

# **EIGHTH FIVE YEAR PLAN**

**1992-97**

**Volume I**

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**GOVERNMENT OF INDIA  
PLANNING COMMISSION  
NEW DELHI**

**EIGHTH FIVE YEAR PLAN**

**1992-97**

**VOLUME I**

**Objectives, Perspective, Macro-Dimensions,  
Policy Framework and Resources**

**GOVERNMENT OF INDIA  
PLANNING COMMISSION  
NEW DELHI**

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# **EIGHTH FIVE YEAR PLAN (1992-97)**

## **VOLUME I**

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## FOREWORD

The Eighth Plan is being launched at a time of momentous changes in the world and in India. The international political and economic order is being restructured everyday, and as the 20th Century draws to a close, many of its distinguishing philosophies and features have also been swept away. In this turbulent world, our policies must also deal with changing realities. Our basic policies have stood us in very good stead, and now provide us the opportunity to respond with flexibility to the new situation, so that we can work uninterruptedly towards our basic aim of providing a rich and just life for our people.

Planning has been one of the pillars of our policies since Independence, and our present strengths derive from its achievements. There is today a recognition that in many areas of activity, development can best be ensured by freeing them of unnecessary controls and regulations and withdrawing State intervention. At the same time, we believe that the growth and development of the country cannot be left entirely to the market mechanism. The market can be expected to bring about an "equilibrium" between "demand" - backed by purchasing power - and "supply", but it will not be able to ensure a balance between "need" and "supply". Planning is necessary to overcome such limitations of the market mechanism. Planning is essential for macro-economic management, for taking care of the poor and the downtrodden, who are mostly outside the market system and have little asset endowment. It is thus not a choice between the market mechanism and planning; the challenge is to effectively dovetail the two so that they are complementary to each other.

Human Development, in all its many facets, is the ultimate goal of the Eighth Plan. It is towards fulfilling this goal that the Eighth Plan accords priority to the generation of adequate employment opportunities to achieve near-full employment by the turn of the century, building up of people's institutions, control of population growth, universalisation of elementary education, eradication of illiteracy, provision of safe drinking water and primary health facilities to all, growth and diversification of agriculture to achieve self-sufficiency in foodgrains and generate surpluses for exports.

Government has introduced major reforms to provide greater competitive stimulus to Indian industry. The Eighth Plan seeks to carry this process further and give much greater emphasis on private initiative in industrial development. The public sector will become selective in the coverage of activities and its investments will be focussed on strategic, high-tech and essential infrastructure. The problems afflicting public sector units will be squarely addressed with a view to making this sector strong and dynamic. To create an appropriate environment for rapid industrial and economic growth, a major focus

of the Eighth Plan will be the strengthening of the physical infrastructure, particularly in the areas of energy, transport, communication and irrigation.

The success of development programmes can be multiplied manifold if the people are wholeheartedly involved in their implementation. The implementation strategy for the Eighth Plan, therefore, relies on building and strengthening people's institutions and making people active participants. The role of the Government will be to create opportunities for the process of people's involvement in developmental activities.

The Eighth Plan envisages an average growth rate of 5.6% in GDP. It would be financed mostly from domestic resources. The realisation of the objectives of the Plan calls for an integrated set of macro-economic policies and the utmost financial discipline on the part of all concerned - the Central and State Governments, public and private enterprises and financial institutions. It also seeks to evolve a consensus and fruitful cooperation among all the "social partners" in development, namely, Government, farmers, trade unions, business, etc. The Plan is thus a joint endeavour in national development.

The Planning Commission has done a truly commendable job in record time in completing the entire deliberative process and finalising the Plan document, involving the Central Ministries and the State Governments. I congratulate the Deputy Chairman, Members and officers of the Planning Commission. I also thank Chief Ministers, Governors and Central Ministers for making very constructive contributions towards the formulation of the Plan and for giving their approval to the document.

Let us dedicate ourselves to the task of achieving the objectives set for the Plan. Let us together build an India that is free from want, ignorance and disease; an India that is vibrant and modern; and an India that is socially integrated and economically strong.

New Delhi  
July 9, 1992

  
(P.V. NARASIMHA RAO)

## PREFACE

We are launching the Eighth Five Year Plan in the backdrop of widespread changes which have altered the international social and economic order. Centralised economies are opening up to free market forces and competition. We are also witnessing an eventful release of people 's power for creative freedom and active involvement in restructuring the economic order for human development. This tidal wave of change has not left India untouched. In these trying and turbulent times, we have to respond and adjust to the changes quickly and creatively.

2. The challenges before us are many. Fiscal problems restrict the ability of the Government to provide needed resources to maintain the impetus of growth. At the same time, we have to ensure that the stimulus for sustaining the long-term growth of the economy is strengthened in the immediate future. The process of economic reforms and structural adjustments has to be carried forward without sacrificing the imperatives of development. This calls for a delicate balancing of options in the formulation of the Plan.

3. We have to start rolling back the Public Sector investment from those sectors of the economy where the private sector can move in and step up our investment in the social sector. At the same time, we have to ensure that the infrastructure needed for economic development continues to grow in this transitional period.

4. A third of our population lives in conditions of poverty, denied of the basic minimum needs. We cannot have the ambivalent attitude of the developed market economies which can afford to provide social security to its people. We do not have those kind of resources. So, we have to move with caution. Those very processes, which stimulate growth, sometimes tend to neglect the poor. I would like to quote the Prime Minister who summed up the issue in the following words: "There is, however, one danger which we must recognise and guard against in the "opening up" process. This could lead to wider disparities within the society. To meet this situation, we have to enable the under-privileged sections also to derive the benefit of the new opportunities. This process would naturally need some time to fructify. Until that happens, there has to be a by-pass arrangement whereby benefits reach the lowest rungs of the social pyramid directly from the State. We are doing this".

The Eighth Plan has been formulated in the face of these challenges. This makes it a Plan with a difference. It is a Plan for managing the change, for managing the transition from centrally planned economy to market-led economy without tearing our socio-cultural fabric.

## **The New Role**

5. In line with the changed circumstances, we have redefined the role of the Planning Commission. From a highly centralised planning system, we are gradually moving towards indicative planning. Through clear prioritisation of goals, efforts will be made to reduce the bottlenecks, making higher rates of growth possible. If each sector can clearly visualise what is expected of it, then it can gear up to meet the set target. Through the instrument of indicative planning, it will be possible to provide a clear picture of the effects on the entire economy of any change in governmental policy.

6. The Planning Commission will play an integrative role and help in the development of a holistic approach to the policy formulation in critical areas of development. The Planning Commission will play a mediatory and facilitating role for managing the change smoothly and creating a culture of high productivity and efficiency in the Government.

7. In addition to the resource allocation role, the Planning Commission will concern itself with resource mobilisation for development as well as with efficient utilisation of the funds. The key to efficient utilisation of resources lies in the creation of appropriate self-managed organisations at all levels. In this area, the Planning Commission will play a systems change role and provide internal consultancy for developing better systems.

## **Salient Features of the Plan**

8. This Plan has some features, which distinguish it from other plans and which, in my view, form its essence.

9. Those features are:

- This Plan is indicative in nature. It concentrates on building a long-term strategic vision of the future and sets forth the priorities of the nation. While for the public sector, the Plan goes into the details examining the alternatives and identifying the specific projects in various sectors, for the rest of the economy it works out sectoral targets and tends to provide promotional stimulus to the economy to grow in the desired direction.
- The Plan recognises "human development" as the core of all developmental effort. It is only healthy and educated people who can contribute to economic growth and this growth, in turn, will contribute to human well being. The priority sectors of the Plan that contribute towards realisation of this goal are health, education, literacy and basic needs, including drinking water, housing and welfare programmes for the weaker sections. In the Eighth Plan, Governments at the Centre and in the States will expand their role in this sphere.

- No society in the long run can sustain the welfare of its people without economic growth. For rapid economic development, the priority sectors identified for the growth of infrastructure are power, transport and communications. The basic assumption is that if we can provide these three essential ingredients in the urban and rural areas, it will lead to accelerated economic growth.
- The Plan attempts to correct the fiscal imbalances from which the Sixth and the Seventh Plan suffered. The funding of the Plan has to be done in a non-inflationary manner by avoiding the debt trap, both internally and externally. This calls for reduction in Government's dissavings, higher resource mobilisation both by the Centre and the States and improvement in the performance of public sector units.
- This is an integrative Plan. If the results of our developmental activities so far have not been commensurate with the investments made, one of the main reasons has been our fragmented approach. Too many agencies trying to do too many things with a thin spread of resources has led to poor results. If we can integrate our developmental efforts, the results can be much more impressive even with these levels of investment. I think the time has come for us to take a close look at the structure of the Government particularly in the priority areas of Rural Development, Energy and Transport and bring together the various departments/agencies dealing in each of these areas under one umbrella for coordinated policy formulation and implementation.
- The Eighth Plan recognises the essential need to involve people in the process of development. The attitude of passive observance and total dependence on the government for developmental activities has become all-pervasive. It has to be altered to a pro-active attitude of people taking initiative themselves. In the process of development, people must operate and the Government must cooperate. In this Plan, therefore, for the first time a new direction is being given to achieve these objectives by the adoption of institutional approach. The Planning Commission has now worked out institutional strategies which will mean creating or strengthening various peoples' institutions at the district, block and village level in order to synthesise the purposes of investment, envisaged in the central plan with optimisation of benefits at the grassroots level by relating these programmes to the needs of people. Panchayats and Nagar Palikas, elected by the people, will have to play a larger role in formulating and implementing the developmental projects in their areas. They should be vested with adequate financial resources, technical/managerial inputs and decision making authority. Involvement of voluntary agencies and other peoples' institutions is essential for effective micro-level participatory planning.

- This Plan is performance oriented. It concentrates not so much on its allocative role, but on how to utilise the allocations optimally. The stress is on performance improvement, quality consciousness, competitiveness, efficiency of operations and completion of the projects on time. In order to provide an incentive for good performance and bring in result orientation the formula for giving central assistance to states has been suitably amended.
- The Eighth Plan pays special attention to employment in the rural areas. If people can get adequate earning opportunities where they reside normally, they would not migrate to the urban areas. Such an expansion of employment opportunities calls for a shift in emphasis in the rural development programmes from the creation of relief type of employment to the building up of durable productive assets in the rural areas. These assets can enhance productivity and create more job opportunities, leading to sustained development.
- This is a flexible Plan with scope for change, innovation and adjustment. In the outlays, that we have proposed for the States and some of the Central Ministries, there is a fairly large component of resources that the States and Central Ministries have to raise themselves. Unless these resources become available, it will not be possible for us to fund this Plan. Also, there are some sectors like power, transport and communications which, we feel, should have got higher outlays in line with the priorities accorded to them. This resource gap is sought to be filled by private sector investment in these areas. We intend to undertake mid-course review both with the States as well as the Central Ministries and, if need be, take remedial measures.

## **Macro Dimensions**

10. The Plan proposes a growth rate of 5.6 per cent per annum on an average during the Plan period. The level of national investment is proposed at Rs.798000 crores and the public sector outlay at Rs.434,100 crores. Consistent with the expected resource position, the size of the Plans of the States and Union Territories is projected at Rs.186,235 crores and of the Central Plan at Rs.247,865 crores. This may be compared with the Seventh Plan outlay of Rs. 180,000 crores, comprising Rs. 89,466 crores for the States and UTs and Rs. 95,534 crores for the Centre.

11. The outlays in the public sector are financed by budgetary support and domestic and foreign borrowings. The total budgetary support in the Eighth Plan is Rs.188,475 crores at 1991-92 prices, which is 43.4% of the outlay. Budgetary support becomes a crucial factor in determining the outlays of sectors which do not have any access to internal resources or borrowings. Besides, in the physical infrastructure areas such as power and

transport including railways, a certain minimum budgetary support has to be made available even though they may have access to internal resources and borrowings.

## **Plan Allocation**

12. A look at the allocations made to the priority sectors in the Eighth Plan shows that nearly 81.7 per cent of the total budgetary support to the Central Ministries has now gone to the social, infrastructure and agricultural sectors. This compares with 70 per cent in the Seventh Plan.

13. The total Plan outlay of States, including Area Programmes, will be Rs. 179,985 crores. The total budgetary support to the State Plans will be Rs. 78,500 crores, which includes normal Central assistance, Central assistance against externally-aided programmes as well as Plan revenue deficit grants. What we have now planned for the States is a little more than twice the Seventh Plan level.

14. The investment on the agriculture sector in the economy has been declining as a proportion of the total investment. Agriculture has to keep growing under the constraint of limited availability of land for which non-agricultural demands are also increasing. The burden of feeding a growing population lies on agriculture. We should also not lose sight of the fact that about two-thirds of employment is provided by agriculture and a large segment of our export earnings come from this sector. Therefore, the agricultural sector needs to be given a high priority. The private investment in this area can flourish only in the backdrop of a good infrastructure created by the efforts of the public sector. Major developmental responsibilities in agriculture lie with the States and greater efforts will have to be directed towards the development of agriculture and rural infrastructure. In this context, I must draw particular attention of those States, which have not so far experienced the benefits of green revolution ----the States in the Eastern region.

## **Employment Generation**

15. If we are to reach ultimately the goal of full employment by the turn of the century, we will have to concentrate on creating job opportunities, particularly in the rural areas. The Central Plan has made a substantial step-up in the outlay for Department of Rural Development from Rs. 4900 crores approved in the Seventh Plan, (against which the actual expenditure was about Rs.10,800 crores) to Rs. 30,000 crores in the Eighth Plan. In this context, the rural development programmes will have to be revamped in order to become more effective and more productive.

16. The emphasis has to shift from the creation of relief type of employment to the building up of durable productive assets in the rural areas. The productive assets, which contribute to the overall development of the rural areas, are: all-weather rural roads; minor

irrigation works like percolation tanks etc; land levelling and prevention of soil erosion/improvement of soil; social forestry; school buildings and buildings for primary health centres; vocational training and production centres etc. Any additional resources for generation of wage-employment should be restricted to the identified 'backward' districts.

## **Infrastructure**

17. The Sixth and the Seventh Plans made a determined effort to improve power supply. While we have not been able to electrify all homes, we have, by and large, been able to provide power to productive activities particularly in industry, agriculture and commercial sectors. This was possible because of the leading role played by the Centre. The Central Plan contributed 45 per cent of the capacity addition during the Seventh Plan as compared to 6 per cent in the Fifth Plan. The Central projects have enabled the creation of regional grids which are being enmeshed into a national grid. The priority of the Central Plan in the power sector now will be towards integrating the national power supply system so as to improve its utilisation and to correct the present adverse hydel-thermal mix which has reached so low as to threaten the optimal utilisation of thermal capacity. To make this possible, States will have to assume a greater role in power capacity addition and the associated distribution net work in the short and medium term. I would urge the States to allocate adequate resources for the power sector to match the expansion in demand during the Eighth Plan and the early years of the Ninth Plan. These resources have to be generated from within the State Electricity Boards and the Electricity departments and not by borrowings from the State Governments.

## **Financing the Plan**

18. While working out the financing pattern of the Eighth Plan, one of our major concerns was to avoid the trap that we had got into during the Seventh Plan. At the time of formulation of the Seventh Plan, it was envisaged that nearly 40 per cent of the total public sector outlay would be financed by the balance from the current revenues and by the contribution from public enterprises, both inclusive of additional resource mobilisation. Ultimately, the contribution from BCR and public sector enterprises turned out to be only 20 per cent of the total outlay and the balance was met through borrowings. That created an internal debt-trap and acute BOP crisis. We want to avoid that situation and confine the Public Sector outlay to an irreducible minimum level essential for ensuring the targeted growth.

