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SOME THOUGHTS
ON
PLANNING

-D. R. GADGIL

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SOME THOUGHTS ON PLANNING

By

D. R. Gadgil

I

ECONOMIC PLANNING

Economic development raises the importance of economic activities in society. In relatively underdeveloped economies with somewhat simple structures and large self-sufficient or subsistence elements, the social, the political and the religious organisations necessarily loom large in the life of the people. As economic activity grows in volume and complexity and becomes closely related to larger and larger segments of life and well-being of citizens, its importance and the importance of those who guide its destinies necessarily increase.

✓ In relation to socio-economic conditions, ours is a highly stratified and unequal society. Even among traditional societies, our society has been specially marked for its insistence on ranking and stratification and a peculiarity of it has been the great compartmentalisation of groups and relative immobility between them. This traditional structure was subjected to a long period of colonial rule which reinforced some positions of privilege and intensified attitudes and ideas relating to ranking and resultant inequality. Twenty years of self-rule have done little to change this materially or significantly. The language we talk and the avowals we make are about abolition of privilege and establishment of socio-economic equality. However, it is clear to everybody that little progress has been made in

✓ the actual elimination of older centres of authority, in modification of hierarchical attitudes and values or in improving living conditions of the poorest. A society in which older conditions thus persist while an entirely new set of beliefs and expectations has been accepted must be subject to special stresses.

✓ As of today, planning in some form or another is widely accepted, attempts are made to regulate consumption outlays, to encourage investment in particular directions and to adopt suitable incomes policies. Monetary and fiscal measures are universally employed to regulate economies and a very large proportion of the national product passes through the national fisc of most advanced countries.

✓ For ascertaining the possible direction of future change in socio-economic conditions, it might be useful to examine the signs of convergence in capitalist and communist economies.

✓ The convergence is in the direction of the capitalist economies accepting a number of ideas relating to planning, direction and regulation of economies, role of social obligations and of public interest in the conduct of business, and broadly accepting a goal of basic equality and the concept of minimum essentials of life. On the other hand, the Communist societies tend to attach greater importance to prices and markets and to show greater regard to the wishes of the individual in the operation of the economy and to give him a greater freedom of choice. It would appear that while the capitalist economies are accepting a number of objectives and values associated with socialist or communistic thought, the Communist economies are accepting some values and a number of techniques of operating the economy associated with the liberal capitalist world.

✓ An obvious conclusion from this sketch of trends in the last few decades is that pure types do not last, even if

they emerge at any time. More particularly, in the growing complexity of modern techno-economic situation, planning and purposive regulation of the economy are unavoidable. A broad-based welfare approach including guaranteeing of minimum living conditions for all also appears well established. However, in the future, planning is likely to pay greater attention to local circumstance and individual choice and to adopt a wider-ranging technique with greater dependence on interplay of unplanned activity within a broad frame.

Progress towards relative equality is of special importance in our context. The eclipse of the concept of equality in the post-war Western world was an understandable reaction to the situation of the cold war. However, contemporary trends in advanced Western countries have been towards improving considerably the situation of the most disadvantaged classes and creating a much more equal society than before.

The gross inequality between class and class is undoubtedly an important factor in creating unrest and instability within our country. It is, therefore, not unreal to assume that in the coming decades, pursuit of equality of opportunity and attainment of minimum conditions will be an important compulsive factor in our Plans and our thinking.

In the context of a poor country such a movement has a connotation very different from that in a rich country. For example, the concept of a minimum living standard in a rich country can be pursued without necessarily affecting the acquisitive activities or the trend in the increase in the standards of living of the rich. In a poor country the ensuring of a minimum standard would obviously have a much greater restraining force.

Planning starts from the possibility of purposive external intervention, shaping social activities and regulating the pace and direction of the movement of social and economic organisations in achieving given goals through stated means and procedures within a given time.

The basic postulate of the planner is possible effectiveness of external intervention and also the desirability in human or social terms of such intervention. Moreover, the agent of such intervention, when one talks of planning of economic growth or development or regulation of the pattern of emergent activity, is largely the state or some organ of a state. In particular cases, planning may be undertaken by or entrusted to a social organisation which is not endowed with the full powers of a state. Ordinarily, however, some sanctions for directing activities, promoting or curbing or prohibiting them other than mere forces of the market or any automatically operating social forces are necessary for effective planning. Consideration of planning in this manner gets connected with the state and its organs.

The planner thinks of bringing about changes and movements. It is necessary for the planner to adopt an essentially dynamic forward-looking view.

As the planner looks to a fairly distant future, he has to study the existing situation in relation to ultimate objectives and the ability that he possesses to transform the situation in the desired direction.

Planned economic progress in a country of our size and diversity requires the emergence of a broad agreement on fundamentals of policy and consistent follow-up action at various levels. It is only when these are in evidence that energies of people can be fully harnessed to the strenuous, dedicated effort necessary for significant national progress. In the context of this endeavour, the Planning Com-

mission has an important part to play in evolving effective and acceptable policies and programmes.

Planning is not the business of the Planning Commission. The Planning Commission is there to gather thoughts, to gather data, to gather the opinions of politicians, social workers, industrialists and to present to the people a frame in which all the data and all the opinions are meaningfully placed in such a manner that they prove acceptable. This is all that the Planning Commission does.

The Planning Commission cannot presume to have a larger role. The role is of everybody. What, in the ultimate analysis, does development mean? National development means the effort on the part of every one to increase national product. And you can increase national product by two ways: by avoiding waste in consumption, by more rational consumption and by being more scientific and more rational in your activities and by making better use of your resources.

All planned efforts at economic development of the nation are directed mainly towards increasing the size of the per capita product. At the same time, it has to be remembered that there are no invariable criteria according to which the product is or should be distributed among the various participants. The actual division at any point of time is a function of the structure of the economic system, of the policies of Government and of the accepted ideas in relation to the future progress of society.

Moreover, the economic system does not always operate only through the allocation of distributive shares; most systems carry a regulatory frame which provides directives, prohibitions, incentives and disincentives in a variety of ways. The efficiency of a system has to be judged in relation to the extent to which, as a whole, it leads all participants to put in their optimum effort in the direction

of increased productivity and at the same time moving society towards its desired goals.

✓ Mass understanding of the production responsibility of everybody cannot come through unless there is a mass conviction that this is a fair society, that this is a society in which the distributon of the product is being justly regulated and that everybody is participating and has a share.

One of the very important requirements of successful planning in a country as large and varied as this is that planning is based to an important extent on a wide understanding of what is happening and a broad agreement about the direction in which we should move.

II

PLAN FORMULATION

A plan must be a concrete document and not generalisations and platitudes.

There is, apparently, a very large expectation and, equally obviously, there is a considerable shortfall in terms of achievement. The problem of what expectations you can properly entertain, what achievements you can in a realistic manner expect and what attitude you should adopt in order to bridge this great wide difference between possible expectations and achievements—this is not only a planning problem but a problem of social contentment. It is a large problem of social peace. As it comes to my mind, an important political problem also.

The present position in fact is that our sights are fairly fixed. I do not think they are too ambitious. In terms of development economics, providing the basic needs of food and employment is not too ambitious at all. But as far as

actualities and achievements go, we have not made considerable progress towards it.

If there is certain under-employment of labour in the rural areas or there is a large or small fringe of employment in urban areas, you can think in terms of extending employment opportunities. But with additions to the work force taking place continuously, this extension will not at any point of time completely meet your need.

