced by the principles on which the economic system of the country as a whole is based. It is therefore necessary to indicate the type of economic organization which, having regard to the circumstances of India, would be appropriate to the plan we have outlined. This is a subject on which it is possible to hold widely different opinions and which in the past has lent itself to acute controversy. In con-

sidering it we should therefore eschew preconceived notions and approach the question from a detached point of view. Since planning is primarily a matter of organizing the human and material resources of a country, our aim should be to devise a system which would help to utilize them to the maximum advantage. The plan must fit in with the general outlook and traditions of our people and the cost of efficiency in terms of human suffering and loss of individual freedom must not be unduly heavy.

35. *State Intervention Inherent in Planning*

It is a rather widely-held assumption that a planned economy can only function within the political framework of a totalitarian government. This assumption is natural since in the two countries which have witnessed the most impressive experiments in economic planning undertaken in recent years, namely Soviet Russia and Germany, the State has exerted over the activities of its citizens in every sphere of life a degree of authority which provides little scope for the exercise of individual freedom. It is inevitable that in executing a comprehensive plan of economic development, especially in a country where the beginnings of such development have yet to be laid, the State should exercise in the interests of the community a considerable measure of intervention and control. That this would be an indispensable feature of planning was recognized by us in our first memorandum. We have, for instance, indicated in that memorandum that no economic development of the kind proposed by us would be feasible except on the basis of a central directing authority, and further that in the initial stages of the plan rigorous measures of State control would be required to prevent an inequitable distribution of the financial burdens involved in it. An enlargement of the

positive as well as preventive functions of the State is essential to any large-scale economic planning. This is inherent in the idea of planning and its implications must be fully admitted.

36. *Planning and Democracy*

This, however, is not to concede that no society can undertake a comprehensive and integrated plan of economic development except by discarding the fundamental postulates of democratic government. There is no warrant in logic or history for such an assumption. If democracies can successfully plan and organize their resources for waging wars, it stands to reason that they can do so equally for fighting social evils such as poverty, disease and ignorance. Democracy rests on the belief that the freedom of the individual to give full expression to his personality is one of the supreme values of life and among its basic needs ; the State cannot demand a surrender of that freedom except for well-defined ends and except with the assent of the community freely expressed through constitutional channels and with opportunities for the free functioning of parties holding divergent views. If a planned economy involves, as it necessarily must, the restriction of individual freedom in varying degrees, such restriction under a democratic government will be of limited duration and confined to specific purposes. Whereas in a totalitarian society the individual is merged in the State and belongs to it, having no rights except those which the State chooses to confer, in a democracy the State belongs to the people and is but a means of securing the fulfilment of the individual's rights, and therefore any restriction which it imposes on his freedom must be justified by that test. We believe that planning is not inconsistent with a democratic organization of society. On the contrary, we consider

that its objects will be served more effectively if the controls inherent in it are voluntarily accepted by the community and only enforced with its consent.

37. *Basic Principles*

In discussing different types of economic organization from the point of view of planning it is perhaps worth while pointing out that the distinction which is generally drawn between capitalism and socialism is somewhat overdone. The principle of *laissez faire*, which is regarded as the dominant note of capitalism, has during the last hundred years been so largely modified in the direction of State intervention in various spheres of economic activity that in many of its characteristic aspects capitalism has been transformed almost beyond recognition. Similarly, countries which in recent years set out to organize their economic life on orthodox socialist lines have found it necessary in several important respects to accept capitalistic ideas in their effort to evolve a workable form of society. As a result of these developments, the distinction between capitalism and socialism has lost much of its significance from a practical standpoint. In many respects there is now a large ground common to both and the gulf between the two is being steadily narrowed further as each shows signs of modifying itself in the direction of the other. In our view, no economic organization can function effectively or possess lasting qualities unless it accepts as its basis a judicious combination of the principles associated with each school of thought. These principles may be summed up as follows: first, that there should be sufficient scope for the play of individual initiative and enterprise ; secondly, that the interests of the community should be safeguarded by the institution of adequate sanctions against the abuse of individual freedom ; and thirdly, that the State should

play a positive role in the direction of economic policy and the development of economic resources. It is from this angle that we approach the problem of determining the place of the State in a planned economy in India. We believe that capitalism, in so far as it affords scope for individual enterprise and the exercise of individual initiative, has a very important contribution to make to the economic development of India. We believe at the same time that unless the community is endowed with powers for restraining the activities of individuals seeking their own aggrandizement regardless of public welfare and for promoting the main objectives of economic progress, no plan of economic development will succeed in raising the general standard of living or promoting the common good. "The problem of this century is to find the most fruitful method of combining planning—the right kind and degree of planning—with freedom. Competition and central direction may, indeed, be so applied that they spend all their energies merely in frustrating each other. But if . . . they are sorted out and each applied by itself to the problems for which it is appropriate, there is no inherent reason to doubt that an economy based on both planning and free enterprise would be superior to either of the extremes." ¹

38. *Role of the State*

In dealing with the relation of the State to economic activity it is necessary to make a distinction between the role which the State may generally be expected to play in future when a planned economy has come into normal operation, and its part during the interim period when the plan is in process of being carried out. As the role to be assigned to the State in normal times is of more fundamental importance, we deal with it first.