19. To achieve that, we have to reduce the government's dis-savings drastically from 2.3 per cent of G.D.P. recorded in 1991-92 to an average of 1.1 per cent of G.D.P. for the Eighth Plan period. Generation of more savings by the Government is a crucial element underlying the financing pattern of the public sector investment in the Eighth Plan. It is essential that the contribution from Balance from Current Revenue (BCR) during the Eighth

Plan is not less than 8 per cent of the public sector outlay, as against 3 per cent during the Seventh Plan. The contribution from State Public enterprises must improve substantially. The Plan must be funded in a non-inflationary manner and by avoiding debt-trap ---- both internal and external. Hard decisions, both in relation to resource mobilisation and containment of expenditure including subsidies, are called for in order to achieve this.

## **Assumptions**

20. The success of the Eighth Plan rests on achieving some targets. These are : a reasonable degree of price stability ; export growth rate of 13.6% in volume terms; limiting imports to a growth rate of 8.4% of the GDP ; savings rate of 21.6% and limiting of government dis-savings to 1.1 per cent. The present inflationary trend in the economy has to be contained. Determined efforts to augment our resources have to be made. A surplus in current revenue must be generated to fund developmental expenditure by drastically reducing non- developmental expenditure. We must seriously consider how long the sectors, which have the capacity to pay, should be allowed to remain untapped for contributing to the exchequer to overcome the resource crunch and restore fiscal balance. While reducing the non- developmental expenditure, we must look critically at the expenditure on defence, subsidies and establishment costs. Resources necessary to improve the conditions of the weaker sections would just not be available if the relatively affluent sections are not made to share the burden of financing the poverty alleviation programmes.

## **Balance of Payments**

21. Another area of critical concern relates to the balance of payments. It is imperative that, during the Eighth Plan, steps are taken to correct the fundamental weaknesses in the country's BoP position. Originally, it was felt that the current account deficit should be contained at a level equivalent to 1.4 per cent of the GDP. In a further assessment of the export prospects and import needs, it has been decided to keep the current account deficit at 1.6 per cent of the GDP during the Eighth Plan. Containing the current account deficit at this level is not going to be an easy task. We will need to pay special attention to restricting the imports of crude oil and petroleum products. This task has been made very difficult by the fall in output of crude oil much below the levels projected just about a year ago. We have to provide for adequate energy input to sustain economic growth. It is in this context that I urge a more concerted effort on tapping commercially viable sources of alternate domestic fuels, a close monitoring of consumption and an appropriate pricing policy.

## Plan Implementation

22. Now let me turn to the vital area of implementation and operationalising the concepts presented in the Eighth Plan. How do we ensure that the benefits of Plan programmes like Minimum Needs Programme and employment generation schemes reach the intended beneficiaries? To my mind, this calls for large scale involvement of the people in the process of development. We had set up a task force to suggest various practicable institutional options for involving people in the task of development and for reducing their dependence on government for everything. The report has since been received and examined by us. As a first step towards the implementation of some of the recommendations made by the task force, I had called a meeting of the voluntary agencies in order to workout an action plan and also to seek their whole-hearted involvement in this process. The action plans formulated in this workshop are now ready for implementation. It is proposed to launch the experiment of micro-level participatory planning in 150 blocks during the first year of the Eighth Plan through creation of a three-tier institutional system. This system requires local communities at village, block and district level to diagnose needs, workout the priorities and implement plans using the collective wisdom of the people, knowledge of the experts and administrative skills of the government functionaries. This may require a change in the existing programme-oriented approach wherein we determine standardised activities to be undertaken in all the villages without any flexibility. Our accent on institutional approach is to provide a community instrument which would determine what people really need and how it can be achieved most effectively. The organisational structure has already been worked out and during the first year of the Plan we intend to start pilot projects in 150 Blocks. Depending upon the results, the experiment will be extended to 500 Blocks during the Eighth Five Year Plan.

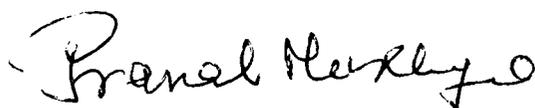
23. Another initiative taken by us to bring together the farmers, business community, banking institutions, scientific institutions and various governmental agencies is reflected in the setting up of Small Farmers Agri-Business Consortium (SFAC). We had identified 10 areas where we have comparative advantage by global standards because of our agro-ecological and socio-economic conditions. These are : Food crops, Oilseeds, Cotton, Sugarcane, Horticulture, Sericulture, Dairy development, Poultry, Aquaculture and Agro-Forestry. By setting up this Consortium, we intend to improve the efficiency of production and post-harvest technologies and develop suitable marketing network. This will lead to creation of jobs as well as income generation. All the ground work for the setting up of this Consortium as a registered society has now been completed and it is hoped that the Consortium will start functioning soon.

24. We are also working out a monitoring system which will provide us timely signals of the performance of the State Governments in the priority sectors of the Plan. It is my hope that with all these measures we have initiated, it will be possible to monitor and implement the Plan more effectively.

25. In order to provide expert advice to the State Governments and Central Ministries, we propose to set up Consultancy groups in the areas of financial management, population and rural health services, vocationalization of education, horticulture and micro-level planning. Each group will have a panel of experts drawn from Government agencies as well as educational and professional bodies. On invitation from State Governments and Central Ministries, these groups will work with them in chosen areas for development and problem solving. They will also act as "integrators" and build effective channels of communication and inter- action between main wings of the Government.

26. At the threshold of the Eighth Five Year Plan we have an India which possesses differentiated infrastructure with immense potential for industrialisation. Most of the villages have access to electricity and will shortly be within the reach of modern telecommunication net-work. Income and consumption levels have risen. The consumption basket has diversified. The incidence of poverty has declined. The average life expectancy has gone up. The death and birth rates have declined. Literacy has improved and the educational base has widened. We now have a robust and resilient agricultural economy with near self- sufficiency in food production. We have a large pool of skilled manpower and ample entrepreneurial resources. The growth performance of atleast a decade preceeding the Eighth Plan has been good. The liberalisation process initiated last year is gathering momentum offering new opportunities.

27. It is in this background that we launch the Eighth Plan. This Plan represents our shared commitment to the achievement of national priorities. This Plan is built on the edifice of promises that we have made to the nation. The success of this Plan will depend on how well we meet our commitments and keep our promises.



(PRANAB MUKHERJEE)  
Deputy Chairman  
Planning Commission

New Delhi  
18th June, 1992

# CHAPTER 1

## OBJECTIVES AND ORIENTATION

1.1.1 The launching of the First Five Year Plan in April 1951 initiated a process of development aimed not only at raising the standard of living of the people but also opening out to them new opportunities for a richer and more varied life. This was sought to be achieved by planning for growth, modernisation, self-reliance and social justice. We have come a long way over the past forty years. A largely agrarian feudal economy at the time of independence has been transformed into one based on a well developed and a highly diversified infrastructure with immense potential for industrialisation. Income and consumption levels have significantly risen. Consumption basket has diversified. Incidence of poverty has visibly declined. The average life expectancy has gone up. The death and the birth rates have declined. Literacy has improved and the educational base has widened.

1.1.2 We now have a robust and resilient agricultural economy with near self-sufficiency in food production. We have built a diversified industrial and service structure. We have a large pool of skilled manpower and ample entrepreneurial capabilities. The growth performance of at least a decade preceding the Eighth Plan has been impressive. We have the wherewithal for further progress. Hence, the task before the Eighth Plan is to use these advantages for further growth and lay strong foundations for even higher growth in the future.

1.1.3 The economy has passed through difficult circumstances during the last couple of years. The growing fiscal gap and the sudden depletion of foreign exchange resources created a situation which put severe strains on the economic system leading to drastic import curbs, high rate of inflation and recession in industry. This in turn has led to the projection of very low growth in 1991-92, which happens to be the base year of the Eighth Plan. Corrective measures have already been initiated by way of planned fiscal reforms and policy changes. The Eighth Plan will thus have to reorient some of the development paradigms, since its objective is to lay a sound foundation for higher growth and to achieve the most significant goals, namely, im-

provement in the levels of living, health and education of the people, full employment, elimination of poverty and a planned growth in population.

1.1.4 The public sector was assigned a place of commanding height in the Indian economic scene. It was expected to create the basic infra-structure for development, be a pace setter in taking risk and nurturing entrepreneurship, take care of the social needs, help the poor and the weak and create an environment of equal opportunities and social justice. The public sector has expanded considerably. Its expanse and its influence may not be measured just by the size of its contribution to GDP or its share in investment, but by the fact that it touches every aspect of life. In the process, it has made the people take the public sector for granted, oblivious of certain crucial factors like efficiency, productivity and competitive ability. This has eroded the public sector's own sense of responsibility and initiative. Many of the public sector enterprises have turned into slow moving, inefficient giants. A certain amount of complacency has set in which is not conducive to growth. While there are several social and infrastructural sectors where only the public sector can deliver the goods, it has to be made efficient and surplus generating. It must also give up activities which are not essential to its role. The Eighth Plan has to undertake this task of reorientation.

1.1.5 The Eighth Plan will have to undertake re-examination and reorientation of the role of the Government as well as the process of planning. It will have to work out the ways and means of involving people in the developmental task and social evolution. It will have to strengthen the people's participatory institutions. In keeping with these objectives, the process of planning will have to be re-oriented so as to make planning largely indicative. This, in turn, will imply a somewhat changed role for the Planning Commission. The Planning Commission will have to concentrate on anticipating future trends and evolve integrated strategies for achieving the highest possible level of development of the country in keeping with the interna-

tionally competitive standards. In place of the resource allocation role which very largely characterised the working of the Planning Commission in the past, it will have to concentrate on optimal utilization of the limited available resources. This will call for the creation of a culture of high productivity and cost efficiency in the Government both at the Centre and the States and the Planning Commission will have to play the role of a change agent. At the same time, it must provide the broad blue-print for achieving the essential social and economic objectives and indicate the directions in which the economy and the various sub-sectors should be moving. It should pin-point areas in which advance action should be taken to avoid serious bottlenecks. Planning must thus proceed from a vision of the society to be created, and through an appropriate mix of policy instruments influence the decisions of the various economic agencies to achieve the desired goals. In this sense, indicative planning is a more difficult exercise.

1.1.6 The Eighth Plan is being launched at a time which marks a turning point in both international and domestic economic environment. All over the world centralised economies are disintegrating. On the other hand, economies of several regions are getting integrated under a common philosophy of growth, guided by the market forces and liberal policies. The emphasis is on autonomy and efficiency induced by competition. We cannot remain untouched by these trends. We have to draw lessons from the development experience of other nations during the last four decades. Development economics was largely theoretical when India started her planning in 1951. It has now acquired considerable empirical knowledge based on the rich applied experience of many nations, among whom there are success stories as also failures. Indian planning needs to draw on some of these lessons. It also needs to be guided by its own experience, gained during the last four decades. If planning has to retain its relevance, it must be willing to make appropriate mid-course corrections and adjustments. In that process, it may be necessary to shed off some of the practices and precepts of the past which have outlived their utility and to adopt new practices and precepts, in the light of the experience gained by us and by other nations.

## The Development Performance

1.2.1 The Indian economy, which was stagnant during the first half of this century, started growing after the Five Year Plans were launched. However, the growth rate in Gross Domestic Product (GDP) remained lower than expected and hovered around 3.5 per cent per annum for the first three decades of the developmental phase. It was only in the eighties that a clear break from this was observed. The growth rate in the eighties was nearly 5.5 per cent per annum. This change was accompanied by a perceptible rise in the growth in agricultural income, a significant increase in the rate of growth of per capita consumption and a decline in capital output ratio indicating more efficient use of capital (Table 1.1). These are mutually reinforcing trends.

1.2.2 The finances needed for development were raised mainly through domestic savings which contributed between 90 and 95 per cent of investment in different periods. The rate of savings increased from an average of 10.3 per cent of GDP during 1951-56 to 21.7 per cent during 1976-81 (Table 1.2). It, however, declined in the eighties, averaging around 20 per cent. In the last two to three years again, the savings increased to levels ranging between 21 and 22 per cent of GDP. Household sector was the largest contributor to domestic savings, with its share rising over the years. On the whole, performance of the Indian economy in the area of savings has been good as compared to many other developing countries. There have, however, been certain disturbing trends in this sphere in recent years. The public sector saving was declining, and in the Government sector, particularly, the savings turned negative in 1983-84. Since then, the gap has been widening.

1.2.3 A rising saving rate sustained a rising rate of investment. The rate of investment increased from about 10.7 per cent of GDP in the period 1951-56 to about 23 per cent in 1985-92. The biggest increase in the rate of investment occurred in the public sector. The share of public sector increased from 27 per cent of total investment in 1950-51 to a little over 46 per cent in the Seventh Plan. However, the growth rate of the economy was not commensurate with the rising levels of investment in the first three decades of planning. The capital output ratio was increasing. The deterioration in the incre-

**Table 1.1 GDP Growth, Rates of Investment and Incremental Capital Output Ratio (ICOR) in Indian Economy(1951 - 1990)**

S.NO	PERIOD	Growth in GDP at Factor Cost %	Investment Rate %	ICOR
0	1	2	3	4
1.	1951-52 to 1955-56	3.61	10.66	2.95
2.	1956-57 to 1960-61	4.27	14.52	3.40
3.	1961-62 to 1965-66	2.84	15.45	5.44
4.	1966-67 to 1970-71	4.66	15.99	3.43
5.	1971-72 to 1975-76	3.08	17.87	5.80
6.	1976-77 to 1980-81	3.24	21.47	6.63
7.	1981-82 to 1985-86	5.06	20.98	4.15
8.	1985-86 to 1989-90	5.81	22.70	3.91
9.	1985-86 to 1991-92*	5.31	23.17	4.36

Note: Estimates are based on the New Series of National Accounts Statistics, Central Statistical Organisation.

\*: The average growth rate, investment rate and ICOR for a seven year period (1985-86 to 1991-92) has been worked out by including the estimates of growth and investment rate for 1990-91 as reported in the Quick Estimates of CSO (released in Feb. 1992), and by assuming a growth rate of 2.5 % for 1991-92 (as projected in Economic Survey 1991-92) .

**Table 1.2 Rates of Savings  
(1951 - 1990)**

Percent

S.NO	Period	Household Sector	Private Corporate Sector	Public Authorities	Non-dep. Enterprises	Public Sector	All Sectors
0	1	2	3	4	5	6	7
1.	1951-52 to 1955-56	7.57	1.03	1.49	0.19	1.68	10.28
2.	1956-57 to 1960-61	8.59	1.21	1.55	0.38	1.93	11.73
3.	1961-62 to 1965-66	8.37	1.71	2.59	0.54	3.13	13.21
4.	1966-67 to 1970-71	10.64	1.31	1.70	0.70	2.40	14.35
5.	1971-72 to 1975-76	12.40	1.64	2.15	1.09	3.24	17.27
6.	1976-77 to 1980-81	15.71	1.61	2.86	1.46	4.32	21.65
7.	1981-82 to 1985-86	14.02	1.69	1.20	2.45	3.65	19.36
8.	1985-86 to 1989-90	16.01	2.03	-0.87	3.21	2.34	20.37

mental capital-output ratio (ICOR) could be attributed to a variety of factors. Some of them were the consequences of the very process of development, like changes in the composition of investment (e.g., from engineering to chemical industries) and rising real costs in certain sectors like irrigation and mineral development where the easier opportunities had been exhausted first. The changes in the composition of output do not, however, fully explain the rise in ICOR. There were other avoidable factors and most of these could be grouped together under the expression "inefficiency in resource use". There were substantial time and cost overruns in execution of several projects. Also, the low level of capital utilisation was due to lack of adequate synchronisation in the implementation of inter-linked projects. However, the growth performance of the economy improved significantly in the decade of the eighties and correspondingly the ICOR also declined. The build-up of the infrastructures and other capabilities over the earlier three decades certainly was used to advantage in sustaining the growth in the eighties. There is yet scope for improving the resource use in the

economy in order to bring down the ICOR further and the all-round cost of production.