The general proposition that ultimately it is the development process that is the reply to this problem is, in my opinion, correct.

The socio-economic situation of the future is something about which we all need to be concerned much more than we are. This is not a question calling for prediction. It is a question of looking at the facts — to say that social tensions are going to mount.

To-day we have, on the part of executives and on the part of large industrialists, a plea for incentives all the time. The executive, the industrialist or even the large farmer is able to say that unless you give me this price, unless you give me that incentive (so that I do much better than I am doing now), I won't do what you want me to do. In his heart of hearts, he is wanting to do it himself. But he is trying to hold the whole society to ransom. He wants to claim a price for what he would like to do.

Now when this happens on one side and on the other there is our stark inability to meet some basic needs or to offer adequate employment, there is no reason to think at all that our social discontents can die down or lessen.

In an unequal society, a feeling of solidarity can be generated only with the initiative taken by the better off and those in power. The initiative cannot be with those not

better off, those worse off, those in distress. But their reactions can be made somewhat less astringent, you can reduce the asperity a little, you can assuage their feelings a little, if there is some appropriate assurance coming through—not through words but through the pattern of behaviour.

It is said that the whole of the industrial transformation in Japan was made easier by what are called the puritanic traditions of the Japanese industrialists. It has been said by some economic historians that they took over some of the Samurai patterns of behaviour. Though they were amassing wealth and reinvesting on a large scale, their own standard of living was never ostentatious. The way they behaved with labour may be patriarchal but was not such as to show that they were different classes.

In a poor country like ours, with the widening gap in incomes, in levels between areas and between classes, this is a social problem. Ultimately I have always thought it best to describe it as a moral problem.

Plan formulation in relation to physical features and resources and the institutional structure in each area is necessary if the Plan is to succeed. Further, planned development requires not only financial and physical or material inputs but also resources of personnel.

✓ A plan of development has to be based on a full knowledge of existing resources and it seeks to present a programme of the successive steps through which the utilisation of those resources will be organised and will be made continuously more productive.

✓ The two main stages in plan formulation are, setting the objectives and targets for the ultimate or long-term achievements and, secondly, defining precisely what you expect to do within a definitive period of five years, one year, and so on. While the first sets the main directions

and looks, if fairly realistic, to general feasibility, the other has to be a much more detailed and careful exercise.

We have to look on planning not as a series of distinct programmes of five-year effort but as a continuous, ongoing process; and planning has to be thought out not only in relation to possibilities of long-term development of the economy but also to short and intermediate-term variations and fluctuations in its fortunes. Therefore, while the Five-Year Plans of the future will continue to embody the best estimates and judgements made on the basis of intensive investigation, analysis and thinking at the beginning of the period, they need not be treated as either not being capable of or not needing adjustments from time to time during the currency of the five-year period.

The potential for growth in a Plan period is very largely a function of investments and effort in the past which have fructified or are beginning or are due to bear fruit. The investment effort during a Plan period is, in part, required to realise the potential but at least equally it is required to prepare for continued growth in future Plan periods. If such effort is not maintained from Plan to Plan, the economy would stagnate when the results of past effort have been worked out.

The preparation of Five-Year Plans in the light of a longer perspective not only gives a proper orientation to the planning effort but also provides the frame within which priorities can be adjusted and a variety of short-term, intermediate and long-term projects and schemes properly co-ordinated.

A Five-Year Plan, however carefully it may be prepared and however firmly based, could be affected by unexpected passing events and by fluctuations in the politico-economic situation. Therefore, while the Five-Year Plan would continue to form the main base on which Annual

Plans would be prepared, it would be necessary to operate in detail with an elaborately prepared Annual Plan for each year. While the main purpose of the Annual Plan would be to maintain the development effort during the year along the lines indicated in the Five-Year Plan, it would also look to any adjustments in emphasis and relative size of outlays needed in view of the emergent economic situation and would define details of programmes of economic activity having regard to immediate past performances, physical availabilities and financial resources.

✍ Planning loses all meaning and direction unless it is undertaken within certain constraints and is related to a given effort. The need for making choices, defining priorities and attempting balanced and coordinated effort becomes evident only in the context of financial and other restraints. Above all, in the absence of such compulsions, efficiency and economy are usually disregarded. Constant awareness of financial restraints is thus of extreme importance in planning in a poor country.

Planning is a two-way process. It involves building up an aggregative frame related to basic objectives and to future lines of progress and maintaining a proper balance between the various sectors and activities. On the other hand, it also involves taking fully into cognisance the detailed situation on the ground and making due allowance for its potentialities and limitations. To a large extent our present procedures do neither. Each State or ministry, department or division is in the main anxious to inflate its own claims. The result is that little discrimination is shown in including schemes, economy is not insisted upon and almost no attention is paid to careful balancing and co-ordination. When the inevitable cut is imposed, there is neither time nor inclination to re-examine the entire structure and arbitrary adjustments are made. Waste and inefficiency are the obvious results. On the other hand, as most people operate with standard schemes, little allowance or

adjustment is made for variations in conditions and circumstances. Moreover, there is no periodic evaluation or re-examination and once a scheme has been admitted, it continues from Plan to Plan usually at higher and higher levels of expenditure. Expenditure orientation of the whole process makes it difficult to discover mistakes of planning or of performance.

The only way to get over these defects is to build a proper framework of objectives and priorities and to pay adequate attention to varying conditions and requirements from area to area.

Except in a highly centralised and fully articulated development plan, action cannot be taken in every area and in every respect. Direct action has to be confined to a few strategic points. It has to be assumed that helped by incentives and such indirect measures, its effect will spread throughout. Therefore, appropriate visualisation of transmission of forces and spill-over effects should shape every Plan. There are two main aspects of this visualisation. Firstly, the distribution of beneficial effects over all constituents of a sector of the action taken in relation to one constituent. Secondly, the manner in which and the extent to which development initiated at any location or in any activity spreads to other areas or activities.

When plan formulation, implementation and evaluation become continuous, successive processes, each successive stage of planning requires more intensive effort. Enquiry and research would come to be integrated with planning and will acquire a newer dimension. The enquiry may be local and highly specific and the research mainly an exercise in adaptation; such activities will nonetheless prove highly essential and useful in planning. Therefore, the planning organisations of the future will not only need to have at their disposal adequate economic and sta-

tistical expertise but will also require to be in touch with local agencies of investigation and research in all relevant subjects.

Planning activity during the last fifteen years has thrown up some amount of information and led to collection of a body of statistical data. The first stage is the collation and analysis of the available data with a view to assessing the extent of progress made or development achieved in various directions. The next requirement is to define carefully the objectives of future effort in each important direction.

The physico-geographical conditions vary within the country even more widely than the socio-economic, and the only way in which full account can be taken of these variations in planning is to spell out for each type of area and activity the goals of proximate development effort in physical terms. The point need not be laboured. It is, however, clear that the definition of objectives when attempted in some detail will involve not only analysis of the existing situation but also an assessment of limitations and possibilities. And this assessment will be related to the scientific and technological advance as well as to social and economic structures and attitudes. It would be wrong in this regard to set our sights too high.

In planning in an underdeveloped country, inadequacy of data must be taken for granted. What I would like to emphasise is not so much full information or elaborate tools of analysis as the desire to understand the situation, to define a set of coordinated goals with some precision and to think out possibilities carefully and in some detail. If such an approach is fully accepted and there is readiness to take pains, planning at the State and the district level is bound to get a good start.