¹ *The Economist*, May 13, 1944, p. 639.

39. *Methods of Intervention*

Coordination of general economic activity, management of currency and public finance, collection of statistical and other information, adoption of legislation to safeguard the interest of economically weak classes, are some of the more important functions which have now been universally recognized as legitimate duties of the State in the economic sphere. We have, however, to deal here with another and a more specific set of functions which are being advocated by important sections of enlightened opinion both in this country and outside. These functions centre round (i) ownership, (ii) control and (iii) management of economic enterprises. A widening of the economic functions of the State in these directions is advocated on the ground that unrestricted private enterprise under the capitalistic system of production has not served the interests of consumers and of the community generally as satisfactorily as it should have. We have therefore to determine the nature and scope of State activity in terms of these three factors in the economy which we visualize.

40. *Control More Important*

Of the three factors mentioned above, from the point of view of maximum social welfare State control appears to be more important than ownership or management. Mobilization of all the available means of production and their direction towards socially desirable ends is essential for achieving the maximum amount of social welfare. Over a wide field it is not necessary for the State to secure ownership or management of economic activity for this purpose. Well-directed and effective State control should be fully adequate. State control of this character is, however, bound to put important limitations on the freedom of private enterprise as it

is understood at present. Legal ownership would lose some of the essential attributes which are attached to it at present, especially in respect of the use and disposal of economic resources. Monopolies, for example, would not be allowed to limit their output with a view to increasing their profits by raising prices. Scarce natural resources would not be allowed to be exploited without consideration for the future requirements of the country. The rights attaching to private property would naturally be greatly circumscribed. In the light of these considerations we indicate below in general terms the sectors of economic activity which should be owned, controlled and managed by the State.

41. *State Ownership*

State ownership is necessarily involved in all cases where the State finances an enterprise which is important to public welfare or security. State ownership will also arise where in the public interest it is necessary for the State to control an industry, but the circumstances of the industry are such that control is ineffective unless it is based on State ownership. As regards the former class, industries falling within this category may be either entirely new industries or industries new to particular areas, and in both cases may require financial assistance from the State in the initial stages. If later on private finance is prepared to take over these industries, State ownership may be replaced by private ownership, but it is essential in the public interest that the State should retain effective control over them. In the other group of industries in which State ownership exists because it is a necessary means of enforcing State control, ownership by the State will be a more or less permanent feature. In these cases where ordinary methods of State control have to be supplemented by State ownership, it will be

necessary as a rule to place management also in the hands of the State. The manufacture of materials exclusively required for war purposes and the organization of vital communications such as posts and telegraphs are illustrations of this class of industries.

42. *State Control*

Enterprises owned wholly or partially by the State, public utilities, basic industries, monopolies, industries using or producing scarce natural resources and industries receiving State aid should normally be subject to State control. The nature of the control to be exercised will vary from industry to industry and from unit to unit in the same industry according to the specific requirements of each case. The institution of adequate controls which would achieve the object in view without unduly hampering the initiative of the management and the proper enforcement of such controls will present difficult problems. The following are illustrations of the form which control may assume : fixation of prices, limitation of dividends, prescription of conditions of work and wages for labour, nomination of government directors on the board of management, licensing and " efficiency auditing "—a development of cost accounting which will be the watch-dog of public interest rather than of financial interests in the limited sense.

43. *State Management*

Where an enterprise is owned by the State, there is a *prima facie* case for its management by the State. But it does not invariably follow that all enterprises owned by the State should also be managed by it. There are three alternative methods of management open in such cases—by the State, by private enterprise and by *ad hoc* public

corporations. To some extent the deciding factor, which determines which of these alternative methods should be adopted in any particular case, is how far the necessary personnel will be forthcoming under each method. But since State ownership generally arises because the industries concerned are of public importance, considerations of efficient management alone cannot be allowed to settle the question. It is necessary to take into account also the wider and more fundamental question of the extent to which public welfare and security will be safeguarded and promoted under each system. It is not possible to lay down a general rule as regards this aspect of the question and each case must be decided on its merits. In the ultimate decision the governing issue will be whether State control is not sufficient to safeguard the public interest, but in addition to it State management should also be provided.

44. *Compromise Formula*

We have set out some of the leading considerations by which the question whether an industry should be left to private enterprise or should be owned and managed by the State is to be determined. The application of these considerations in particular cases is bound to present difficulties and there will necessarily be a wide field in which decision will involve a nice balancing of various factors. It will probably be found in these cases that the arrangement which will best meet the situation is a compromise between the two principles so that while some units of the industry are owned and managed by the State, others are left to private enterprise. Where considerations of efficiency on the one hand, or public welfare on the other, would not permit of a clear-cut decision, it is in the direction of a compromise on these lines between State and private enterprise that a practical

solution may be sought. Public utilities of a monopolistic character and industries for the products of which the government is the principal customer would among others be the main industries which would fall within this category. Experience of working the same industry partly by State and partly by private enterprise will incidentally afford valuable guidance in shaping public policy in the matter. Moreover, the simultaneous operation of both systems in the same industry will provide a useful incentive and corrective to each system, resulting in all probability in a maximum contribution to the well-being of the community by the industry as a whole. "There is no need to socialise at once all the forms of production it may prove desirable to socialise some time : nor is there any reason why a form of production, socialised at first, should not be handed back, under proper safeguards, to private enterprise if socialisation does not yield good results. Within a single branch of production there may be some parts which it is desirable to socialise, and others which are best left under private ownership and control. The less rigidly the line is drawn, the more room will there be both for diverse experiment and for suiting different types of men and women with jobs in which they have a decent chance of being happy." ¹