1.2.4 Given the structure of Indian economy, the growth in the national income has largely been determined by the trends in agricultural production. The reason is that agriculture is the largest component of GDP and has overall impact on other sectors via input linkages, employment and incomes. The average performance of the agriculture sector has shown some improvement in the eighties as compared to the earlier decades (table 1.3). As other sectors have come up, the share of agriculture in GDP has now stabilised at about 33 per cent as compared to about 55 per cent in the early fifties (table 1.4). It is still quite large. Agriculture has been subject to wide year-to-year fluctuations due to the weather factor. Wherever irrigation and power are available on an assured basis, agriculture has performed remarkably well in terms of its response to the high-yielding varieties, intensity and diversification. These trends need to be strengthened particularly in the Eastern region and in the dry belt. Combination of agri-busi-

**Table 1.3 Sectoral Growth in Gross Domestic Product**

(Percent per annum, based on GDP series at 1980-81 prices)

S.NO. & Sector	1951-52	1956-57	1961-62	1966-67	1971-72	1976-77	1981-82	1985-86
	to 1955-56	to 1960-61	to 1965-66	to 1970-71	to 1975-76	to 1980-81	to 1985-86	to 1989-90
1 Agriculture	2.88	3.35	-0.28	5.36	2.33	1.33	3.16	3.59
2 Mining And Quarrying	4.40	6.96	6.76	1.31	5.38	4.53	6.91	7.03
3 Manufacturing	5.84	6.28	6.62	3.96	3.33	4.86	6.99	6.72
3.1 Registered	6.18	8.24	8.34	4.67	2.39	5.28	8.56	6.30
3.2 Unregistered	5.62	4.38	4.60	3.16	4.61	4.39	4.88	7.41
4 Electricity								
Gas & Water Supply	8.68	12.00	12.84	9.54	6.83	6.91	8.41	9.60
5 Construction	6.80	6.70	6.83	4.36	1.47	5.11	3.36	4.06
6 Trade Hotels & Restaurants	4.79	5.77	5.39	4.22	4.10	4.49	5.96	6.57
7 Transport, Storage & Communications	4.38	6.99	6.27	4.72	6.54	5.78	6.81	8.04
8 Financing, Etc.	3.12	2.83	3.31	3.54	3.61	4.56	6.39	8.27
9 Public Admn. & Defense	3.45	6.83	8.97	6.83	4.89	5.89	6.76	8.69
10 Other Services	2.79	3.32	4.24	3.61	2.95	3.00	4.56	6.12
11 Total	3.61	4.27	2.84	4.66	3.08	3.24	5.06	5.81

**Table 1.4 Sectoral Distribution in Gross Domestic Product**

(Percentage share)

S.No. & Sector	1951-52	1956-57	1961-62	1966-67	1971-72	1976-77	1981-82	1985-86
	to 1955-56	to 1960-61	to 1965-66	to 1970-71	to 1975-76	to 1980-81	to 1985-86	to 1989-90
1 Agriculture	54.91	51.86	46.61	43.76	42.04	38.75	36.48	32.82
2 Mining And Quarrying	1.15	1.18	1.39	1.45	1.38	1.46	1.69	1.76
3 Manufacturing	11.88	13.47	15.77	16.17	16.95	18.02	18.85	20.00
3.1 Registered	5.50	6.78	8.65	9.14	9.63	10.35	11.25	12.11
3.2 Unregistered	6.38	6.69	7.12	7.03	7.32	7.67	7.60	7.89
4 Electricity								
Gas & Water Supply	0.38	0.53	0.79	1.11	1.33	1.62	1.84	2.14
5 Construction	3.37	3.89	4.56	5.32	4.74	4.91	4.64	4.43
6 Trade Hotels & Restaurants	8.62	9.38	10.46	10.82	11.05	11.89	12.21	12.67
7 Transport, storage								
& Communications	2.51	2.84	3.23	3.53	3.90	4.42	4.77	5.26
8 Financing, Etc.	8.88	8.56	8.29	8.20	8.45	8.83	9.02	9.84
9 Public Admn. & Defence	2.24	2.48	3.05	3.63	4.17	4.42	4.84	5.48
10 Other Services	6.07	5.82	5.84	6.01	5.98	5.69	5.65	5.60
11 Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

ness, with farming, has to be encouraged in order to raise the average level of agricultural incomes, to increase the export possibilities and raise value-added component in exports. The Eighth Plan will devote itself to these tasks.

1.2.5 Manufacturing will occupy a crucial position in future economic development. The nation's ability to grow fast, export, be competitive and create an expanding base for direct and indirect growth of productive employment will depend upon the growth and efficiency of the manufacturing sector. This sector needs the support of the best of technology. In turn, it will help create a wider technological base in the country. After a good start in the Second and the Third Plans, the growth performance of the manufacturing sector declined during the late sixties and the seventies, but picked up again during the eighties (table 1.3). The performance during the eighties was supported by initiation of steps towards liberalisation in import and industrial policies, besides relatively better performance of the infrastructure sectors, particularly energy and transport. Due to the foreign

exchange crisis and curbs on imports and general resource crunch constraining demand, the manufacturing sector experienced a recession in 1991-92. But, given the efficacy of corrective steps already under implementation, the industrial growth is expected to pick up again. The Eighth Plan will concentrate on building a sound foundation for industrial growth, modernisation and productivity improvements. To do this effectively, the areas of comparative advantage must be clearly identified.

1.2.6 A major strength of the economy has been the large base of natural resources. The strategy for self reliance in food and basic industries was pursued through large allocation of investible resources to the development of irrigation, energy and transport sectors. With experience in project execution, the period of project completion i.e. the time lag between investment and benefits, could be reduced. The shortfalls in Plan targets of power, railways, coal, oil, etc., were sharply reduced during the eighties. This also contributed to a reduction in ICOR. The capabilities to manage the opera-

tions of the projects, in technical as well as in financial terms, however, did not come upto the assumptions made at the time of investment decisions. Since the operation was not in a "free market" situation, the cost consciousness was lacking. The goods and services were provided generally at prices determined on the cost-plus basis. The system of administered prices generally pursued in these sectors was not effective to check inefficiency. The policy of subsidising specific groups of consumers had two effects. First, the subsidy element could not become transparent enough to be reflected clearly in terms of costs and social benefits flowing therefrom. Secondly, the rise in the demand for services of infrastructure from certain sections of the consumers was high, leading to persistent shortages. The net result of the lack of cost consciousness and business outlook in operations was the inability of these sectors to generate the resources required for their own expansion, let alone producing a surplus for the others.

1.2.7 In more recent years these sectors have been mobilising their capital directly from the market at prices which more closely reflect the scarcity of capital. At the enterprise level, the cost consciousness is building up. Another important development has been the emphasis on modernisation and system improvement in these sectors. An efficient operation of infrastructure sectors is a must for development.

1.2.8 Growth has brought about a structural change in the economy. This has surfaced in the form of a shift in the sectoral composition of production, diversification of activities, advancement of technology and a gradual transformation of a feudal and colonial economy into a modern industrial nation. The composition of national income has changed steadily over the planning era (Table 1.4). While the share of agriculture and allied activities in the GDP has declined, that of the tertiary sector has increased. The expansion of services has not only been conducive for employment generation but also for better efficiency of the system and better quality of life. It should be noted that education, health care, extension work, research and its application are all part of the services sector. They all contribute to the quality of life as well as productivity. As regards the secondary sector, the increase in its share in GDP is due

mainly to improved performance of the infrastructure like electricity, gas and water supply and the growth of registered manufacturing sectors. Though the share of agriculture sector in the rate of growth of GDP is still quite large, for the first time, in the Seventh Plan it was less than the contribution of tertiary sector. This is one of the consequences of significant step-up in the pace of growth.

1.2.9 The country has succeeded in creating a good base for scientific and industrial research. In agriculture, an integrated system involving research institutes, agricultural universities and an extension machinery has been set-up. In industry, there is a network of industrial research laboratories. Research and Development divisions have been established in major enterprises and consultancy firms have come up for project consultancy and design engineering. The basis for this advance lies in the rapid expansion of higher and technical education. India now has the third largest scientific and technical work force in the world. However, we still have a long way to go to catch up with the better placed countries of the world. We also have to strengthen considerably the capacity of our system to absorb the modern technology fully and make further advances in it. The ultimate aim of technological progress is improvement in productivity, efficiency in the use of basic resources like land, water and minerals and increase in income and employment.

### Imperatives for Change

1.3.1 Starting with a poor base and getting further heated in the process of growth, the Indian economy was beset with scarcities of resources and materials from the very beginning. The scarcity situation was sought to be tackled through a regulatory framework. Licences for production and imports, control of distribution, a regime of administered prices and subsidies were its main features. This regulatory mechanism did manage to save the economy from extreme difficulties like debt trap and the social unrest that arise from the breakdown in supplies of basic consumption goods. The economy could sustain through the wars, the droughts and the oil shocks. Yet, those who got the allocation of resources through the regulatory regime benefited more than the others. Vested interests got established. The regulatory framework was expected to protect the con-

sumer against those who obtained the resources for production through the same mechanism. But, the latter often gained through the system at the cost of the consumer and the common man.

1.3.2 The equity objective was sought to be pursued through redistribution of assets. But, land reforms could not be implemented effectively. The problem of poverty could not be tackled through growth, which itself was slow over a long period of time. Hence, direct intervention through poverty alleviation programmes became necessary. Self-employment and wage-employment programmes were taken up in the Government component of the public sector plan. But the constraints of Government resources permit only a limited role for such programmes. Moreover, the orientation in these programmes has shifted from building assets of durable nature to providing relief jobs, and the programmes are beset with substantial leakages.

1.3.3 A sustained high growth rate has pushed the Indian population to unsupportable numbers. The 1991 Census revealed a population of 844 million. Such dizzying rate of population growth negates whatever gains the nation has been able to achieve in agricultural, industrial and services sectors. Also, this leads to an unbearable burden on health, education and housing sectors. If this trend is not halted, it will never be possible to render social and economic justice to millions of our masses. The current rate of population growth is simply not sustainable.

1.3.4 The growing unemployment has been a major problem of the eighties and is going to be even worse in the nineties. Provision of employment to all the job-seekers is going to be a major challenge for the planners during this decade.

1.3.5 The entire population does not have access to all the basic necessities of life - drinking water and health facilities, in particular. Infant mortality is still high and literacy levels, particularly among the women are low. The social infrastructure has to be attended to with a degree of urgency in the next phase of development.

1.3.6 There has been a marked acceleration in urbanisation over the past two decades. If the present trends continue, urban population may account for about one-third of the total popula-

tion by the turn of the century. Urban infrastructure, even at a minimum level, for this size of population will need considerable resources.

1.3.7 Although in the eighties some signs of improvement in certain less advanced States have been observed, regional disparities continue to exist. Development institutions and organisational capabilities in the backward regions of the country and the delivery system for development programmes would need to be strengthened to deal effectively with the problems of development and redistributive justice.

1.3.8 Technological change in agriculture has led to increases in cropping intensities. But, in areas of developed agriculture, further absorption of labour is declining and there is need for greater economic diversification. In the face of the shrinking size of average holdings, the special needs of inputs, capital, processing and marketing for small land holdings should be paid attention.

1.3.9 From the point of view of long-range sustainability, the need for greater efficiency in the management of natural resources-land, water, minerals, etc. - has become urgent. A vigorous effort has to be made for recovering the wastelands and extending the green cover. A package of incentives to promote efficiency in the use of nature-based resources needs to be devised as a matter of priority. Energy use efficiency and energy conservation need particular attention in view of expanding needs and shrinking sources of fossil fuel.

1.3.10 On an overall stock taking, we find that at the threshold of the Eighth Plan, there is a high backlog in the provision of social consumption needs of the people, particularly the rural people and the poor. There is a reduced, but still unacceptably high level of poverty and hunger in the country, with high concentration in some regions. Illiteracy, particularly among women, is very high. There is high incidence of infant mortality. Decadent social practices like scavenging still prevail in large parts of the country. The widening gap between growth of labour force and growth of employment is assuming serious proportions.

1.3.11 The imperatives of growth in the face of these challenges require an innovative ap-

proach to development which is based on a reexamination and reorientation of the role of the Government, the harnessing of the latent energies of the people through people's involvement in the process of nation building and the creation of an environment which encourages and builds up people's initiative rather than their dependence on the Government and which sets free the forces of growth and modernisation. The State has to play more of a facilitating role and has to concentrate on protecting the interests of the poor and the underprivileged.

1.3.12 The need to restructure the systems of economic management has become unavoidable if India is to emerge as a vibrant and internationally competitive economy in the 90's. Systems of control and regulation, developed for good reasons in the past have outlived their utility and some positively stand in the way of further progress. Such dysfunctional systems have to be overhauled in the light of emerging realities.

1.3.13 The industrial regulatory environment of the past has led to certain unintended results which in turn have contributed to the weaknesses in our industry. Domestic competition has often been restricted, leading to lack of quality and cost consciousness in segments of industry. The level of protection offered to Indian industry, by way of quantitative import restrictions and tariffs, has been too high leading to high costs of production and inadequate technological dynamism. These weaknesses have to be removed in the context of the scarcity of resources, which puts a premium on efficiency, and also in the context of global economic trends which require a high degree of competitiveness. Indian industry is now ready to face the full pressure of domestic competition and the measures already taken in the sphere of industrial policy should help to achieve this objective. Indian industry must also be readied to face international competition in a phased manner.

1.3.14 Steps have already been taken to reduce the degree of quantitative licensing in trade and industrial policy and it is proposed to do away with quantitative restrictions altogether over a period of about three years. We have also made a start with reducing tariff levels. The tariff rates must be reduced in a phased manner so that they become comparable with those in other industrializing developing countries within a few

years. This is essential to make Indian industry internationally competitive.

1.3.15 The Eighth Plan has to meet these challenges in the various sectors against the background of certain critical imbalances which have emerged recently, rather sharply. These are:

- (a) increasing fiscal and budgetary deficits, mounting public debt and severe constraints on the resources of the Government and the public sector to undertake the essential developmental activities,
- (b) a critical situation in the balance of payments, and
- (c) a high rate of inflation.

Thus, the Eighth Plan, while providing a new orientation to planning consistent with the new thrusts in economic policy, has to ensure that the public sector investment rests on a sound resource base and that the current account deficit is limited to a level sustainable by normal capital flows.