In the initial stage of collecting information and defining objectives, attention will naturally be concentrated on particular areas of activities, such as agriculture, roads, small industry, education or health. However, for making progress towards a properly coordinated plan, meaningful frames in which a number of activities could be fitted must be found. It appears that in the context of State and district planning it is important to integrate plan formulations relating to (1) provision of socio-economic overheads and (2) the conservation and development of natural resources. The state has the responsibility of providing universally the utilities and services which are needed for the development of economic activities of individual establishments. An economic way of planning for the diffusion of these facilities is to locate them in a series of well-distributed centres, each of which serves a convenient surrounding area. This approach could take care of not only the vital system of communications but also of the location of schools and health centres, of bank branches and warehouses as also of the location of industry. The concept of such a physico-geographical frame for the planning of socio-economic overheads at various levels could prove a powerful device in economic, effective and also objective planning of an important area of state activity. Though less comprehensive, the concept of coordinated conservation and development of natural resources will also meaningfully bring together a number of important functions of the state. This exercise will also provide the needed secure and broadening base for planning the development of agriculture, other primary production and of the necessarily resource-based, widely spreading small industry.

Development plans of individual productive activities will have to be formulated separately. However, especially at the district level, an important consideration in the planning of all aspects, i.e. of the socio-economic overheads, of resource development and of productive activities, will be the provision of employment or rather as full

utilisation as possible of labour resources. This requirement should provide an important directing and integrating factor in all area or regional plans.

Recent experience has highlighted certain aspects in relation to which action is necessary to ensure continuity in planning effort and stability of Plan progress in the future. Two aspects appear to be specially important. The first is the need for Government to place itself in a position to direct and regulate the economy effectively and to be able to maintain an element of stability even in the face of adverse circumstances. The other is to raise substantially the level of domestic resources required to finance investment and to reduce our dependence on foreign assistance.

Nationalisation of banks does not appear necessary to keep continuous watch on the operation of industry and it is likely to have undesirable consequences. Instead, two steps might be suggested. First is the appointment and active functioning of Government directors not only where capital loans are given by official institutions but also where the L. I. C. holds a sufficient number of shares in any company. Through this, general supervision should be possible on the operations of all important public companies. Even more effective may be the nationalisation of the profession of chartered accountants. Bringing all large companies, in this manner, within the purview of a public audit system should prove highly useful.

The severe restraint of resources faced in our planning makes it specially important that the development of all rapidly growing urban areas be made progressively self-financing. This is connected with the difficult problems of control of speculation in and prices of land and the formulation of far-seeing plans of land use and vigorous present action by appropriate authorities to secure its future implementation. Unless these problems are solved at an

early date, even a beginning cannot be made with tackling the housing situation which is causing grave concern in most metropolitan areas.

✓ Provision of an adequate infra-structure for all areas is a necessary pre-condition of intensification of productive effort in agriculture. It is also a pre-condition for the establishment of dispersed small-scale industry. Without the provision of the infra-structure and the development of natural resources, the more backward areas could not begin to develop. Therefore, this is a pre-condition for correcting regional and area imbalances. On the other hand, these activities provide the only means for generating widespread employment opportunities during the plan period. The provision of the infra-structure and the conservation and development of natural resources comprise activities which have necessarily to be carried out in each area and locality and which are highly labour-intensive. Our economy has not the resources to give employment just for the sake of providing employment. Employment opportunities have to be integrated with the path of development, and the emphasis on the programmes of infra-structure and conservation offers the best way of doing this.

Agriculture with us is already an industry which employs too many people and with the growth of population, the numbers in agriculture keep on growing and, therefore, a shift from agriculture is needed. This can happen only if non-farm occupation, employment in non-farm occupation, increases. So occupation development in our country has to be employment-oriented, of course, with this promise that employment-orientation does not mean employment for employment's sake. It is only in pursuing the development that employment should originate.

✓ Without a minimum provision of essential economic and social services and facilities, economic development cannot begin and cannot be sustained.

In agricultural production, emphasis has to shift to detailed local and area planning and planning for needs of different categories of producers in addition to planning for individual crops. Programmes like consolidation and co-operative farming have to be given high priority. In co-operation, two sets of problems deserve special attention. Programmes in relation to area in which co-operation has not yet taken root, and programmes for the rehabilitation of the weaker sections in States where it is well-established. A number of objectives have to be integrated in the plan of industrialisation. In the main, these are employment and dispersal. Deliberate dispersal from the worst metropolitan concentrations and the spread of socio-economic overheads in all backward areas are most urgent; but basically the industrial plan itself must be reoriented. Further, self-reliance has to become an immediate and continuous concern.

III

PLANNING AND STABILITY

Stability means a minimum degree of poise in the economy which is necessary to see that development proceeds apace. Instability, beyond a point, endangers development itself.

The most important aspects of stability are keeping prices under control and ensuring an adequate supply of foodgrains. Building up a buffer stock of foodgrains and providing for institutional distribution of essential commodities are two important measures suggested in the next Plan for this purpose. Stability of prices also requires that Government outlays do not exceed available resources by any considerable amount. To achieve this, the gap must be filled by raising additional resources. The effort

must be specially significant in the next few years because of reduced dependence on foreign aid.

✓ A plan of development must be accompanied by policy measures, other than fiscal and monetary measures, for holding prices in check.

✓ Instability which follows on the lack of direction and regulation will itself make growth difficult, whatever the apparent capital investment.

If stability is successfully maintained, it will be possible to undertake larger development effort; on the other hand, the development plan must follow the route indicated by conditions of stability. Emphasis has to be placed on the paramount need for an integrated policy and for an overall regulatory frame. Even the economies of industrialised countries of Europe all operate today under a general regulatory frame imposed by governments. The levels of incomes and their distribution are major concerns of state policy. Also, even though for the major part, fiscal and monetary measures suffice at present, in these economies resort is apt to be had to direct price controls and physical allocations the moment signs of an inflation or a recession or war become evident. In comparison with these economies, the need for a full and effective regulatory frame is vastly more urgent in India; the analogy of a war economy is, in fact, more appropriate for us.

Policy for stability may be divided into two major parts: a price policy and an incomes policy both of which are, of course, highly interconnected. Three sets of prices are immediately of the greatest importance: prices of essential goods of mass consumption; prices of agricultural products and prices of those intermediate and capital goods which are essential for planned development and which are in chronic short supply. In the last category, imported goods and their substitutes and those goods in relation to

which imports play an important part, figure prominently. The maintenance of a stable cost of living index depends on successfully stabilising prices of essential consumer goods. This can be done only by arranging for a regular minimum supply of these at stable prices to needy people all over the country. The first requirement, in this regard, is a widespread net-work of retail outlets under public control. The second is availability of adequate supplies of the goods to enable the public system of fair-price shops to function throughout the year. The supplies required are of both agricultural and non-agricultural products: e.g. foodgrains, vegetable oil and sugar, and cloth and kerosene.

In the structure of prices, those of foodgrains enjoy a central position. Next in importance is the relative stability in prices of other agricultural commodities. Dependent as we still are on the monsoons, we must also create the means of equalising supplies of foodgrains over years good and bad. Variations in production for foodgrains should, therefore, not be allowed to vary the supplies available. Nor should the variations in production be able to influence the prices in an undesirable way.

It is for this reason that the Planning Commission has suggested the building up of buffer-stocks and the maintenance of an adequate distribution system through fair price shops and otherwise. This is all the more important when we are planning to scale down and eventually to stop the imports of foodgrains under PL-480.