45. *Control During Planning Period*

The general propositions regarding State activity in the economic sphere which we have enunciated above will hold good even during the planning period. But during this period in addition to the controls embodied in these propositions the State will have to adopt a number of other controls of a temporary character. Without them a planned economic development will be

¹ G. D. H. Cole, *Great Britain in the Post-War World*, p. 81.

hardly possible. To a large extent the controls to be instituted during the planning period would be similar to those which are in force at present under war conditions and to which the country has become more or less accustomed ; but they will be better coordinated and more systematically administered.

46. *Controls Illustrated*

These controls will operate mainly in the following spheres :

- (1) production,
- (2) distribution,
- (3) consumption,
- (4) investment,
- (5) foreign trade and exchange, and
- (6) wages and working conditions.

Control of production will aim at a proper allocation of resources so as to secure better regional distribution of economic enterprises and to reach the targets set for the different branches of industry. The control will operate chiefly through a system of licences for establishing new units and for extending existing ones. Distribution will be controlled primarily with the object of determining priorities for the release of raw materials, semi-finished materials and capital goods. In the early stages of planning, control will also include rationing and distribution of consumers' goods. The objectives to be kept in view in controlling consumption will be to enforce fair selling prices for essential goods and for goods manufactured by industries receiving State assistance and also to prevent inflation. As regards investment, control will imply that new capital issues should be approved by the State so as to secure a proper distribution of available resources, to prevent inflation, to provide for the orderly development

of new enterprises, and generally to maintain and promote the interests of Indian nationals. Trade and exchange will be subjected to control to such extent as may be required for conserving foreign exchange and for protecting Indian industries. The control of wages and working conditions will aim at ensuring not merely fair conditions for labour, but also efficiency of management, particularly in public utility concerns and protected industries.

47. *National Government*

The wide powers of direction and control with which the State would be invested for the successful execution of the plan would be exercised through a national government responsible to the people. "The strength of State Authority, not in the physical sense, but in the moral sense of a genuine submission on the part of the great majority of the population, is an important factor in the success of planning."¹ To achieve this moral strength and to ensure harmonious and uninterrupted working during the planning period, the personnel of government should be adequately representative of every considerable body of political thought and sentiment in the country. It is also necessary that while sufficient powers of coordination are vested in the central government, the administration of economic policy should be delegated to provincial and local governments on a basis of wide decentralization. The various controls, both permanent and temporary, which have been indicated will not be effective unless the State has at its disposal a specialized agency possessing the necessary knowledge and experience for handling economic matters. For this purpose a new service—an economic civil service—should be established in the country, composed of persons with

¹ F. Zweig, *The Planning of Free Societies*, p. 255.

the special education, training and experience appropriate to the economic functions of the State.

48. *Future Economic Organization*

The general shape of the economic organization which will emerge if our proposals are carried out is not unlike the type of society which Professor Pigou foreshadows in his book *Socialism versus Capitalism*. We quote the following passage from it which, *mutatis mutandis*, is applicable to the society we have in view and the role which the State will play in it : “ If, then, it were in the writer’s power to direct his country’s destiny, he would accept, for the time being, the general structure of capitalism ; but he would modify it gradually. He would use the weapon of graduated death duties and graduated income tax, not merely as instruments of revenue, but with the deliberate purpose of diminishing the glaring inequalities of fortune and opportunity which deface our present civilisation. He would take a leaf from the book of Soviet Russia and remember that the most important investment of all is investment in the health, intelligence and character of the people. To advocate ‘ economy ’ in this field would, under his government, be a criminal offence. All industries affected with a public interest, or capable of wielding monopoly power, he would subject at least to public supervision and control. Some of them, certainly the manufacture of armaments, probably the coal industry, possibly the railways, he would nationalise, not, of course, on the pattern of the Post Office, but through public boards or commissions. The Bank of England he would make in name—what it is already in effect—a public institution ; with instructions to use its power to mitigate, so far as may be, violent fluctuations in industry and employment. If all went well, further steps towards nationalisation of

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important industries would be taken by degrees. In controlling and developing these nationalised industries, the central government would inevitably need to ' plan ' an appropriate allocation for a large part of the country's annual investment in new capital. When these things had been accomplished, the writer would consider his period of office at an end, and would surrender the reins of government. In his political testament he would recommend his successor also to follow the path of gradualness—to mould and transform, not violently to uproot ; but he would add, in large capitals, a final sentence, that gradualness implies action, and is not a polite name for standing still."

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(A 135)

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