1.3.16 The Balance of Payment situation has been continuously under strain for over almost a decade. During the Seventh Plan period the ratio of current account deficit to GDP averaged 2.4 per cent - far above the figure of 1.6 per cent projected for this period in the Plan document. This deterioration in the Balance of Payments occurred despite robust growth in exports in the last three years. The already difficult Balance of Payment situation was accentuated in 1990-91 by a sharp rise in oil prices and other effects of the Gulf War. With access to commercial borrowings going down and the Non-Resident deposits showing no improvement, financing the current account deficit had become extremely difficult. Exceptional financing in the form of assistance from IMF, the World Bank and the Asian Development Bank had to be sought. While the immediate problems have been resolved to some extent, it is imperative that during the Eighth Plan steps are taken to curb the fundamental weakness in India's Balance of Payments situation so that it does not cause serious disruption to the economy. It is, therefore, necessary to plan on a drastically reduced inflow of resources from outside.

1.3.17 Prices rose somewhat moderately during the Seventh Plan. The annual increase in the wholesale price index was seven per cent. However, the last two years have seen a sharp increase in the prices, more particularly of the primary articles. Maintaining a reasonable degree of price stability is essential for the smooth functioning of the economic system. In the context of the Eighth Plan, price stability is essential both to protect the interests of the poor and to prevent any deterioration in the mobilisation of resources. In the past, it has been found that while any increase in the price leads to corresponding increases in Government expenditure, a similar increase in revenue does not occur. As a consequence, the resource gap widens. Deficit financing in terms of the Central Government borrowings from the Reserve Bank must, during the Eighth Plan, be kept at a level consistent with a reasonable degree of price stability.

1.3.18 The ability to sustain a level of investment that is necessary to ensure the fulfilment of the objectives of Eighth Plan rests on the feasibility of mobilising the necessary resources. In the Seventh Plan, balances from current revenues and contribution of public enterprises, both inclusive of additional resource mobilisation, were to finance nearly 40 per cent of the total public sector investment. However, it turned out ultimately that these two sources financed no more than 20 per cent of the total public sector investment, resulting in greater recourse to borrowing. Public sector investment was thus financed in a manner which was neither envisaged nor healthy for the economy. The public sector investment of the order envisaged in the Eighth Plan requires that the dissavings of the Government must come down sharply. Improved fiscal management, leading to the generation of more savings by Government, is one of the fundamental premises underlying the financing pattern of public sector investment in the Eighth Plan. The recent trend of increasing dissavings of the Government needs to be reversed.

### Objectives

1.4.1 In the light of the trends outlined above, the approach to the Eighth Plan will have the following fourfold focus:

- (i) Clear prioritisation of sectors/projects for investment in order to facilitate operation-

alisation and implementation of the policy initiatives taken in the areas of fiscal, trade and industrial sectors and human development;

- (ii) Making resources for these priority sectors available and ensuring their effective utilisation; and completion of projects on schedule avoiding cost and time overruns;
- (iii) Creation of a social security net through employment generation improved health care and provision of extensive education facilities throughout the country; and
- (iv) Creation of appropriate organisations and delivery systems to ensure that the benefits of investment in the social sectors reach the intended beneficiaries.

1.4.2 Based on this approach, the following objectives will be accorded priority:

- (i) Generation of adequate employment to achieve near full employment level by the turn of the century;
- (ii) Containment of population growth through active people's cooperation and an effective scheme of incentives and disincentives;
- (iii) Universalisation of elementary education and complete eradication of illiteracy among the people in the age group of 15 to 35 years;
- (iv) Provision of safe drinking water and primary health care facilities, including immunisation, accessible to all the villages and the entire population, and complete elimination of scavenging;
- (v) Growth and diversification of agriculture to achieve self-sufficiency in food and generate surpluses for exports;
- (vi) Strengthening the infrastructure (energy, transport, communication, irrigation) in order to support the growth process on a sustainable basis;

1.4.3 The Eighth Plan will concentrate on these objectives keeping in view the need for (a) continued reliance on domestic resources for financing investment, (b) increasing the technical capabilities for the development of science and technology, (c) modernisation and competitive efficiency so that the Indian economy can keep pace with and take advantage of the global developments.

### **Human Development**

1.4.4 Human development will be the ultimate goal of the Eighth Plan. It is towards this that employment generation, population control, literacy, education, health, drinking water and provision of adequate food and basic infrastructure are listed as the priorities. The provision of the basic elements, which help development of human capital, will remain the primary responsibility of the Government.

### **Employment**

1.4.5 The phenomenon of growing unemployment has, of late, emerged as a major problem and therefore expansion of employment opportunities has to be the central objective of the planning effort. An accelerated expansion of employment opportunities is necessary both for poverty alleviation and effective utilisation of human resources for economic and social development of the country. During the past two decades, employment has grown at a rate of about 2.2 per cent per annum, but due to a faster increase of labour force at about 2.5 per cent, the backlog of unemployment has been rising. A declining trend in the employment elasticity with respect to GDP growth in recent years has made the task of accelerating the growth of employment more difficult. A deliberate and conscious effort towards employment orientation of the growth process is therefore essential.

1.4.6 It is considered necessary and reasonable to set the goal of employment for all for achievement in a time span of the next ten years. Assessment of the present backlog of unemployment and likely additions to the labour force suggest that this goal will require generation of additional ten million employment opportunities per year on an average, or about a three per cent average annual growth of employment. A relatively high rate of economic growth combined with a pattern of sectoral growth yielding a higher aggregate employment elasticity will be

necessary for achieving the rate of employment growth envisaged. Raising employment elasticity in aggregate will require faster growth of the sectors, the sub-sectors and the areas which have relatively high employment potential. A geographically and crop wise diversified agriculture, wasteland development for crop cultivation and forestry, rural non-farm sector, small scale manufacturing, urban informal sector, rural infrastructure, housing and services, have been identified as sectors and areas constituting the basic elements of an employment oriented growth strategy.

1.4.7 It also needs to be recognised that in addition to the generation of new stable employment opportunities of the order of 10 million per year, which will take care of the open unemployment, it should be ensured that those underemployed and employed at very low levels of earnings, are able to raise their productivity and income levels. Upgradation of technologies of the self-employment in the traditional and unorganised sectors and improved access to credit and markets would need to be ensured. It would also be necessary, in the meantime, to continue programmes for providing supplementary work to the underemployed poor in infrastructure building and other activities.

### **Population and Family Welfare**

1.4.8 The rate of population growth during the eighties, though marginally slower than what it was during the seventies, was still around 2.1 per cent per annum, which implied an addition of around 18 million to the nation's population every year. The country will cross 1 billion mark by the year 2001. If this trend is not halted, it will never be possible to render social and economic justice to millions of our masses. The Eighth Plan will make vigorous efforts to contain the population growth.

1.4.9 To give a major thrust in this priority area, which constitutes the pivotal point for the success of all developmental efforts, a National Population Policy needs to be enunciated and adopted by the Parliament. Given the political commitment at all levels, it must generate a cascading effect to become a peoples' movement. Social determinants such as female literacy, age at marriage, employment opportunities for women, and their status in society are as important as achieving a reduction in infant

mortality, improving health and nutrition of pre-school child, and providing a comprehensive package of maternal health care services. Such an intersectoral interaction, supported by political commitment and a popular mass movement, should constitute the approach to strategic interventions.

### **Literacy and Education**

1.4.10 Expansion and utilisation of employment opportunities and increase in productivity are strongly influenced by education. In the process of development, education is, therefore, an investment. This investment has to be made well in time to derive full benefits from the overall developmental effort.

1.4.11 Recent efforts made in the state of Kerala, and in some districts of Tamil Nadu and West Bengal to achieve 100 per cent or near 100 per cent literacy are an example of what can be achieved through determination and people's involvement. There are wide variations in literacy rates across the States. The Eighth Plan sets the target of achieving 100 per cent literacy among the people of age group 15 to 35 years in all the States. This will involve changing the literacy status of about 110 million people. Students in colleges and universities, teachers and other motivated people will have to be mobilised for this mission. Far more vigorous efforts in this respect are needed in the states of Rajasthan, Haryana, Uttar Pradesh, Bihar, Madhya Pradesh and Orissa than in the other States.

1.4.12 The intensity of the problems of education and population growth corresponds to the degree of lack of development in the rural areas, inequitous distribution of assets in terms of land and water-supply in a given rural community, and educational deprivation of women. The broad priorities, therefore, are to prepare the ground for the spread of literacy and primary education through socio-economic justice and to remove the traditional constraints on the status and education of rural women, in particular. A demand for education, modernization and efficiency has to be stimulated through a general awakening and mobilisation of the rural communities especially in the educationally backward states.

1.4.13 The Eighth Plan will aim at universal primary education, both through full-time for-

mal schools and part-time, non formal arrangements for working children and girls in particular. Special programmes will be launched for education of tribal children with due regard to tribal culture, economic problems, and removal of disparities between tribal and non-tribal population groups, with substantial inputs of Science and Technology leading towards the reduction of isolation of the tribal people from the rest of society.

1.4.14 Higher Education needs to be extended in an equitable and cost effective manner mainly by large-scale expansion of distance education system and increased involvement of voluntary and private agencies. Apart from strengthening of facilities and restructuring curriculum, the component of value education should be introduced as part of foundation programme. While an integrated approach to the development of higher education needs to be adopted, measures to promote excellence should be emphasised. Technical education including Management Education is one of the most potent means for creating skilled manpower required for developmental tasks. While this implies high costs of construction, laboratory equipment, library books and journals and high rate of obsolescence, such high cost, being directly related to development, should be viewed as an essential productive investment, yielding valuable returns to the society. The quality of technical and management education needs to be improved not only through modernisation and upgradation of infrastructures but also by adopting futuristic approaches and strengthening industry-institutional and R&D Laboratories inter-action.

### **Health**

1.4.15 The health facilities should reach the entire population by the end of the Eighth Plan. The 'Health for All' (HFA) paradigm must take into account not only the high risk vulnerable groups, i.e., mother and child (as done so far) but must also focus sharply on the underprivileged segments within the vulnerable groups. 'Towards Health for the Underprivileged' may be the key strategy for the H.F.A. by year 2000, a declaration to which India is a signatory.

1.4.16 The structural framework for the delivery of health programmes must undergo a meaningful reorientation in a way that the underprivileged themselves become the subjects of

the process and not merely its objects. This can only be done through emphasising the community-based systems. Such systems must provide the base and basis of health planning, recognising health and education as the key entry points for harnessing community development efforts. These systems must be reflected in the planning of infrastructure, with about 30,000 population as the unit.

1.4.17 By providing valid information and by associating the pre-defined segments of population with not only the health planning process but also with the methods for the evaluation of programmes, the process of suggested reorientation can be initiated. In more than one way, it must be reflected in the planning process for the social sectors, and especially health, so that the people themselves bring about the solution of their problem.

1.4.18 The ethos and culture of the communities must provide the scaffolding for such community-based systems. In this context, the traditional systems of preventive medicine, including meditation, yoga and other health practices may find a better acceptability amongst communities, with distinct advantage of their cost-effectiveness. The practitioners of Indian systems of medicines can play a major role in this direction.

1.4.19 The oft-repeated pattern of providing for health needs in terms of curative services for those who are ill must now give way to an approach in terms of positive health, with emphasis on disease prevention and health promotion. At the other end of the spectrum, a responsiveness of the services towards rehabilitation of those with physical or other handicaps, would contribute to development of a system of comprehensive health care.

1.4.20 Major efforts shall be initiated to expand educational facilities for those categories of health care providers where the existing numbers and the annual turnout are far below the desired level. Incorporation of health related

courses as a part of vocationalisation of general education, shall be pursued vigorously. Reorientation or retargetting of the process of education for all categories of health professionals, is essential. The quality of services is directly related to the content and type of education of the health professionals and their sense of commitment to respond with sensitivity to the needs of the people.

### **Drinking Water**

1.4.21 The country has not yet been able to provide sustainable source of clean drinking water to all the people, particularly in rural areas. Based on an identification done in 1980 and updated in 1985, the number of 'No Source Problem Villages' was estimated at 1.62 lakhs as on April, 1985. During the Seventh Plan period (1985-90), 1.54 lakh 'No Source Problem Villages' were provided with a source of drinking water supply, thus reducing the number of such villages to 8365 by the end of the Seventh Plan. At the commencement of the Eighth Plan period, there will be about 3000 no source problem villages. However, there are a large number of villages which are only partially covered and a large number of habitations which have no source at all or have highly inadequate supply. While the norms which are presently adopted envisage a source within a walkig distance of 1.6 kms. or elevation difference of 100 meters in hilly areas and at last one handpump/spot source for every 250 persons, the accessibility of drinking water supply to the people will have to be progressively improved upon. Special and specific measures are also needed to tackle quality problems, such as, guineaworm, excess fluoride, high iron content and salinity. Water quality monitoring is to be streamlined and given proper emphasis to ensure safe drinking water. Simultaneously, steps will have to be taken for replacement and rejuvenation of defunct handpumps/tubewells. Measures for conservation of water and recharge of aquifers have to be implemented on a larger scale to provide for sustained supply of water. Much greater efforts are, therefore, needed to provide adequate quantity and quality of water and to make the sources sustainable.

## **Protecting the Weak and the Left-behind**

1.4.22 Achievement of a high growth rate and sustaining it over the decade will be an important goal of the Eighth Plan. Employment generation and poverty alleviation objectives are ultimately related to growth. However, the growth has to be accompanied with a sharper regional focus of reduced disparity and more dispersed benefits. The backward regions and the weaker sections of the society, if not protected fully, are more likely to be left behind in the natural process of growth. Adequate protection will have to be continued to be provided to the poor and the weaker sections of the society. Adequate food supply, control on inflation, effective working of public distribution system and developmental programmes which generate adequate employment are among the main components of the strategy to take care of the poor. Similarly children and particularly the girl child need to be paid particular attention. One of the targets in this context would be to equalise the enrolment and retention rate of the girl child with that of the boy child through the elementary education period.

1.4.23 Scavenging by human beings is a scourge which must not exist any more. It is the most undignified work offered to the weakest in the society. Its elimination will require a two pronged effort (i) making provisions of flush latrines mandatory in every house in urban areas, and (ii) providing alternative work opportunities to those presently engaged in scavenging. This has to be a time bound programme to be completed within the period of the Eighth Plan.

### **Land Reforms**

1.4.24 The aim of land reforms in the Eighth Plan must be fulfilment of all the five principles of National Land Reforms Policy, i.e., abolition of intermediaries, tenancy reforms with security to actual cultivators, redistribution of surplus ceiling land, consolidation of holdings and updating of land records. Landlessness is a root cause of rural poverty. In a country where agriculture is the principal means of livelihood, access to land is a major source of employment and income. This access could be achieved in two ways either by a more equitable redistribution of land or by providing security of tenure to tenants and share-croppers who are the actual cultivators. The scope with respect to redistri-

bution is limited. After the imposition of the ceilings, 7.23 million acres of land was declared surplus of which 4.65 million acres had been distributed by the end of Seventh Plan. Of the remaining, a large proportion is under litigation. With the average size of holdings declining, there is no possibility of fresh ceilings. Hence efforts will have to be made to detect the surplus land hitherto unavailable, to distribute the existing surplus expeditiously and ensure that allottees retain possession of land. The thrust in the Eighth Plan will be towards recording the rights of tenants and share-croppers with the objective of giving them security of tenure. In some States this has already been done and it has led to increase in both employment and agricultural output. The allottees of surplus land and tenants would be provided a package of modern inputs so as to enhance the yields from land. This strategy would meet the twin objectives of poverty alleviation and output growth. The consolidation of land holdings has made progress in the States while in others it is yet to make a beginning. Consolidation should be made compulsory in the command of the large irrigation projects.