When we talk of stable prices, we do not think in terms of absolute stability in the price of every agricultural commodity. Individual prices will vary, partly because of the forces of demand and supply and for other good reasons. But we really must have a proper concept of how the whole set of relative prices can be kept stable or altered in the desired directions. This is equally true of the other agricultural commodities.

The operation of a system of distribution, internal procurement and building up and maintaining buffer-stocks are all closely inter-related. The necessary operation of turning over the buffer-stocks can be effected only by regular issue through the distribution system and replenishment through procurement. The only means of holding the price line is an effective system of distribution of food-grains and essential consumer goods. This in its turn depends on a larger buffer-stock and annual internal procurement. When such an inter-related complex is fully established, Government will be in a commanding position in the market.

Properly administered, these buffer-stocks could affect the operation of the economy in two ways. It would be possible with their help to stabilise prices of individual agricultural commodities and maintain them at some mutually normalised relative level. It would also be possible to reduce somewhat the effects on the economy of large fluctuations in internal production of agricultural commodities from year to year. The buffer stocks could absorb extra supplies in good years and carry them over to reduce deficiencies in bad ones.

Special attention has to be paid to the prices of food-grains, as foodgrain prices usually lead in all upward spurts of the cost of living index.

Upsetting of stable prices obstructs the development process immediately. While we are thinking in terms of a five per-cent agricultural growth, we emphasise all the means in terms of both physical supplies as well as prices to maintain a given degree of stability.

Whatever the programmes, stability and the buffer-stock concept in an operative sense are an important new feature of our Approach to the Plan. It is not a non-cost operation. Building of buffer-stocks means financial in-

vestment initially. Operating buffer-stocks means intelligent purchase and sale and distribution. ~~These are important aspects and they will have to be worked through in detail by agencies in the field.~~ Whether it is in agriculture or the buffer stock operation or distribution, you come to realise the extremely important role that states and state administrations have to play in this.

IV

SELF-RELIANCE

A move towards self-reliance has two consequences. First, it makes it necessary to cover appropriately the gap between imports and exports. Strict regulation of imports and a very large effort in promotion of exports would be required to achieve this. The second consequence is diminution in resources available for investments, chiefly in the public sector.

Self-reliance is an easy term but very difficult to achieve. Self-reliance means two things. Self-reliance means that you might step up the rate of domestic savings which is very important in the context of foreign aid. And you must increase exports.

V

LOCAL PLANS

✓ The development process unless it is regulated and directed naturally concentrates benefits on those strategically situated: whether groups and individuals, or places and areas. When left undirected, it leads necessarily to concentrated development in a few centres with the others being denied its benefits. Inevitably, the process has a

✓ cumulative effect and those in a strategic position continuously improve their relative situation and those left outside the stream of development fall relatively more and more backward.

In the initial stages of planned development, uniform largé effort all over the country is alone possible and may prove useful. Yet, as development proceeds, it becomes more and more necessary to plan in detail and to give attention to local needs and circumstances. We have, in future, to look to an era of much greater importance being attached in planned development to efforts at the State and the district level and to responsibilities both in raising resources and in formulating and implementing plans lying largely with Governments of States.

When States and local authorities thus come to play a larger part and to have a larger initiative, it will become specially important to establish an agreed approach and to have a pre-determined frame. Development, like many other things, is indivisible. The pace and the direction of economic progress of the whole nation depend essentially on the concert attained and the harmony maintained in the relevant activities of individual States. Planned long-term progress requires not only agreement regarding its objectives and direction but also concert to short-term action.

Though national priorities may be uniform, the specific objectives of planning at each level have to be defined specifically.

✓ The natural corollary of beginning to plan from the bottom is to recognise that planning is not something that comes from outside or above but from what each State, district, locality and community does to develop its own resources and potentialities. This emphasises a wide diffusion of initiative, decision-making and participation; it also ✓ implies a parallel shouldering of responsibilities.

It has to be widely recognised that planning is not sending up lists of demands to somebody high up and that the revolution of rising expectations could produce lasting results only if supported by an upsurge of matching effort.

✓ In the ultimate analysis the main justification for detailed regional planning lies in the fact of significant local variations. State and district economic planning comes into its own only when it is realised that the particular local situations, structures and patterns of action and reaction must be taken fully into account in a large number of aspects of not only Plan programmes but also of Plan strategy. Local planning is thus worthwhile only when it is based on adequate information put in a meaningful frame, and when it is, and proceeds progressively, supported by greater and greater inputs of investigations, research and analysis.

✓ Planning works through instrumentalities and agencies. The characteristics and quality of those agencies are extremely important in planning a programme and in the results obtained from it. District planning or area planning, in this context, would be meaningless unless it takes into account important aspects of the existing situation in the area or region.

✓ The emphasis on district or local planning is related also to requirements of institutional adaptation. Main reliance in local development effort is being placed on co-operatives and Panchayati Raj institutions. In credit and many other fields, co-operatives have proved superior to state action. At the same time, the development of Panchayati Raj institutions and of co-operatives has been very uneven over the various States. In some States it would be proper to regard these institutions as the main agencies or instruments of local development programmes. However, in other States either they are non-existent or work unsatisfactorily. It then becomes necessary to adapt the insti-

tutional framework to the requirement of local conditions. This is best done on the level of the district. The absence of a proper local institutional framework handicaps development effort in many directions. For example, the distribution by the Reserve Bank or by the Agricultural Refinance Corporation of credit among various States and districts is closely related to the strength and viability of co-operative structures in them. Therefore, it is necessary, in formulating a plan of rural development, to think in terms of an appropriate institutional structure for the area.

The recognition of the importance of building up Panchayati Raj and co-operative institutions was the result of experience of successful development planning. They are not fads or ideologies but are essential systems without which planned development cannot proceed far. Planning, except at a highly generalised level, has to be related to local situational variations, responses, preferences and feasibilities. Such relation can be established only locally. Moreover, planning also requires an agency which can communicate to vast numbers of dispersed farmers, artisans, and others the schemes and intentions of planners and which can, in turn, interpret their wishes and difficulties to planners. Such agency cannot be wholly official; that would be both highly costly and ineffective.

The other aspect of institutional development is that of land reforms. The importance of this cannot be exaggerated. At the same time, the strength of the forces which make the implementation of legislation difficult has also to be assessed. Categories such as tenants and small-holders could not be effectively helped in a plan of development until the basic provisions of land reform measures are fully implemented in their favour. The other intractable problem in this field is that of uneconomic holders. The programme of supplementing the income of uneconomic holders through additional activities is undoubtedly important. But a programme of consolidation of holdings and the

possibility of some advance in the direction of larger units of farming through co-operative or other programmes is a matter which requires close attention. It must, at the same time, be recognised that in the absence of implementation of land reforms or a considerable progress in the consolidation of holdings, this will remain a problem whose solution is not in sight.

VI

FINANCIAL RESOURCES

The time has come to do all we can to raise progressively larger internal resources for development planning, if the effort is not to slacken and the economy not allowed to stagnate. The effort is not likely to succeed unless its base is widened as much as possible.

Taxation is a very important means of affecting the savings level and collecting resources in the hands of Government. It is necessary in this context to see that no existing tax revenues are given up unless better substitutes are first found.

In relation to the large mass of small producers in agriculture and industry, the best approach for raising the level of savings appears to be that of offering them incentives for investment in their own business.

The main problem in this area is to identify possibilities of profitable capital investments for bodies of small producers and to induce them through technical assistance and initial loan finance to participate in concrete ventures individually or in groups.