### **Agriculture**

1.4.25 The strategy for agricultural development in the Eighth Plan must aim at not only achieving self-sufficiency in food but also generating surpluses of specific agricultural commodities for export. Though the progress of agriculture in the recent period has been satisfactory, there are striking regional and crop imbalances. Productivity varies considerably from one region to another. The benefits of Green Revolution which remain confined at present to the north and north-west must spread to other regions, more particularly to the eastern and north-eastern region, which have adequate rainfall, fertile soil and unlimited scope for stepping up agricultural production. Since two-third of the cultivated area is still unirrigated, a more balanced regional development would call for a greater emphasis on dry land farming. Even though the progress in oilseeds production has been significant, the country is far from self-sufficiency with valuable foreign exchange being spent on the import of edible oils. A concerted effort towards increasing oilseeds production is essential. Agriculture and allied activities on which two-thirds of the workforce

are still dependant must continue to receive a major emphasis in our planning effort.

### **Infrastructure**

1.4.26 The physical infrastructure, particularly in the areas of energy, transport, communication and irrigation, has traditionally been provided by the public sector. Since the scale of construction in these areas is very large and these are of direct and indirect benefit to large sections of the society, the public sector will continue to play a dominant role in this area and will have the ultimate responsibility of meeting the demands. However, if private initiative comes forward to participate in creating such infrastructure like power plants, roads, bridges, medium and minor irrigation projects, social housing, industrial estates, on reasonable terms and with full protection of people's interests, such initiative must be positively encouraged.

1.4.27 Among the main components of infrastructure, energy needs particular attention during the Eighth Plan mainly because of the fast growing demand, the limits of our internal sources of energy and implications for balances of payments. The medium term energy plan has to be seen only as a component of a long term plan where the strategies of fuel substitution and shifts from non commercial sources of energy to commercial sources is clearly spelt out. It is only in the perspective of such a long term plan that a view about priorities and relative emphasis on use of petroleum based energy vis-a-vis coal and hydro based energy will emerge and will have to be pursued right from now through the Eighth Plan. While planning for energy development, equal emphasis will have to be given to improving the performance of the existing plants by enforcing higher efficiency norms. It should always be remembered that substantial improvement in the plant load factor can itself bring about sizeable additional electricity. Greater emphasis on developing non-conventional energy and on energy saving practices is also required.

1.4.28 The goals in the energy sector, inter alia, envisage elimination of power shortages in different parts of the country, achievement of a minimum hydel share of 40 per cent in the total installed capacity by the end of the Ninth Plan, restraining the growth in consumption of petroleum products without hampering economic de-

velopment, elimination of the flaring of associated natural gas, stepping up the levels of output of coal and lignite, promotion of cost-effective technologies for the development of renewable and non- conventional energy resources and enlargement of the coverage of Integrated Rural Energy Project.

1.4.29 In the transport sector, the goals include strengthening of the road network, improvement of the condition of the existing roads, entry of the private sector in road transport, removal of all potential bottlenecks to smooth flow of railway traffic on trunk routes, stepping up of the pace of electrification of railways, creation of adequate air cargo and shipping capacity, strengthening of the container network and development of inland waterways.

1.4.30 In the sphere of irrigation, the main objectives are to reduce time and cost overruns in all major and medium irrigation projects, step up irrigation efficiency levels, reduce losses on irrigation projects by recovering costs through higher irrigation rates and arrears collection, and expand installation of modern irrigation devices like drip etc.

### **Science and Technology**

1.4.31 Science and Technology efforts would have to be deployed widely to cover all the basic areas of development. The constraints of basic resources like land, water, minerals and sources of energy can be overcome only by productivity-raising innovations. The strategy for S&T development would be as follows:

- i) Laying greater emphasis on scientific and technological content of all programmes in the socio-economic sectors;
- ii) Giving priority to implementation of programmes having most direct impact on society;
- iii) Identifying and implementing national technology missions and S&T projects in a mission mode in selected areas;
- iv) Aiming at improving the quality of S&T education and training at all levels;

- v) Providing for a significant thrust in selected areas of advanced research to reach international levels;
- vi) Ensuring, through fiscal incentives, that research is carried out by, and within, the production and service sectors;
- vii) Accelerating the process of commercialisation of research to induce greater degree of purposiveness and better links between research and industry;
- viii) Taking appropriate steps, all round, for moving into the age of information/telematics.
- ix) Encouraging research and innovation in the tools and techniques of traditional occupations (i.e., agriculture and rural artisanship) and inducing widespread adaptation.

### **Environment & Forests**

1.4.32 Environment, ecology and development must be balanced to meet the needs of the society. In the interest of sustainable development it would be necessary to take measures to preserve, conserve and nurture, the fragile and critical eco systems. There is a need for decentralised approach in this area as well, so that the environmental considerations are taken note of in every sector with a definition of the appropriate technology and environmental options while formulating programmes and projects.

1.4.33 Environmental management principally includes planning for sustainable use of resources, protection and conservation of ecological system by education, training and awareness. Cooperation of both governmental and non-governmental organisations should be called for at all stages if environmental movement is to achieve success. It can only be accomplished with the fullest cooperation of the people. Cleaning of important rivers such as the Ganga will have to be accelerated.

1.4.34 Forest conservation and development must aim at preservation of biological and genetic diversity in terms of fauna and flora and protection of forest cover from further degradation. At the same time, meaningful projects are

to be developed to utilize wastelands and to make them productive.

### **Housing**

1.4.35 The overall magnitude of the housing problem confronting the country, viewed over a span of 20 years from 1981 to 2001, is estimated to be 23.3 million dwelling units in terms of backlog and 63.8 million new dwelling units comprising of 32.6 million in rural areas and the balance 31.2 million in urban areas to meet incremental housing needs.

1.4.36 The role of the Government in this area would be to create an enabling environment, to remove constraints to housing activity of various sections of the population, to promote a substantial increase in the supply of housing and basic services, to support standardisation and upgradation of the housing stock and to stimulate rental housing. The State would address specifically to the needs of the houseless, poorer households, SC/ST, women and other vulnerable groups. The long term objective is provision of "Shelter for All". Given the competing demands on available resources, however, the achievement on this score will inevitably need to be spread over a reasonable span of time.

### **Urban Development**

1.4.37 The present urban pattern, its form, composition and distribution is such that, unless positive public interventions are made, the present differential and disparities cannot be mitigated. A well-coordinated strategy for promoting development of the small and medium towns, together with a strategy for a sustainable and self-supporting nature of development of metropolitan cities, should form the focus of urban development strategy for the Eighth Plan. An Action Plan to operationalise the development strategy for small and medium towns should consist of strengthening the regulatory/ organisational base of urban local bodies and providing an appropriate investment package on related infrastructure and employment promoting activities. This may require pooling of programmes of different sectors.

1.4.38 Financing of metropolitan development should, in principle, be through internal resources and self-sustaining in nature. However, significant efforts are required in terms of

institutional strengthening, resource mobilisation and also legislative support.

## **The Public Sector**

1.4.39 The public sector has numerous achievements to its credit. The development of our crucial infrastructure sector has been pioneered by PSUs. Many other vital segments of the industrial sector have also been built up by public enterprises. The public sector has contributed richly to the widening and diversification of our industrial structure. The public sector will continue to perform a key role in the coming years. However, certain critical weaknesses that are now apparent will have to be addressed to. The public sector, as envisaged by Jawaharlal Nehru, was to contribute to the growth and development of the nation by providing surplus reinvestible resources. This has not happened as it should have. Many PSUs make substantial losses and have become a continuing drain on the exchequer, absorbing resources which are withdrawn from sectors where these are desperately needed to achieve other developmental goals. Apart from the fact that the present fiscal situation does not permit any more accumulation of unsustainable losses, there is also the fact that many loss making PSUs do not serve the goal for which they were set up.

1.4.40 It is clear that a strong and vibrant public sector cannot be one with financially weak foundations. For the public sector to perform the role expected of it in the 90s, the issue of loss making public sector enterprises will have to be squarely addressed. A policy of the Government meeting the cash losses of so many enterprises for all times to come is just not sustainable. This prevents scarce resources from being used in high priority social sectors or in economic activities that promise a return. Efforts must be made to restructure and revitalise public sector units which are potentially viable through infusion of new technology, rationalisation of labour and even infusion of resources for diversification or modernisation. Equally, patently unviable PSUs may have to be closed down with suitable social safety net mechanisms, including retrenching and redeployment, being devised to protect the interests of workers. It should be recognised that in many cases the very rationale of the public sector entering certain industrial areas needs to be re-examined. There may have been very good

reasons in the past for the public sector to take the initiatives in industrial areas where the private sector would ordinarily either not enter or would hesitate to do so. This may not be the case today and the restructuring of the public sector would essentially entail vacating such areas for private sector initiatives in coming years. Recent Government policies have already vacated large areas for private sector initiatives and this process of restructuring and reform would need to be carried further.

1.4.41 The public sector plan will have to become very selective in the coverage of activities and in making investments and should clearly define its objective principles. The following principles will have to be followed:-

- (i) The public sector should make investments only in those areas where investment is of an infrastructural nature which is necessary for facilitating growth and development as a whole and where private sector participation is not likely to come forth to an adequate extent within a reasonable time perspective;
- (ii) The public sector may also withdraw from areas where no public purpose is served by its presence. The public sector should come in where the investment is essentially for preservation and augmentation of basic resources of the country, like land, forest, water and ecology, science and technology or for running key infrastructural activities. The public sector will have responsibility for meeting social needs or for regulating long-term interests of the society like population control, health, education, etc.
- (iii) In large parts of public sector operations where commodities or services are produced and distributed, unless it is necessary for protecting the poorest in the society, the principle of market economy should be accepted as the main operative principle. It means charging as per cost and costing with full efficiency in operations.

1.4.42 The process of adjustment and restructuring in Indian industry is bound to create some apprehension because of its implication for la-

bour. The social cost of adjustment cannot be borne by labour alone. Institutions which provide a suitable safety net to mitigate the burden of adjustment should be created. Efforts must be made to avoid retrenchment wherever possible through mergers and suitable redeployment. Where retrenchment is unavoidable, it is essential to explore all possibilities of reabsorbing labour productively by effective re-training schemes and schemes to promote self-employment. All this must be accompanied by suitable mechanism for providing generous compensations.

### **Building Up People's Institutions**

1.4.43 Our experience of development planning has shown that developmental activities undertaken with people's active participation have a greater chance of success and can also be more cost-effective as compared to the development activities undertaken by the Government where people become passive observers. The non-involvement of people has also led to the implantation in them of an attitude of total dependence on government for everything so that there has been a lack of effort by the people and lack of accountability to the people in the system of administering developmental schemes.

1.4.44 In the Eighth Five Year plan, it is necessary to make development a people's movement. People's initiative and participation must become the key element in the whole process of development. A lot in the area of education (especially literacy), health, family planning, land improvement, efficient land use, minor irrigation, watershed management, recovery of wastelands, afforestation, animal husbandry, dairy, fisheries and sericulture etc. can be achieved by creating people's institutions accountable to the community. Therefore the focus of attention will be on developing multiple institutional options for improving the delivery systems by using the vast potential of the voluntary sector.

1.4.45 Importance of decentralised local level planning and people's participation has been recognised. Yet results achieved so far have not been very impressive. In this plan, therefore a new direction is being given to achieve these objectives. So far, the approach to people's participation consisted in programme-based

strategies. In addition to such programmes the Planning Commission has now worked out institutional strategies which will mean creating or strengthening various people's institutions at the district, block and village level's so that they synthesise the purpose of investment envisaged in the Plan with optimisation of benefits at the grass-roots level by relating these programmes to the needs of people. This can only be achieved through the collective wisdom of the community combined with the latest know-how available. This work is primarily to be undertaken through NGOs with the support of Government.

1.4.46 Various models of people's institutions have been functioning successfully in the country. Studies show that effective institutions have the following essential ingredients:

- (a) They are owned and managed by the users/stake holders, producers or beneficiaries themselves;
- (b) They are accountable to the community;
- (c) They have the capacity to become self-reliant over a period of time;
- (d) They have the capacity to diagnose the needs of the areas, inter-act with the governmental agencies in order to draw need-based local level plans and to implement those plans in close cooperation with the administration; and
- (e) They tend to bring about integration of various segments of the society for the achievement of common goals of development.

1.4.47 The role of the government should be to facilitate the process of people's involvement in developmental activities by creating the right type of institutional infrastructure, particularly in rural areas. These institutions are very weak particularly in those States where they are needed the most for bringing about an improvement in the socio-demographic indicators. Encouraging voluntary agencies as well as schools, colleges and universities, to get them involved in social tasks and social mobilisation, strengthening of the Panchayat Raj institutions, reorientation and integration of all the village-level

programmes under the charge of the Panchayat Raj institutions, and helping the cooperatives to come up in the organisation and support of local economic activities, for example, are some of the steps which the Government must earnestly initiate. A genuine push towards decentralisation and people's participation has become necessary.

### **The Role of Planning**

1.5.1 In the background of our experience of planning for development over the last forty years and under the strong imperatives for change as they have emerged now, it is quite pertinent to ask the question : "What will be the role of planning in future ?" In order to answer this, one has to see the nature of planning in India and what is expected from it in future.

1.5.2 When the term "planning" was, for the first time, officially defined in the First Five Year Plan document the term used was "democratic planning" as distinct from a "plan based on regimentation". The centralised planning of the type practised in socialist economies did not exist in India, ever. In practice, the market has determined allocations in a major segment of the economy. Public sector, of course, has expanded with a wide ranging influence on the economic life of the nation. The lack of cost consciousness of the public sector, its increasing ineffectiveness in achieving the targets and depletion of its resources crippling its ability to carry on its activities without high-cost borrowing have compelled us to define and limit its role and lay down the objective principles of its operations. It has also been discussed in the foregoing that the process of planning and the pattern of Government activities followed hitherto have dampened people's initiatives and their sense of responsibility towards building the nation. The process of planning needs to be corrected in this respect.

1.5.3 As a corollary to this, the role of Planning Commission needs to be redefined. It has to play an integrative role in developing a holistic approach to the policy formulation in critical and inter-sectoral areas of human and economic development. In the social sector, schemes have to be subjected to coordinated policy formulation. The existing multiplicity of agencies is not only wasteful but also counter-productive because of the long repetitive procedures and the

diffusion of authority involved. An integrated approach can lead to better results at much lower costs.

1.5.4 So far, resource allocation has been the predominant role of the Planning Commission. This has to change. Instead of looking for mere increases in the Plan outlays we should look for increases in the efficiency of utilisation of the allocations being made and the prospects of a return on the investments. The Planning Commission has to play a mediatory and facilitating role among States and sometimes Central Ministries to manage the change smoothly and create a culture of high productivity cost efficiency and sound financial discipline in the Government. Through clear identification of goals and prioritisation of schemes, efforts will be made to reduce bottlenecks, making higher rates of growth possible. If each sector can plainly see what is expected of it, then it can gear itself up to meet the set targets.

1.5.5 Planning in our country still has a large role to play. Planning is needed for creating social infrastructure and for human development. We need to build schools, hospitals institutions of excellence and scientific research. We have to plan and structure the system of education to cultivate necessary calibre, skills and value systems. Private sector participation in these efforts, within the framework of nationally desirable objectives and goals, will be welcome. But the private sector, as yet, is not capable of taking care of the entire needs of the society, particularly of the poor and the weak, in remote and the rural areas. Market mechanism may be able to bring an equilibrium between "demand" (backed by purchasing power) and supply even in this sphere, but market mechanism will not be able to bring a balance between the "need" and the supply. Therefore planning in this area will remain important.

1.5.6 Planning is necessary to take care of the poor and the downtrodden who have little asset endowments to benefit from the natural growth of economic activities. Poverty alleviation programmes have definitely helped in reducing poverty and generating employment. A vision about the structure and the pattern of future growth is important also for its implications for the rate at which employment can be generated in future.

1.5.7 The removal of large disparities in development between regions requires flow of resources across regions. The experience has shown that market forces have not achieved this in adequate measure. Planning process has to manage the flow of resources across regions for accelerated removal of regional disparities. At present, the Plan does provide for special area programmes such as the Hill Area Plan, Tribal Areas Plan and other schemes for backward areas. While these programmes aim at creating a basic infrastructure, the backlog of development is large and considerable efforts are to be made for integration of such regions into the mainstream of economic activity in the country.

1.5.8 Planning and more particularly public sector investment will have a major role to play in strengthening the physical infrastructure, i.e., energy, transport, communication and irrigation, etc., in order to support the growth process on a sustainable basis.

1.5.9 Obviously there are areas in which markets cannot play an allocative role. Market mechanism is never adequate for protecting environment, forests and ecology. Nor is it adequate in giving guidance about the use of scarce resources like, rare minerals, land and water. A long term perspective, and hence planning, is needed in these areas.

1.5.10 Planning and market mechanism should be so dovetailed that one is complementary to the other. Market mechanism must serve

as an "efficiency promoting device", while planning will be the larger guiding force, keeping the long term social goals in the perspective.

1.5.11 So long as public sector investment is a significant proportion of the total investment, planning in so far as it relates to the public sector has to be detailed, setting forth not only the objectives but also examining the alternatives and identifying specific projects in the various sectors. Besides, the plan of the Centre will have to be appropriately linked with the State Plans as both the Centre and the States have responsibilities in almost all areas. All this is analogous to corporate planning. For the rest of the system, however, the Plan will be indicative outlining the broad directions in which the economy should be growing. The Plan will, therefore, consist of (a) providing a vision of the future, (b) constructing medium term economic projections for the entire economy, (c) evolving a system of information pooling and dissemination, (d) identifying areas of development where the country has strengths or where the country needs to build up strengths, (e) evolving appropriate policy measures to achieve the desired goals, and (f) ensuring a degree of consensus in the system through meaningful dialogue with 'social partners' of the Government, namely, the farmers, the trade unions, the business group, etc. In a more deregulated environment, policy formulation and coordination will assume greater importance.

## CHAPTER 2

### DEVELOPMENT PERSPECTIVE

2.1.1 The objectives of fulfilling the social and human aspirations of the people, meeting the essential requirements of living, raising income levels and improving their quality of life are at the centre of our developmental efforts. While these efforts are translated into an accountable form through Five Year Plans, indications of the long-term needs of the society and the direction in which the economy should move over a longer time horizon are needed for drawing up such plans. It is this long term development perspective which is presented in this chapter.

#### Factors in Long-Term Growth

2.2.1 The factors which determine the long term conditions of growth are the demographic trends, the basic resource endowments, the entrepreneurial resources and the technology perspective. The growth and the structure of population and the size and growth of labour force are the elements of demographic trends which determine the long-term social needs on the one hand and influence the growth prospects on the other. Basic resource endowments i.e., the sources of energy, land, water, other essential minerals, environment and ecology are vital elements in the determination of the potential for growth and comparative advantage. However, technology can augment the basic resources by raising their productivity, and conserving their uses. Technology is, thus, emerging as the most important factor which can even change the comparative advantage. Access to the best technology in all spheres of activity and ability to take a lead in building up new technologies (i.e., making innovations) even in a small sphere of activity are going to become the most crucial factors in determining our development pace viz-a-viz other countries.

2.2.2 Some of the major concerns to be taken care of by the pattern and the pace of growth in the long run are:

- i) Need for expanding employment in the face of ever-diminishing elasticity of employment to output growth, particularly in the processing and manufacturing activities;

- ii) Need for maintaining "food security";

- iii) Ensuring that the vast differential between average agricultural incomes (and productivity) and non-agricultural incomes (and productivity) narrows down;

- iv) Need for meeting the social needs and minimum requirements of the population within the ambits of a prudent fiscal system;

- v) A realisation that in the past mere investment in quantitative terms did not necessarily mean the economic and social benefits trickling down to the poor masses leading to visible improvements in terms of standard of living and incomes for which social measures are necessary.

2.2.3 An important imperative of growth in the face of basic resource constraints is that the best of the technology is used in every economic activity and more particularly in those activities which are related to the processing of basic raw materials, manufacture and conversion of fuel into energy. This is cost-saving and also resource-saving in the ultimate analysis. However, the technology mostly comes embodied in machines, i.e., capital equipment and makes the production processes capital-intensive as well as labour-replacing. The process which economises most on the use of energy, avoids wastages of raw materials and reduce the time span of processing, also tends to involve more automation and thus saves on labour use. The higher the pace of growth we desire, the more advanced is the technology we need to adopt, and consequently the lower is the elasticity of labour absorption to growth. This trend has been observed in the development history of most of the countries. Recent experience of trends in labour absorption in manufacturing in India also conforms to this. In the perspective of the next 15 years or so, population will still be rising at a significant rate and there will be substantial additions to the labour force. While the per capita income and productivity will definitely increase, it does not follow as a matter of course

that all those seeking jobs will get jobs. Special care will have to be taken and policies devised for making jobs available to all, which is a national goal. This would be possible by broadly following two strategies in the long run.

2.2.4 The first strategy is related to using the foreign trade, i.e., imports and exports for balancing the internal production and demands in such a way that we tilt our structure of production more in favour of employment intensive industries and exchange its products with the imported products which are less employment intensive.

2.2.5 The second strategy would be to facilitate and encourage the creation of services which are productivity-raising for the economic system as a whole. Transport, trade, and a variety of professional services are examples of such services. Services by their very nature are more labour absorbing. This has been the historical experience of many countries.

2.2.6 The development of under developed agriculture in large parts of the country will create demand for additional labour during the period in which agriculture gets transformed from a less developed to a highly developed stage. Depending on the intensity of our efforts and investments, this transformation may take anywhere around 10 years. And hence, during this period agriculture does offer additional opportunities for labour absorption. Beyond that period, agriculture may also start showing similar trends in labour absorption as the industry has shown in recent periods. In fact, at present the agriculture in North-West India is already showing such tendencies.

2.2.7 Maintaining food security and relative self-sufficiency in food production is a strategically desirable long-term goal for the country. A reasonable degree of food self-sufficiency or supply of "wage goods" is seen to have a very positive influence on stability and growth even in our limited experience of development. It may be largely due to the factor of relative food self-sufficiency, among others, that India achieved a higher rate of growth and better economic stability and resilience during the Eighties. This was the only decade as a whole when we felt somewhat comfortable on the food

front. Hence, it seems appropriate that food self-sufficiency remains an important element of the strategy of development even in the perspective of a period of next fifteen years or so.

2.2.8 Food security implies not only sufficient supplies but also supplies at prices affordable by the poorer sections of the society. Appropriate institutional mechanisms, such as a public distribution system, sharply focused on the poorer sections should be put in place to protect the poor from rise in food prices. However, this task would be rendered difficult if food prices in general rise very sharply.

2.2.9 A moderate increase in food prices consistent with remunerative returns to the farmers should be the desired objective. In order to enable farmers to earn higher incomes a combination of processing and business activity with the farming activity is necessary. In other words, farming must be encouraged to grow into "agri-business". In order to bring this about, efforts will be required in building the infra-structure and creating conditions for the growth of agri-business. Innovative organisational methods and forms in which large number of small farmers could come together to take advantage of the economies of scale which are important for agro-processing and agri-business are needed. This direction has to be kept clearly in view while evolving the pattern of long term growth. The Eighth Plan will take some major steps in this direction.

2.2.10 The existing differentials between rural and urban infra-structure facilities, the prevailing average income levels for the bottom deciles of the population and significant regional differences in development make it necessary for the State to take care of the important social needs of the population like health, education, cultural needs as well as minimum requirements of the living environment like drinking water, rural roads, information and communication. This will be over and above what the State will have to do by way of investment in the physical infrastructure like energy, transport and communication. In performing such functions in the past the Government has come under severe fiscal strains. Much of this expenditure has come out of borrowing whose cost is also increasing. There is need for maintaining the fiscal health in the long run. Otherwise a point is reached when

under heavy pressure of debt servicing the Government becomes incapable of performing even the minimum of its essential functions. Some new approaches to financing investments in the area of human development are called for. Rationalisation of the element of subsidy in the provision of these services is required. Sharp focussing on the target groups is required where the provision of services is free or heavily subsidised. Participation of private entrepreneurs, and local communities in the provision and running of institutions which take care of social needs will have to be encouraged.

2.2.11 In the past there has often been an obsession with the plan size and with acceptance of projects as plan schemes with a token outlay. This does not necessarily bring about growth in real terms. On the other hand this shifts emphasis from the real productive growth and identi-

fication and formulation of proper growth oriented schemes and their timely completion according to schedule. Many of the public sector enterprises have not only failed to generate any surplus on the massive investments made on them, but continue to demand huge budgetary support from the government every year.

### Nature and Implications of Population Growth

2.3.1 The growth in Indian population gathered momentum in the last few decades. It can be seen from table 2.1 that the natural growth rate during the decade 1941-51 was only 1.25 per cent per annum, and had remained at much lower levels during the earlier decades of this century. The growth rate started increasing rather fast after 1951 and reached a peak of 2.22 per cent during the decade 1971-81. It is tempting to think that if only India had succeeded in

Table 2.1 Dynamics of Population Growth : 1901 - 1991

Period	Population at the end of the Period (as on 1st March)		Growth Rate %		Vital Rates per 1000 Population		
	Total (millions)	Urban (%)	Decadal	Annual (Exponential)	Birth Rate	Death Rate	Natural Growth Rate
1	2	3	4	5	6	7	8
1901-11	252.09	10.29	5.75	0.56	49.20	42.60	6.60
1911-21	251.32	11.18	-0.31	-0.03	48.10	48.60	-0.50
1921-31	278.98	11.99	11.00	1.04	46.40	36.30	10.10
1931-41	318.66	13.86	14.22	1.33	45.20	31.20	14.00
1941-51	361.09	17.29	13.31	1.25	39.90	27.40	12.50
1951-61	439.23	17.97	21.51	1.96	41.70	22.80	18.90
1961-71	548.16	19.91	24.80	2.20	41.20	19.00	22.20
1971-81	683.33	23.34	24.66	2.22	37.20	15.00	22.20
1981-91	844.32	25.72	23.56	2.12	32.50	11.40	21.10

- Note :-1) The 1981 Census Population total has been revised in the light of the 1991 Census results.  
 2) The 1991 Census figure includes projected population of Jammu & Kashmir.  
 3) The Vital Rates except for 1981-91 have been calculated from the Census of India data by Reverse Survival Method.  
 4) Vital Rates for 1981-91 have been calculated using Sample Registration System data.

containing her population growth rate after 1951 to around one per cent per annum i.e. the rate China has achieved, how much difference this factor alone would have meant in terms of per capita income, consumption and levels of living. The Seventh Plan document assessed the growth rate during 1981-86 as 2.1 per cent and projected the growth rate for the period 1986-91 at 1.9 per cent. According to Census 1991, the growth for the entire decade of eighties was 2.1 per cent. Thus both the Sixth and the Seventh plans have fallen short of achieving the targets set for reducing population growth.

2.3.2 On the assumption that the family planning efforts will be turned into an effective people's movement during the Eighth and the Ninth Plan, the Standing Committee of Experts on Population Projection has estimated that the annual growth rate of population during the period 1991-96 would be 1.81 per cent which

will further come down to 1.65 per cent during 1996-01. The Eighth Plan (1992-97) envisages a population growth rate of 1.78 per cent per annum. As per these projections the Indian population will grow from 844 million in 1991 to 925 million in 1996, 1006 million in the year 2001 and 1102 million in 2007. (Table 2.2). The Net Reproduction Rate (NRR) will equal unity only during 2011 to 2016, that is 5 years later than was expected at the time of presenting the Seventh Plan. The goal of stabilising population (zero population growth, ZPG) has thus shifted further in time. India's fertility and mortality levels and the age distribution of the population are such that even after attaining NRR = 1 by the year 2011-2016, the population would stabilise (i.e., achieve ZPG) only towards the end of the 21st century.

2.3.3 The socio-economic variables that could be considered to be inter-related are death rate,

**Table 2.2 Population Projections**

Period	Population at the end of the period (as on 1st March)			Average Expectation of life at birth		Birth Rate (per 1000 persons)	Death Rate	Growth Rate	General Marital Fertility Rate (Per 1000 Married Women)
	Total (millions)	Urban (millions)	Urban popln. as % of total popln.	Male	Female				
1	2	3	4	5	6	7	8	9	10
1991-96	925.13	257.36	27.82	60.60	61.70	27.50	9.40	18.10	160.80
1992-97	941.37	266.57	28.32	61.05	62.20	27.00	9.20	17.80	157.50
1996-2001	1006.20	306.87	30.50	62.80	64.20	24.90	8.40	16.50	144.50
2001-2006	1085.98	363.64	33.48	64.80	65.80	23.00	7.80	15.20	132.30
2006-2011	1164.25	425.73	36.57	67.05	68.30	20.90	7.10	13.80	120.90

Source - Report of the Standing Committee of Experts on Population Projections (1989).

Notes 1). The projections have been adjusted in the light of the 1991 Census results, particularly in case of Urban Population.  
2). For 1992-97, 2006-2011 : projections are based on similar assumptions as adopted by Standing Committee of Experts on Population Projections (1989).

infant mortality rate, female expectation of life at birth, female literacy, female mean age at marriage and percentage of women employed. The latest available statewide data on these variables are presented in table 2.3.

2.3.4 There is considerable variation in respect of socio-demographic variables across the States. One of the most important variable, i.e., Infant Mortality Rate (IMR), for example, varies from 17 in Kerala to 123 in Orissa. Study of the relationship among demographic and socio-economic variables shows that female literacy and age at marriage are highly correlated with fertility decline. Increase in age at marriage affects fertility decline as it shortens the reproduction period and produces larger intervals between generations. Lower infant mortality rate also helps in having lesser number of children as the acceptors of family planning methods become more confident about survival of children. Fertility rates have started declining in many parts of the country where, apart from family planning programmes, substantial progress has been made towards female education and improved health status for women and children and where job opportunities for women have increased.

2.3.5 Though India was the first country to acknowledge the need for controlling population growth, our achievements have fallen considerably short of the targets in this direction. After a little initial decline during the decade of sixties and in the early seventies, the birth rate has remained stagnant at 33/34 per thousand for almost a decade till 1985. This has happened in spite of the fact that the Couple Protection Rate (CPR) has been going up significantly during the same period. The CPR increased from 22.5 per cent in 1977 to nearly 35 per cent in 1985, and further to 44.1 per cent in 1991. Though the birth rate (BR) has shown a declining tendency, (from 33.7 in 1980 to 32.6 in 1986 and 29.9 in 1990) the fall is not commensurate with the increase in CPR. One explanation for this appears to be that the acceptance of family regulation methods has largely been confined to older age groups. An analysis of demographic data for 1961 and 1981, in fact, reveal that fertility decline has been most marked in the older age-group of 30-44 and much less in the age-group of 15-29. Whatever fertility decline was observed in the younger age-group was more due

to rise in age at marriage than to the use of family regulation methods. However, the second half of the eighties is witnessing the beginning of a new phase of fertility decline. There has been a small but perceptible and continuous decline in fertility and population growth as indicated by the Sample Registration System (SRS) estimates.