Continuous growth in agriculture, chiefly in areas of intensive irrigated agriculture, would make surpluses available to many classes and individuals in some rural areas. These surpluses could be deployed for financing plans for development through measures such as rural debentures.

Unless we raise irrigation and electricity charges and tax agricultural incomes, we shall soon have a new privileged class whose income increases out of all proportion to its contribution to taxes.

Raising of domestic savings is easy to speak of. What it in fact amounts to is certain consumption restraints.

It has been said that the Japanese industrialists and businessmen through the Meiji era modelled themselves on Samurai lines. This meant that while pursuing profit, amassing wealth and building up a many-faceted economic and industrial structure, their basic attitude was that they were serving social and national interests. Following the Samurai, they had to be sparing in the demands that they made on the society and the economy. The very high rate of savings achieved by Japanese economy in the past and which continues to be a characteristic of it at present is closely connected with the self-abnegation arising partly out of the fundamental approach of the growing Japanese industrial class. Modern economic historians have pointed out to some inappropriateness and improprieties in the adoption of this role by the industrialists and to some failures to which it led. It cannot, at the same time, be denied that it served an important purpose in the transition and gave to the Japanese business class a moral authority in relation to Government and the people at large which business classes in other developing societies, including India, do not appear to possess.

It should not be taken to imply that inappropriate attitudes and expectations are exhibited only by businessmen.

They are general. A loss of confidence in leaders at all levels is part of our total situation. It is obvious that large discrepancies between the requirements of the future and the present attitudes and expectations of important sections of the community cannot persist for long without serious consequences. The young, in particular, have to orient themselves to the future. Basically, such orientation involves a frank acceptance of agreed national goals and policies, recognition of social obligations and a measure of self-discipline.

The ability of Government to syphon off a large part of the surplus which accrues once the development process has begun, is also limited by political considerations. The distribution of wealth in most under-developed economies is very unequal and the distribution of political power is in most cases similar. A programme of development which assumes mobilisation of considerable resources and plans for their long-term investment, especially if it has some broad social objectives in view, often runs counter to the short-term interests of those in centres of political and economic power. It is, therefore, likely to encounter opposition. In such circumstances, only the plans which do not disturb the existing distribution of wealth and power and allow for the growth of new activities chiefly in the hands of those possessing power will be carried out. However, such plans will fail to solve emergent social problems and can be maintained only by fairly strong regimes which could disregard social pressures. The traditional hierarchical structure of those societies also impedes occupational mobility and obstructs the bringing together of resources of capital and labour in an appropriate manner.

One of the things we should learn from the Japanese experience and perhaps the most important, is the paramount importance of savings. Already before the War, I think the gross saving of the Japanese was about 20 per cent or more. Now, it is nearer to 30-35 per cent. It is 35

per cent of the GNP. What does not go into consumption is gross savings. Our gross savings are nothing. The rate of progress depends on saving and of course, on proper investment. These savings are related to consumption habits.

Now, thinking of ostentatious consumption—that it is something vulgar—it is a part of their national tradition, which has been extremely important and which is an extremely crucial factor in the Japanese economic development. What can we do to increase our savings rate? What can we do to avoid ostentatious consumption, so that whatever investment is there it goes really towards further and further increases in production? We have to go quite a long way. This is something which the national composition and national characteristics determine, but if we are really keen on economic development, we have to learn it from the Japanese.

In a poor country with unequal distribution of incomes, production of goods of mass consumption is apt to be depressed while industries and trades in relatively luxury consumption goods are booming. In the rural sector, the most obvious and important measure for checking very high incomes is that of incorporating agricultural incomes fully in the assessment and levy of the general income tax. A progressive personal income tax is already levied on urban incomes. However, it is highly ineffective because of the current view regarding incentives for savings needed in the private sector. As long as the richest are expected to save largely out of their personal incomes, the levels of direct taxation must make allowance for these over and above their high standards of consumption. And there is no guarantee that these supposed savings will fructify. If instead, it is decided that personal income tax will be pitched so high that at the highest no room need be kept for savings, the whole approach towards personal income taxation will effectively change. This may have some effect on the capital market; but any gap on this account in capital

supply can be made good through additional capital funds being made available through Government's financial institutions.

It is the hall-mark of an unequal society that not only is the ownership of the resources of production very badly distributed within it but also that operational and other facilities are equally mal-distributed. In case of the banking and credit system, as it operated 20 years ago, this inequality was glaringly evident. Developments during the past 20 years have in part changed the picture. Even so, the basic inequality is still large and the main objective of social control of banking and credit would appear to be that of more evenly spreading available credit over different areas and categories and relatively lowering the cost of credit to small operators.

Furnishing adequate credit to the small man is somewhat difficult in ordinary commercial banking practice because of the lack of security offered and the uncertainty that surrounds the business. The costs of each unit of business also tend to be high. The co-operative approach gets over this in part because it brings together groups of persons largely known to each other and, therefore, can operate on the security of knowledge of character and other non-bankable features. However, whether in co-operative banking or in commercial banking where a small local unit adopts practices and procedures appropriate to the situation, it is apt to run up against norms laid down by the Reserve Bank or other inspecting authority. The security for credit offered, the margins insisted upon, the number of instalments, the method or frequency of granting extensions and other features of any supervisory system would have to be specially adopted to needs of financing the smaller men and the weaker sections. The local bank or the co-operative bank can keep down the cost of credit to the small man only because the overheads are smaller or because there is some voluntary work and lower pay scales.

Expectations of the regulating authority would have taken account of all such features of the business.

While the co-operative institutions or single unit or small area banks can fulfil certain purposes of social control more effectively than other members of the system, the resources they could command for the purpose may not be adequate. Therefore, the units with command of larger resources could be looked upon as in part supplying resources to this other part of the system. The recent practice of commercial banks of buying debentures of Land Development Banks is a step in this direction. It should, therefore, be clear that it is not necessary for each unit in the banking system to try to perform all functions. It should, in fact, be accepted that it is not possible for this to happen and, that to make it happen artificially may involve unnecessary costs.

VII

DEVELOPMENT ADMINISTRATION

Planned economic development has added enormously to the dimension of Government effort. The activities of Government have increased tremendously both in width of coverage and in depth and intensity.

Apart from undertaking multi-fold activities and activating or regulating economic life all over the country, planning requires continuous maintenance of a long-term and coordinated direction to socio-economic developments. This is both a highly important and difficult function which is made all the more important and difficult because of the large size, the diversity and the federal political structure of the country. Administration has to be geared to all these ends. It will be thus seen that large ground had to be covered as between the highly limited Government ac-

tivity of British times for which the particular structure was fashioned and the requirements of the administrative system of the planned development era.

It must, in the first instance, be recognised that the Indian administrative system has grown rapidly, adapted itself partially to the changed situation and tried to meet the large and manifold new requirements. Inefficiency and corruption may have increased, but there has been no real break-down of the system and this itself is credit-worthy. However, huge problems remain unsolved and it is necessary to pay urgent attention to these.

Even for ordinary departmental administration, much more diversified and wider based methods of recruitment have to be adopted. This will enable direct recruitment of a certain number of specialists and technically qualified personnel for administrative posts at appropriate levels. Even more important is making it possible for them to operate side by side on similar positions of authority with members of the generalist civil service.

Secondly, all operations other than the strictly administrative should be put outside the purview of the generalist service. The large number of public enterprises and autonomous corporations for performing a variety of specialised functions either of research or of administration or of quasi-business activity should be put outside the sphere of the generalist administrator. In these activities which are essentially spheres of the managers and the experts, it should be insisted that the running would be by people who are professionally competent and are committed to a career in that particular line of activity. In business management, it is the experience even of Communist countries that the manager has to have considerable power and autonomy. This is necessary in order to enable him to manage his business flexibly. It is equally necessary to enable giving him due credit or fixing blame on him for

good or bad management. The present arrangements by which the generalist looks upon all these areas as his privileged preserves into which he moves in and out at will and regarding the mismanagement of which no responsibility is ever fixed on him must cease at the earliest. As a corollary, it follows that the power of generalist secretaries over such branches of activity must also be abolished.

The next desirable change is essentially a change in attitudes, the attitudes of top civil servants to lower ranks and vice versa. It is admitted on all hands that there is considerable administrative talent and considerable enthusiasm to be found among all lower ranks, specially of local administrative personnel among departmental staff all over India. However, the whole of the tradition of colonial rule has imposed a pattern of behaviour which prevents any free expression of opinion or exercise of initiative by these large elements. This is a heavy handicap especially in a society which talks of democratic decentralisation. Means must, therefore, be found to vitalise the lower level of the administrative structure and by suitable encouragement and incentives to give scope for independent expression of views and some types of independent action by staff at the lower levels.

Successful plan implementation also requires maintenance by Government of a consistent long-term economic and social policy. For purposes of planning, this requirement is so essential that it cannot be satisfied by the ordinary co-ordinating arrangements within a Cabinet.

It is at the same time obvious that the ordinary day-to-day administration of various Ministries, departments and offices should not be hampered by the functioning of any outside body with a general over-viewing function. The way out is specially to ensure that all important decisions which have relevance or significance for other activities or for future arrangements or operations should be

subject to tests of consistency with policy laid down in this behalf or, if there is no policy already laid down, should be viewed in the possible frame of such policy. An organisation which looks at policy decisions from this point of view would not only be highly useful but, for any long-term detailed planning, highly necessary. It does not appear essential to vest such organisation with any direct power. All that would be necessary is to ensure that in each such case informed and detailed comment in the light of accepted, co-ordinated and long-term policy decisions or perspectives should be fully expressed and should be carefully considered before action or decision is finally taken by the supreme organ of government.

At the national level the Planning Commission could properly perform this function and does so already to some extent. If organisations for plan formulation such as Planning Boards are created at the State level, they could be similarly used. Apart from these, it should be useful to have planning cells in all Ministries and departments and planning officers at the district level. This could ensure that the planning aspect of all decisions and activities would be continuously brought to the notice of authorities and the functioning of important organs of government would acquire a much-needed orientation towards planned development.

VIII

AGRICULTURE

Economic development is indivisible. Transformation of semi-subsistence agriculture into a fully commercialised enterprise requires the creation of an integrated economy with a transport net-work reaching into all areas and widespread systems of water and power supply. Moreover, it requires education and technical training, and in so far as

the transfer of these from outside is much easier in industry and the towns, the establishment of industrial and urban centres is important for technical progress in agriculture.

The needed increase in agricultural productivity and the implicit transformation of agricultural society confront, in the main, two sets of problems. The first relates to transfer of technology. In part this depends on the spread of literacy and of primary, secondary and technical education. However, for the greater part it calls for adapting to local conditions the methods already well established elsewhere. This is a complex and difficult task which has been relatively neglected.

The other set of problems is related to the structure and policies of governments and the response of societies. Conditions in this regard are so diverse as to preclude generalised statements. However, types of problems encountered may be indicated by relating them to motivation and organisation. Assuming that the peasant family will continue to represent the main type of production unit, two vital factors in motivation will be tenure arrangements and pricing policies. The structure of government will initially determine the first. A plantation or estates economy could achieve the breakthrough in productivity. However, with the large numbers necessarily retained on land, such economy may prove socially and politically unstable. Absorption by the individual peasant of advanced agricultural technology and its constant rational practice will also necessitate general assurance of fair tenurial terms.

In a market economy, pricing policies will have great importance. These will be related to a series of different considerations such as the urban cost of living, procurement of agricultural supplies, the desired cropping pattern and the level and stability of agricultural incomes. The pressure on land and the need to encourage transfer

into non-farm employment will keep returns to agriculture relatively low in developing societies. However, elimination of exploitative elements and maintenance of stability should prove practicable and are essential.

The main requirement is an organisational pattern which enables the small, dispersed units to retain individuality and yet obtain strength and advantages of large-scale operation. Co-operatives can meet the requirement. To achieve full results they must build up an integrated co-ordinated structure. Credit, sale and supply and processing are all vital activities that can be co-operatively organised for the small farmer and their meaningful co-ordination can make the whole structure and community powerful. Such a structure could serve many purposes.

The peasant farmer is born in a traditional society; he has an extremely limited base of production and has almost no opportunities of readily extending it. In fact, because of the initial paucity of resources, the cycle of seasons and lack of adequate institutional support, he is almost tied down to a state of what may be called non-development equilibrium.

Supplying credit for agricultural production is not only a dispersed and small unit activity but is subject to many risks which are to be fully incorporated in the organisation and methods of the credit system.

The co-operative credit structure being essentially federal has considerable elasticity and is specially meant at the primary level to fulfil the needs of small men.

If you have to get results all over the country, the problem of co-ordination of the agricultural programmes requires much more serious attention. It has to be incorporated in the planning process much more than it has been done so far.

The compelling need to increase continuously and greatly the per acre productivity in food and general agricultural production is the challenge that the developing economic situation throws up to the man of science. For, in the ultimate analysis, whatever the contribution to the total effort of the administrator, the educator and even of the farmer, the solution of the problem depends fundamentally on the work of the scientist. One of the most important of our immediate tasks is thus to orient and activate scientists, especially research scientists, in the applied fields, towards taking up this challenge.

The problem of the applied scientist in trying to improve agricultural practice is first to understand what the individual farmer is doing at present and why he is doing this, and then in what manner the results of increased knowledge based on research can be so communicated to the farmer as to make his practice, in the scientists' terms, more rational and more scientific.

Highly generalised advice for a large region is of little use to individual farmers. Detailed adaptation of basic research findings has to be undertaken at least at the rate of one centre per district; and the main orientation of the extension agency should be to survey results of research so as to enable the individual farmer to apply them with needed interpretation and adjustment with his own condition.

It is extremely necessary for research scientists to turn their attention immediately to the problems of unirrigated farming and to those of the dry and insecure areas. There may be no research findings that can be utilised for immediate improvement of these areas. This is all the more reason why special emphasis be placed immediately on those lines of research which after intensive work may provide clues for improvement of the neglected areas and classes in Indian agriculture.

The applied scientist works in a number of directions which appear to him capable of yielding results of practical use. The results of the applied scientist have to be proved on the ground at a number of research and demonstration stations. When they are proved, they are incorporated into programmes for implementation by the extension agency. However, the research scientist cannot operate in a vacuum. He has to be fully aware of the difficulties faced by his ideas in adaptation and proving on the ground. He has also to know in detail the actual problems that farmers in the field are facing. It is when the extension agency and the research and demonstration farms at the district level provide a close link between the scientist and the farmer for a two-way traffic of this character that the work of the research scientist will be directed more effectively and fruitfully and the results of research appreciated and absorbed by the farmer more fully and readily.