2.3.6 Roughly 60 per cent of the total female population in the reproductive ages is below the age of 30. It is typical for all countries during their initial stage of fertility decline that the acceptors of family regulation methods tend to be in the low fertility range or in the older age group. However, after achieving a CPR of 44 and a birth rate of 30 further significant improvement in CPR can only come from acceptance of family regulation methods by the younger age-group. Further increases in CPR would then be more effective in reducing birth rates. This will require more efforts to motivate the younger people. It is in this context that reduction in infant mortality rates, increase in female literacy, and increase in job opportunities for women will become much more important variables in influencing birth rates.

2.3.7 As per the 42nd Round of the National Sample Survey (NSS) (1986-87) reports on utilisation of Family Planning Services, the percentage of eligible couples effectively protected during 1986-87 was 28.6, (Table 2.4), as against a couple protection rate of 37.5 as reported through administrative statistics. Apart from statistical discrepancy due to different sources and methods of collection of data, one reason for this discrepancy could be that the administrative statistics might have included large number of casual users of Family Regulation Methods (FRM), while NSS reveals more sustained acceptors. The NSS report further reveals higher level of effective protection in urban as compared to that in rural areas, and higher level of effective protection among the population group above poverty as compared to that among the group below poverty. This is as to be expected. But what is more revealing is that even among the rural below poverty group, effective protection rate was nearly 22.65 per cent as compared to the overall all-India rate of 28.60 per cent. This is a very hopeful sign. Terminal methods are more dominant among rural and poor groups while non-terminal methods seem to be pre-

**Table 2.3 Important Socio-Economic Indicators - Major States**

States	Birth Rate (1990)	Death Rate (1990)	Infant Mortality Rate (IMR) (1990)	Couple Protection Rate (CPR) (1-4-91)	Total Fertility Rate (TFR) (1985)	Life Expectancy Females (1986-91)	Female Literacy Rate (1991)	Mean age at Marriage (Females) (1981)	Percentage of Women Employed in Organised Sector	
	0	1	2	3	4	5	6	7	8	9
Andhra Pradesh	25.60	8.70	70	44.30	3.70	62.23	33.70	17.26	12.47	
Bihar	32.90	10.60	75	26.00	5.40	57.00	23.10	16.55	6.73	
Gujarat	29.50	8.90	72	57.80	3.90	61.49	48.50	19.52	12.44	
Haryana	31.80	8.50	69	56.60	4.60	61.97	40.94	17.84	11.39	
Karnataka	27.80	8.10	71	46.90	3.60	63.31	44.30	19.21	17.06	
Kerala	19.00	5.90	17	55.60	2.40	73.80	86.90	21.82	38.97	
Madhya Pradesh	36.90	12.50	111	40.30	4.60	54.71	28.40	16.56	10.24	
Maharashtra	27.50	7.30	58	56.20	3.50	64.30	50.50	18.77	13.24	
Orissa	29.90	11.60	123	41.00	3.80	55.15	34.40	19.08	8.80	
Punjab	27.60	7.80	55	75.80	3.50	65.30	49.70	21.07	13.56	
Rajasthan	33.10	9.40	33	29.00	5.50	58.69	20.80	16.10	11.67	
Tamil Nadu	22.40	8.70	67	57.30	2.80	60.80	52.30	20.25	22.00	
Uttar Pradesh	35.70	12.00	98	35.50	5.60	49.64	26.00	16.71	7.92	
West Bengal	27.30	8.10	63	33.70	3.70	59.53	47.10	19.23	9.82	
India	29.90	9.60	80	44.10	4.30	59.10	39.40	18.33	14.22	

Source :- Column 1, 2, 3 & 5 - SRS Estimates, Registrar General, India.  
 Column 4 - Department of Family Welfare.  
 Column 6 - Report of Standing Committee of Experts on Population Projections.  
 Column 7 - Census 1991 (Provisional Totals).  
 Column 8 - Census 1981.  
 Column 9 - Directorate General of Employment and Training, Ministry of Labour.

ferred with rising incomes and urbanisation. Similarly, with rising income levels and urbanisation, dependence on Government services is falling. Government still accounts for overwhelmingly large proportion of family planning services provided.

2.3.8 Nearly 40 per cent of the Indian population was below 15 years of age in 1980 whereas only 6 per cent of the population was over 60 years of age. With the recent changes in vital-rates and expectation of life at birth, the age structure of population has changed and in

future it is likely to change even more significantly. The projected changes in age structure are shown in Table 2.5.

2.3.9 The proportion of persons below 15 years of age would come down from 40 per cent in 1980 to 35.5 per cent in 1992, and 29.5 per cent in the year 2007. Correspondingly the proportion of the group 15+ will increase from 60 per cent in 1980 to 70.5 per cent in 2007. Thus, the proportion of those needing work will rise significantly. The population of age 60 plus has

**Table 2.5 Projected Age Structure**

(Percent)

Year	1990	1992	1995	1997	2000	2005	2007
1	2	3	4	5	6	7	8
0-4	133.30	12.77	12.13	11.71	11.14	10.30	9.96
5-14	23.22	22.89	22.49	22.09	21.58	20.08	19.48
15-59	57.07	57.69	58.43	59.06	59.78	61.55	62.26
60+	6.41	6.65	6.95	7.14	7.50	8.07	8.30

Source: Report of the Standing Committee of Experts on Population Projections (1989).

Note: Projections for 2007 are based on similar assumptions as adopted by the Standing Committee (1989).

**Table 2.4 Percentage of Eligible Couples Effectively Protected**

(1)	Rural (2)	Urban (3)	Combined (4)
Below Poverty	22.65	28.73	23.51
Above Poverty	26.74	39.72	29.93
ALL	25.40	37.58	28.60

Note: Estimated from data on fractile groups reported in NSS report. (42nd Round, 1986-87)

risen to a level of 6.65 per cent in 1992 and will rise to a level of 8.3 per cent by 2007.

2.3.10 The number and the proportion of females in the reproductive age group 15 to 44 will keep on rising over the next 15 years. (Table 2.6) Increase in the proportion and the number of females in the reproductive age group will lead to higher fertility rates and hence it will require a much higher degree of effort to achieve a certain reduction in birth rates corresponding to the effort/success ratio in the past.

2.3.11 The problems of the aged has not been felt much so far since the society has been overwhelmed with the problem of the children. The proportion of older people has been small and the traditional family structure has been able to accommodate the needs of the aged well. This

**Table 2.6 Women in the Reproductive Age Group**

Year	No. of Female Aged 15-44 (Millions)	Ratio of No. of Females Aged 15-44 to total Females (%)
(1)	(2)	(3)
1990	183.00	45.75
1992	191.89	46.02
1995	205.00	46.49
1997	214.31	46.95
2000	226.00	47.08
2005	252.00	48.55
2007	262.40	48.84

Source: Report of the Standing Committee of Experts on Population Projections (1989).

Note: Estimates for 2007 are based on similar assumptions as adopted by the Standing Committee (1989).

is changing now. The proportion of the aged in the society will be growing. In the wake of modernisation and urbanisation more and more families are shifting away from land as the main source of livelihood thus weakening further the main basis of joint family system. Families are becoming nuclear. Taking care of the aged will need more attention in the coming decades.

2.3.12 Urban population is expected to be 224 millions, i.e., 26.04 per cent of the total population in 1992. Urban population for the next decade is projected on the basis of average annual rate of growth observed during the twenty year period i.e., 1971-91, rather than the decelerated rate of growth during 1981-91 as this may not represent the long-term trend of urbanisation. In the post 2001, period the rate of growth of urban population is assumed to be gradually declining in line with the assumed reduction in the rate of natural increase, but the share of urban population is expected to increase continuously. As per the projections, India will enter the 21st century with an urban population of 307 million (30.50 per cent of the total) which is likely to reach a level of 376 million (34.2 per cent of the total) by 2007. It is also estimated that the number of cities with a population of more than one million will grow up from 12 in 1981 to around 40 in 2001. In 1981, 218 class I cities accounted for more than 60 per cent of the total urban population of the country. In 1991, class I cities contained 139.7 million people (excluding J&K), accounting for 65.2 per cent of total urban population and the metropolitan cities alone had 70.76 million of them. These cities are the main hubs of economic activity. Among them are also some of the cities which are already under strain because the infrastructure is over-stretched and inadequate. Vast areas of these cities have degenerated into slums. Housing is in a critical short supply. In 1981, out of a total urban population of nearly

160 million, 32 to 40 million were estimated to be in slums alone. Thus, 20 to 25 per cent of the urban population live with multiple deprivation. This is the result of the gap between the demand and the legal/formal supply of houses.

2.3.13 Viewed in a longer time perspective, a fast pace of urbanisation is inevitable. In fact the growth in urban population during the eighties has been less than expected. The only question to be asked is: "how to make the process more compatible with the overall economic development pattern and environmentally less damaging"? A widely dispersed urban growth will prevent the push of large numbers towards metropolitan cities and will also be beneficial to rural development. This implies vastly dispersed infrastructure, reaching out even to smaller urban and rural areas. A push to such a strategy needs to be given through creation of communication, transport, health and educational infrastructure in large number of small towns and in rural areas.

2.3.14 The successive quinquennial rounds of the National Sample Survey Organisation (NSSO) indicate trends in Labour Force Participation Rates (LFPR) and enable projections of labour force being made for the coming years. Table 2.7 on the Usual Principal Status LFPR shows that LFPR's have declined over the years. However, as the growth in labour force has been mainly influenced by the rate of growth of population, the labour force has continued to

**Table 2.7 Overall Labour Force Participation Rates (1977-78 to 1987-88)**

Year	Labour Force Participatio			
	Rural		Urban	
	Male	Female	Male	Female
(1)	(2)	(3)	(4)	(5)
32nd Round (1977-78)	54.9	26.2	53.2	15.0
38th Round (1983)	54.0	25.2	53.1	13.0
43rd Round (1987-88)	53.2	25.4	52.8	12.9

\* Usual Principal Status.

**Table 2.8 Labour Force\* Projections by Age - Group**

(Millions)

Age-Groups	1992	1997	2002	2007	Addition to Labour Force		
					1992-97	1997-02	2002-07
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
5 +	328.94	364.31	400.75	440.74	35.37	36.44	39.99
15 +	316.65	351.61	387.92	427.87	34.96	36.31	39.95
15-59	294.60	325.87	357.82	393.02	31.27	31.95	35.20

\* Usual Principal Status.

grow despite the declining trend in the participation rates. Usual Principal Status Labour Force Projections for the period 1992-2007 are given in Table 2.8.

### The Social Development Perspective

2.4.1 There has been a significant improvement in the living conditions of the people on an average. In certain states of the country, the life expectancy, infant mortality, literacy, consumption of food and cloth and availability of basic services such as drinking water and domestic electricity have reached satisfactory levels. But there are considerable disparities across States, between the urban and the rural areas, between males and females, and between those who work in organised sector and those who are in the unorganised sector. In the perspective of the next 10 to 15 years, we have to concentrate on reducing these disparities and to improve the quality of life of an average Indian citizen. The development perspective emphasises improvement in the income opportunities of the less privileged sections and in the pockets of gross underdevelopment. An improvement in basic social services and reduction in infant mortality is a pre-condition for realising the desired restraint on population growth. The long term targets in terms of important social indicators are set in Table 2.9. These are average indicators for the population as a whole, and the averages hide the disparities. But, further significant improvements in the averages cannot be brought about without reducing the disparities.

2.4.2 The census of India 1981 reported an overall literacy rate of 36.2 per cent. This was

a considerable improvement over literacy rate of 16.7 per cent in 1951, though, this is still a poor showing for 30 years of planning. Census 1991 reports literacy rate for population aged 7 years and above as 52 per cent. The regional disparities are wide and female literacy is still at a very low level. As per 1991 Census, the female literacy was only 39.4 per cent and male literacy was 63.9 per cent. Data on literacy are also available from various rounds of the National Sample Survey. Even though the definitions followed are the same, there are differences between the results obtained from Census and the NSS rounds. NSS rounds give somewhat higher rates of literacy. The NSS estimates may be more indicative of the real situation. These data are presented in table 2.10. It is significant that during less than five years, i.e., from 1983 to 1987-88, literacy rates increased by 4 percentage points. It appears that the literacy drive will pick up momentum now. Since literacy is high among the younger age-group and is very low among the older age-group, with the cohort movement, more literates will be replacing illiterates. The adult literacy programmes and efforts at universalisation of elementary education will add further to the improvement in literacy rates.

2.4.3 It is more important, in this context, to concentrate on those regions/districts where literacy rates are abysmally low. Of the 412 districts, 243 had a literacy rate below the national average and 193 had female literacy rate below 20 per cent in 1981 (as per the conventional measure based on census data). The 1981 census recorded a work participation

Table 2.9 Some Indicators of Social Development (1992-2007)

(1)	(2)	1991-92 (3)	1996-97 (4)	2006-2007 (5)
1. Life Expectancy (years)	Male	57.7	60.10	66.10
	Female	58.7	61.10	67.10
2. Infant Mortality Rate (per 1000 births)		78(a)	68(b)	48
3. Death Rate (b) (per thousand)		10.0	8.7	7.4
4. Birth Rate (b) (per thousand)		28.9	25.72	21.7
5. Fertility Rate (per thousand)		130.3	113.0	91.4
6. Literacy Rate (%)	15-35 years	56.0*	90.0	100.0
	7 years & above	52.0	75.0	90.0
7. Per Capita Consumption of foodgrains (kg)		182.0	193.6	225.0
8. (a) Villages without drinking water (thousands)		3.0@	0	0
	(b) Villages partially covered (less than 40 lpcd)	150.0	negligible	0
9. Electricity as a source of Lighting (Per Cent of Dwellings)	- Rural	27(c)	50	80
	- Urban	75(c)	80	95

Notes(a) Estimate based on SRS Data

(b) Based on assumptions implicit in the population projections made by the Standing Committee of Experts on Population Projection (1989).

(c) Estimate for 1988-89 based on NSS 44th Round.

@ The figure indicates the number of villages not having any source of drinking water by end of March 1992 (Source : Ministry of Rural Development)

lpcd Litres per capita per day

\* Estimates for 1986-87 based on NSS 42nd Round.

rate of 4.3 per cent for children aged 0-14. Also the NSSO (1983) had revealed that there were 17.36 million working children below 15 years of age. The task before the country is to bring these children back to the class rooms. At least 3-4 years of schooling is necessary for literacy to be permanent. The focus now should be in getting the community actively involved in achieving cent per cent enrolment and in retaining all the children in the school atleast through the primary stages.

2.4.4 Significant improvement in the health status of people is visible from the fact that the expectation of life at birth has increased from 32 to 58 years since independence. It is predicted that it would reach a level of 65 years during 2001-2006, the female expectancy being still higher. Already during 1986-91, Kerala had a female life expectancy at birth of 74 years, which is comparable to most developed coun-

tries. The Death Rate in India has also declined. A number of public health and medical care programmes like, national small pox eradication, malaria control, tuberculosis control, cholera control and immunisation of children against diphtheria, tetanus, whooping cough etc. launched by the Government have helped to improve health and longevity of the people.