IX

IRRIGATION

The development of an irrigation system involves basically the task of planning and creating the infra-structure required for the utilisation of the added water supply in irrigated agriculture and transferring the technology and capital required for the transformation in agricultural practices. It is a total task which has to be viewed in an integrated fashion. Some of the problems of under-utilisation of irrigation works that we face today have stemmed from our failure in planning and programming for the proper development of our irrigation systems.

With the steady commercialisation of agriculture, the concept of a protective irrigation work has fallen into the background, and the productive aspect of irrigation works

which were initially constructed entirely as protective works has progressively attained prominence. The protective concept was appropriate to a static and self-sufficient agricultural economy. In a dynamic economy it is no longer relevant and could not survive. However, the elimination of the protective concept meant at the same time a considerable change in the original design of utilisation of water and a change, inevitably, in the principles of irrigation water management as related to the protective systems.

Irrigation water management has to take into consideration a large number of socio-economic objectives such as a proper distribution of benefits, the conservation and optimum use of water and land resources, obtaining the maximum financial return from the irrigation systems, encouraging the adoption of the most profitable crop patterns compatible with conservation aims and making for the participation of the local community in management.

X

INDUSTRY

Continuous progress of a modern industry is dependent essentially on the pursuit of innovation and improvement, and this can be conducted satisfactorily only if a set of people are set apart for this function. The research scientist in industry has at the same time to be fully familiar with problems faced, day to day, by the working technologists. Unless these two interact and work closely together, no general progress would be in evidence.

It is only when the society or the industry makes up its mind to stand on its own feet and to have sufficient confidence to aspire to lead even if in one particular or a narrow sphere, that its performance and its standards will

go up. This, however, is easier said than done. For it requires not only a minimum degree of self-confidence but also a highly complex and purposive co-ordination of various elements involved in the process. Appropriate Government policy is, of course, required, but the other elements such as the Universities, the specialised and technological research institutes, the capitalists, the technologists and labour must also be meaningfully brought in. The role of the capitalists and of the scientists and technologists is specially important. Innovations and their transformation into practice are largely the work of technologists. However, the pre-disposing and supporting conditions needed for their efforts have to be afforded by the capitalists. The funds that the capitalist ploughs back into research and renovation and the conditions of work that he offers to the technologists provide the firm foundations for industrial progress. And that such imaginative investment is always rewarding, in the balance, is the experience of all advanced countries.

The working technologist has the responsibility of proper maintenance of plant and machinery and of maintaining standards of productive efficiency. With him also could originate a large number of improvements which, though apparently small and piecemeal, could yet cumulatively be of the greatest importance to the industry. The technical scientist in the research laboratories plays a more striking part but the working technologist is not necessarily less important than the research scientist. We are slowly coming to realise that modern industrial organisation depends for its efficient working and technological progress on a very complex pattern of co-operation between various elements and strata. The older types of societies were everywhere hierarchically arranged and the division of labour between one stratum and another was sharply marked. The industrial revolution began when the older sharp lines of demarcation were blurred and the gentleman-academician turned into a scientist, pure or applied, or the artisan

following innovations, blossomed into entrepreneur. In recent times, the close co-operation between strata and occasional interchange of roles has become further emphasised. In the modern context it is necessary for each element, at least, to understand the role of the other and to work in close co-operation.

One of the essential prerequisites for the application of science and technology to economic development is the mental awareness on the part of industry as regards the importance of research and development as a tool for increasing productivity. In addition to this awareness, industry has to concretise its interest by actually establishing its own research and development laboratories and by allocating adequate resources for R and D. Unless industry establishes research and developmental facilities within its organisation, horizontal transfer of technology from research institutions to industry would be exceedingly difficult. Unless steps are taken whereby industries are persuaded to allocate more funds for their own activities in research and development or in other research establishments through sponsorships, science and technology developed in Government establishments even on a massive scale will not bear adequate fruit.

XI

VILLAGE INDUSTRIES

Preservation and growth of village industries is essentially an economic problem in India as the numbers traditionally engaged in them are very large and their role in our rural economy vital.

While modern large-scale industry receives favourable treatment from the state and has advantage of resources and techniques, the establishment of dispersed small-scale

industry can only be achieved by well-directed and vigorous action over a number of years.

In all efforts at protection and development of village industry, the basic requirement of making the units of production viable has to be borne in mind. Research and adaptation of technology have to be made towards this end and the main purpose of co-operative organisations should be to provide the small-scale producer with advantages in appropriate directions of large-scale organisation.

Within the economy there is considerable employment potential and a low level of capital resources. As such, a resource to the most modern technology where it may not be absolutely essential is apt to create technological unemployment and many other problems. We have, therefore, to choose the way we want to develop industrially.

National policy for village industry has two aspects. First is the protective one which has the aim of enabling village industries to survive in face of competition of production of advanced technology. The second is that of gradually enabling village industries to dispense with protection. This has to be directed mainly towards building up of the supporting co-operatives and other organisations at various area levels and at investing fairly large amounts in research and experimentation for finding appropriate technology and forms of organisation and enabling village industry to adopt these. The latter programme is connected chiefly with credit facilities and technical assistance and education. Because of the continuing technological advance, the programmes of development must be conceived of as dynamic and progress in technology and organisation thought of constantly from stage to stage and made effective by policy and action. The whole process must be integrated with the total plan of development and industrialisation. Policy and programmes in relation to village industries must be made consistent with other eco-

conomic policies and programmes and must receive support from them.

If we look at the planning problem logically, the need for dispersed rural industries becomes obvious. We must proceed on the path of industrial development with as great an emphasis on dispersed small-scale industries as possible.

When we talk of a dispersed base, it means that the industry has to be either resource-based or demand-based. The raw material resources must be at hand for further processing to give a real locational advantage. The element of demand, particularly in rural areas, is also something of great importance. In all this we always keep going back to a fundamental point that the economies of scale are always there and inevitable, and these are helped by local demand. So unless you have some sort of protection in the natural features of your situation, the industry cannot hope to thrive.

To develop small-scale industries on a dispersed basis you have to set up industrial centres and have to provide external economies such as communications, water and power, which should necessarily form a part of the overall development plan of the area. Not only this; you have to arrange for raw materials including imported and scarce items. Unless we make special efforts to identify problems and adopt a special policy to solve them, not much is going to happen in this sphere.

XII

EDUCATION

In thinking of future educational developments in the country we have to identify the spheres and limitations

of state action carefully. This exercise is needed to distinguish between activities that should be directly undertaken by the state and the areas in which state action has to be indirect.

Planning on a long-term basis has to match appropriately the resources available to the state with the requirements of the various obligations of the state in the field of education; namely, those in relation to the area in which it has to render free service, the area in which it has to conduct and sponsor activity for which even when a charge is made there is net liability which is considerable, the area in which non-official activity is dominant but for whose proper development and regulation grants and other help have to be administered, and finally the system of individual assistance and other help needed to give adequate opportunities for children of the poorer sections, to make progress through a system of education which is not free.

Barring the primary stage general free education is not only not possible but, financially speaking, not also desirable. Affording free facilities to the large or small minority who can afford to pay is unnecessarily wasteful of resources in our country. Therefore, a system by which an appropriate charge for educational services is combined with a large scheme of scholarships and free studentships appears most appropriate to our circumstances.

Qualitative improvement in education—whether we look upon it as a matter of better text-books, improved teaching methods, or examination reform—depends to some extent on additional resources properly employed, but to a larger extent on the ability and sincerity of teachers.

Future problems of educational planning have to be looked at both from the point of view of quantitative and qualitative developments. Our population is constantly

increasing. The present coverage of educational facilities in most areas and for the more numerous classes is still very inadequate. The percentage of illiterates in our population merely brings out the most extreme aspect of the situation. There is thus great and continuous need to expand educational facilities and opportunities in relation to most areas and most classes at all levels. The qualitative aspect is at least equally important. Any lowering of educational standards is highly undesirable and wasteful. Maintenance and improvement of quality thus becomes an essential part of planned educational development. One aspect of this relates to material supplies such as of buildings and equipment and of trained persons.

The other aspect which is at least equally important depends on the main instrument of educational activity—the teacher and the rapport between the teacher and the main supposed beneficiaries of the activity—the students.

The attitude of the average teacher and his standard of performance are related to the potential that the total situation allows to the best among the teachers. It is, in this context, that the importance of efforts at adjustment, experimentation and innovation have to be highlighted. The greater the extent to which the teacher's activities fall into a dull routine, the less is the chance of maintaining standards adequately. The adjustments or the experimentation that an individual teacher may make or want to make may be very small. He may desire no more than a slight change in the routine to enable him to handle in a better way of a particular situation in relation to institutional arrangements and facilities or in relation to the students or the subject matter. However, the possibility of making the adjustment and that some teachers are making is the one factor that keeps or can keep educational activity and the best among teachers alive.

A large number of ideas which have been talked about

in recent years have yet not been sufficiently concretised to be transformed into national programmes. I may refer to work experience, functional literacy and national service or to more recent concepts such as linking education with productivity. I have nothing to say about the validity of the concepts themselves. My emphasis is that unless a considerable amount of experimentation is done in individual institutions by a body of innovating teachers in a variety of circumstances in relation to these or other ideas, we shall not have enough basis for framing programmes of general action in relation to them. Also, that such experimentation takes place not by direction of superior authority but through creating widespread conditions in which the institutions and teachers will adjust, innovate and experiment chiefly because they feel that they have the opportunity of doing so and because they feel that such effort on their part continuously to improve quality and to relate their activity to the life and needs of the community is what their vocation calls for.

The originating impulse to development and the source of the fund of experience on which future programmes have to be based have to be formed in the natural flowering of activity among the best of teachers and institutions.

As I visualise it, it is the responsibility of the State and of the administrative hierarchy, in relation to the fields directly financed by the State or others to create the optimum conditions for relatively autonomous operation of institutions and the body of teachers and to encourage activity in directions which are thought to be most desirable. It then becomes the function of the Centre not only to create conditions and to give incentives but also to observe, to co-ordinate and to generalise on the basis of activities at various levels in all areas of the country. The central authority in such a situation may easily find itself in an advantageous position from having an overall view and will, in the circumstances, be accepted as a guide and

counsellor by all concerned. And when this happens it will also have enough material at hand on which to build national programmes.

In secondary education and in collegiate education of the general type, considerable progress has been registered in the recent past in a number of States. As pointed out by the Education Commission, time has come to rationalise and regulate future growth. For a variety of reasons, this is a field that is most appropriately left to private endeavour assisted and regulated by the State. The regulation has to be governed by considerations of proper locational spread of institutions and the maintenance of a minimum quality. I do not feel that a purely restrictive attitude in this behalf is appropriate. Educational opportunity at this level is one of the main instruments of social change and progress operating in our society. Therefore, widening of the coverage of areas and classes which have access to these opportunities must continue to be an important objective. At the same time, continuing restraint of resources emphasises the need to economise in and to rationalise the process of institutional spread, and the generally expressed concern at deteriorating standards emphasises that strenuous efforts at maintaining a minimum level of quality must be made.

I would emphasise that in most directions of new endeavour it is necessary to begin with carefully planned experiments and pilot projects; only when these have proved successful should any attempt be made to recommend particular approaches for general adoption. To my knowledge, there have been as yet no successful demonstrations of integrating work experience at any stage of education in our country which can be multiplied at costs which we can afford and have results which are of significance in education. In the other direction—that of national or social service again,—there is little to go upon. I consider the compulsory N.C.C. as an enormously costly failure

and the idea of general national social service has yet to be concretised.

What should be attempted within the next five years with available resources in a given State or locality has to be related to the existing situation with its achievements, its lacunae and its specially crying needs. It is from this point of view that I would specially commend one recommendation of the Education Commission. This relates to adopting the district as not only the basis of administration but also of planning. In this planning the stages are obvious. The first is a careful assessment of the existing situation as it has developed during the last 20 years. The second is the identification of the proximate goals in the light of accepted national objectives and of the special deficiencies and requirements of the local situations. The third is an assessment of the total resources—State, community and private—which can be harnessed towards progress of education and the last is that of the detailed planning so that the variety of goals set before the district as a whole are fulfilled through a careful and intelligent development of resources—financial and personnel, and optimum results obtained.

The route and pace of economic development require adequate supplies of skilled personnel at various levels. It is a necessary part of educational planning to see that training of the personnel is arranged for correspondingly.

Science education has direct relevance to the smooth and efficient operation of many aspects of an industrial society and its importance in the context of efforts at promoting economic development cannot be overestimated.

While, considerations arising out of manpower planning cannot be properly applied to the field of general education, these have full relevance to the field of technical, vocational and professional education. This is the stage at

which special effort, which is sometimes very costly, has to be made to provide for the supply of specialised workers and technicians that scientific and industrial advance demands. The institutional and other facilities brought into existence to provide this trained manpower must be linked to estimates of demand for them.

XIII

FAMILY PLANNING

Control over mortality has become relatively inexpensive and simple and is related largely to action by public authorities. The downward trend in rates of mortality in the underdeveloped countries will, therefore, continue. The only way of containing the grave dangers of a population explosion is for these countries to aim at reducing fertility. Control over fertility is essentially related to behaviour of individuals. In the West demographic controls, economic development, industrialisation, urbanisation, spread of literacy and education have all progressed side by side. However, it cannot be taken for granted that the pattern of events that evolved in the West will necessarily repeat itself in all underdeveloped countries. Even in the West control over fertility has been specially in evidence when individual motivation has been strong. Recent experience in Eastern Europe and Japan indicates that where motivations are adequate, quite sudden and revolutionary changes can occur in rates of fertility.

Possibilities of control of fertility also depend on established methods of birth control and their suitability to the illiterate and overcrowded people most needing assistance. However, recent progress with relatively simple and cheap devices appears to hold promise of a solution of difficulties in this regard. Individual motivation, therefore, assumes supreme importance. In many underdeveloped

countries the approach of people to the question of birth control is relatively rational as seen, for example, in the quite extensive use of male vasectomy. Also, governments in a number of those countries have during very recent years embarked on large programmes in relation to family planning. Nothing can be said today regarding the possible effectiveness of these programmes. However, all evidence points to the possibility of a rapid decline of birth rates where public policy and individual motivation act together.

APPENDIX

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I

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2. International Geography Congress. Symposium on Regional Planning, November 22 1968.
3. Meeting of the National Development Council, May 17 1968.
4. Speech at Bangalore, September 4 1968.
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6. Vaikunth Mehta National Institute of Co-operative Management, June 22 1968.

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4. National Institute of Sciences of India, October 6 1967.
5. Meeting of the State Planning Secretaries, February 29 1968.
6. Thirty-fourth meeting of the Central Advisory Board of Education, October 11 1968.
7. Seminar—National Book Club, December 1966.
8. Metropolitan Regional Planning Seminar, Poona,
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