2.4.5 While efforts at dealing with the epidemics have been successful, meeting the health needs of the population has been far from satisfactory. One crucial indication of population's health status is infant mortality rate. Its contribution to total death rate is high and it has great psychological impact on motivation to limit the family. Contribution of infant deaths to total deaths is about 28 per cent, being 20 per cent in the urban areas and 29 per cent in the rural areas. Infant mortality rate has come down to 78 per thousand, out of which about 60 per cent are

Table 2.10 Number of Literates per Thousand Persons

All-India

Year/Sourc	Rural		Urban		All Areas Persons	Excl. Popln. in Age Groups		
	Male	Female	Male	Female		0-6	0-4	0-14
1	2	3	4	5	6	7	8	9
1977-78 @	415	184	688	500	377	467	440	404
1981 #	408	180	658	478	362	447	414	408
1983 \$	449	219	693	515	405	500	470	440
1987-88 *	484	260	719	556	444	540	509	486
1991 (Census)						521		

Note:-1. Figures in Col 7 and 8 exclude persons in the respective age groups from the denominator only.

2. Figures in Col.9 excludes persons in the age-group (0-14) from both the numerator and denominator.

3. @,\$ and \* for NSS 32nd, 38th and 43rd Rounds respectively.

4. # census .

neo-natal deaths. It is estimated that 30 to 40 per cent of infants are born with low birth weights and about 45 per cent of infant deaths are due to low birth weights. Immunisation status is far from satisfactory. The NSS data also show that the mothers registered for pre-natal care were 21 per cent in rural and 47 per cent in urban areas, and those registered for post-natal care were 12.6 per cent in rural and 23.8 per cent in urban areas.

2.4.6 The National Health Policy has accepted the responsibility to ensure "Health for All by the Year 2000". An infant mortality rate of 60 per cent and 100 per cent immunization of pregnant mothers and school children are aimed at, apart from a number of other health related targets. This calls for substantial improvement in the medical and public health facilities, particularly in the rural areas.

2.4.7 The sources for the availability of drinking water and light, as revealed by National Sample Survey data for the years 1973-74 and 1988-89, are presented in table 2.11. There has been considerable improvement over this period. However, in 1988-89 tap water was available to 15.5% of rural and 72% of urban households. The Technology Mission on Drinking Water in Villages and Related Water Management has an objective to cover all "problem

villages". Of the 5.75 lakh villages in the country 1.62 lakh villages were identified as "problem villages" at the beginning of the Seventh Plan. By the end of March 1992, about 3000 villages remain without any source of safe drinking water. There are however, still about 1.5 lakh villages/habitations where per capita supply of water is very meagre (less than 40 litres per day) or part of population remains unserved or the water sources are polluted. Population covered by these potable water has increased from 56.3 per cent in rural and 72.9 per cent in urban areas in March 1985 to 78.4 per cent and 84.9 per cent in March 1992 respectively. The problems of supplying clean drinking water is so varied and diverse that innovative area specific cost effective technologies are to be evolved.

2.4.8 Population covered with sanitation facilities is very low-as low as 2.7 per cent having individual sanitary latrines in rural areas. An integrated approach to rural and urban sanitation linked to programmes in health and education is called for.

2.4.9 It can be seen from table 2.11 that as recently as in 1988-89, only 27 per cent of rural households and 75 per cent of urban households had electricity available for lighting purposes, the situation improved considerably since 1973-74. The State level data shows greater dispari-

**Table 2.11 Percentage Distribution of Households by Source-wise Availability of Drinking Water and Lighting**

	28th Round (1973-74)		44th Round(1988-89)		
	Rural	Urban	Rural	Urban	
	(0)	(1)	(2)	(3)	(4)
<b>Sources of Drinking Water</b>					
1.Tap	4.69	66.97	15.47	72.11	
2.Well	65.84	18.05	39.12	9.12	
3.Tube-well & Hand pump	15.59	12.69	39.10	17.20	
4.Others	13.88	2.29	6.31	1.57	
<b>Total</b>	100.00	100.00	100.00	100.00	
<b>Sources of Lighting</b>					
1.Electricity	6.55	53.48	26.92	75.12	
2.Others	93.45	46.52	73.08	24.88	
<b>Total</b>	100.00	100.00	100.00	100.00	

Source - National Sample Survey Organisation.

ties as fewer people of eastern States live in electrified dwellings as compared to their northern counterparts. The aim should be to cover 100 per cent households both in rural and urban areas with availability of electricity for lighting purpose.

2.4.10 Poverty still remains a problem of considerable magnitude. Estimates of poverty are conventionally based on a concept of poverty line in terms of monthly per capita expenditure and consumption distribution as available from National Sample Survey. Views vary on the concept of poverty line and the method of estimating poverty. However, irrespective of the concept and measurement, there is evidence that poverty is on decline since the middle of the seventies. In 1987-88, as per the official methodology, around 30 per cent of the population was poor. Assuming that by 1991 poverty proportion declined to 27 per cent, even then about 230 million people were poor and not capable of providing bare essentials of existence.

2.4.11 Incidence of poverty varies very much across the States. The States with high per capita income and highly developed agriculture (Haryana and Punjab) have been virtually able to eliminate poverty. The same cannot be said

about states where industry is highly developed (Gujarat, Maharashtra). Thus development of agriculture and production and supply of food grains seem to be highly favourable factors in eliminating poverty. The target is to eliminate poverty by the turn of the century.

### Food Requirements

2.5.1 India will have an estimated 941 million people by the year 1997 A.D. This will increase to 1102 million by 2007. With this population and given improvements in consumption levels associated with growth in incomes, the estimated foodgrain requirement for 1997 and 2007 will be around 208 million tonnes and 283 million tonnes respectively. The foodgrain production has to match this level of demand. The required production levels of foodgrains by 1997 and 2007 are 210 million tonnes and 285 million tonnes respectively. Main projections are given in table 2.12.

2.5.2 The required development in agriculture can, in the long run, be achieved only through a regionally more broad-based pattern of growth by devoting greater attention and resources to the development of rainfed tracts, utilising efficiently the created facilities of irrigation and maintaining a continuous flow of economically

viable improved techniques, both for rainfed as well as irrigated areas. The concept of planning for agriculture in terms of homogeneous agro-climatic areas needs to be intensified and institutionalised.

2.5.3 Growth of animal husbandry sub-sector will help in increasing employment and bring about income redistribution in favour of small and marginal farmers and landless labourers. The production of milk and milk products is targetted to grow at about 4 per cent per annum from the present level(1991-92) of 57.5 million

tonnes. By 2007, the total supply of milk will be of the order of 105 million tonnes. The supply of egg is targetted to grow at about 6 per cent per annum. A quantum jump in fish production is envisaged through creation of appropriate infrastructure. These measures will contribute to an estimated growth rate of about 6.6 percent in fishery sub-sector. As a result, the fish production is expected to increase to 5.5 million tonnes by 1997 and to 10.5 million tonnes by 2007 A.D.

2.5.4 Energy intensity of agriculture has been rising through direct uses of energy as well

**Table 2.12 Agricultural Perspective**

VARIABLE	1984-1985	1991-92*	1996-97	2001-02	2006-07
(1)	(2)	(3)	(4)	(5)	(6)
<b>Land (Mill. Ha)</b>					
N.S.A.	140.9	140.0	141.0	141.0	141.0
G.C.A.	176.4	182.2	190.6	197.2	203.4
G.C.A.(FG)	126.7	127.0	130.0	132.6	135.0
<b>Irrigation(Mill. Ha)</b>					
F.G.	44.2	53.8	62.3	70.2	77.7
N.F.G.	16.3	21.9	27.0	31.8	36.3
TOTAL	60.5	75.7	89.3	102.0	114.0
<b>Fertiliser(Mill. tonnes)</b>					
F.G.	6.2	9.4	12.8	16.6	21.0
N.F.G.	2.1	4.1	5.5	7.1	9.0
TOTAL	8.2	13.5	18.3	23.7	30.0
Cotton(Mill. bales)	8.5	10.5	14.0	18.0 a	23.0 a
Sugarcane(Mill. tonnes)	170.3	235.0	275.0	335.0 b	408.0 b
Foodgrains(Mill. tonnes)	145.5	172.5	210.0	245.0	285.0
Oilseeds(Mill. tonnes)	13.0	17.5	23.0	29.0 c	37.0 c

**Abbreviations:**

N.S.A. = Net Sown Area

GCA = Gross Cropped Area

FG = Food Grains

NFG = Other than Food Grains

a = 5 % P.A.

b = 4 % P.A.

c = 5 % P.A.

\* = Likely.

as through its indirect use via fertiliser. The imperatives of raising productivity in view of the constraints on land and rising demand for food, fibre and other agricultural products, implies that energy intensity will further rise. However, massive efforts need to be mounted now to make improvements in the efficiency with which energy is used. Efficient use of water and efficient use of fertilisers are the two areas which need to be paid special attention. More investment needs to be made on research in the area of biotechnology to make possible integrated nutrient and pest-management through cultural, genetic and biological methods.

### Natural Resource Constraints

2.6.1 The total geographical area of the country is 329 million hectares, of which the arable land is 166 million hectares. At present 141 million hectares are used for cultivation purposes. Between 1970-71 and 1987-88, the average net sown area (NSA) has been 140.4 million hectares with a maximum of 143.21 million hectares in 1983-84 and a minimum of 136.18 million hectares in 1987-88. The need for production of food, fodder, fibre, fuel and urbanisation will put severe competing claims on the land. Moreover, water logging, salinity, alkalinity of soils on account of inadequate planning and inefficient management of water resource projects in conjunction with other adverse physical factors, will severely constrain the growth of net sown area in the future.

2.6.2 The per-capita availability of land is already declining at a very high rate. With the assumed rate of population growth it will decline to 0.30 hectares by the year 2007 AD as against 0.89 hectares in 1950. Similarly, estimated per capita land availability for animal population will go down from 1.1 hectares in 1950 to 0.6 hectares by 2007 AD. Presently, rural and urban settlements, roads, railways, waterbodies, mines, defence and industrial installations use about an estimated area of 21 million hectare. An additional area of 4 to 5 million hectares will be required for these diverse purposes by 2007 AD. Although forest statistics indicate that there has been an increase of 26 million hectares under forests between 1950-51 to 1986-87, the remote sensing data indicate depletion of the forest cover. In the past, increase in net sown area came about by converting forest area into cultivable area. There is no such scope at

present or in near future. The only alternative available is to reclaim the waste land and the land suffering from salinity, alkalinity and water logging. With such efforts, the upper limit of net sown area will be 141 million hectares. In reclaiming wasteland available private sector initiative and expertise should be tapped wherever necessary without diluting the thrust in the land reforms performance. In many parts of the country the process of land reforms still remains incomplete. This should be completed on a priority basis and it should be ensured that those who till the soil have by and large an ownership stake in it.

2.6.3 Land degradation in India is alarmingly high. An estimated 174 million hectares was being affected by various problems of soil erosion and land degradation in 1984-85. Of this degraded land 8.53 million hectares was water logged, 3.97 million hectares was ravine and gullied land, 3.58 million hectares was affected by alkalinity and 5.50 million hectares belong to saline and sandy areas. However, since 1984-85 about 40 million hectares are reported to have been recovered. Still the magnitude of the problem remains large.

2.6.4 Floods and droughts are recurrent phenomena in India, severely constraining agriculture. On an average, an area of about 8 million hectares is affected by floods annually. Of this, nearly 40 per cent is cropped area. The total net cropped area prone to water stress (moisture scarcity) and drought is about 64 million hectares. The problem of land degradation gets exacerbated due to large scale land erosion in which fertile top soil is lost. As per the Indian Council of Agricultural Research estimates, the present soil loss is about 16.35 tonnes per hectare per year.

2.6.5 Forests are a very valuable renewable resource providing the vital life support system. With the fast growing population the demand on forest has progressively increased. Interpretation of the Landsat imagery indicates that out of 75 million hectares of area recorded as forest, only 64 million hectares sustains actual forest cover, and out of this only 35 million ha. has adequate cover, which account, for only about 11 per cent of the geographical area of the country at present. National Forest Policy (1988) stipulates that the country as a whole

should aim at keeping about one third of the geographical area under forest cover. With all its biological and genetic diversity, forest is a natural gift to humanity. The forests, degraded by the ever increasing biotic influence, need to be rehabilitated by afforestation, not only for environmental considerations, but also for meeting the local demand for firewood, small timber, fodder and for defence and industry.

2.6.6 With an average annual rainfall of 119.4 cm, and surface flow of about 188 million hectare metres, India is endowed with vast water resources. However, total utilisable water is 114 million hectare metres comprising 69 million hectare metres as surface water and 45 million hectare metres as ground water. Due to severe limitations imposed by physiography, topography, and the present state of technology to harness water resources economically, only a limited part is developed for irrigation and other essential uses. The ultimate irrigation potential of the country was estimated by National Commission on Agriculture (1976), to be 113.5 million hectares of which 55.0 million hectares would come from minor irrigation. But this estimate has undergone a change. The national perspective on water resources envisaged an additional benefit of 25 million hectares through surface storage and inter-basin transfers of river water. Further, the Central Ground Water Board provisionally puts the revised estimate of ground water at 80 million hectares, as against the previous estimate of 40 million hectares. Pending firming up of these estimates the ultimate irrigation potential is taken as 113.5 million hectares.

2.6.7 The incremental costs of using water has been rising steadily. Many potential projects from which water can be utilised when developed, though economically viable are too capital intensive compared to other sectors of development like crop husbandry etc. It is essential to increase the productivity of water harnessed through irrigation by improving efficiency of water management and by conjunctive use of surface and ground water with adequate sustainable maintenance and with farmers involvement.

2.6.8 Mineral resources are non renewable and therefore call for more vigorous and sustained efforts for the discovery and exploration of mineral deposits and scientifically planned de-

mand management and replacement by substitutes. The estimated known reserves of copper, gold, iron ore, lead, zinc, chromite, rock phosphate, manganese ore, kyanite and sillimanite of high grade quality are the main cause of concern as the balance life of their reserves is less than 50 years. Hence it is essential to consider the mineral inventory position while trading minerals in future. Considerable efforts need to be directed towards exploration of minerals of rare occurrence, like nickel, molybdenum, tin, tungsten etc. Table 2.13 shows the life indices of some important minerals.

### Energy Perspective

2.7.1 It will be a challenging task to meet the growing demand for energy from households, industry, transport, agriculture and business. Pattern of demand for energy is also changing overtime. Analysis of total commercial energy consumption shows that there is increasing trend in consumption of petroleum products, natural gas and electricity.

2.7.2 Measures will have to be initiated for reducing the energy intensity in different sectors through changes in technology and processes. Interfuel and intrafuel substitution will have to be optimised. The main emphasis will have to be towards maximising the use of renewable sources of energy with affordable cost to low income groups in rural and urban areas. A major stress on efficiency, conservation and demand management should be laid to bring down the energy elasticity to output.

2.7.3 The consumption requirement of electricity at the consumers' end will be around 622 Billion Kwh by the end of the next fifteen years. With various technical measures adopted and system improvement schemes undertaken in various States, the system losses are expected to go down by atleast seven per cent. Taking this into account, the total generation requirement would be 798 Bkwh. Non utilities are expected to contribute about 45 Bkwh. The generation requirement from utilities will be to the tune of 749 Billion kwh besides import of 4 Bkwh.

2.7.4 From supply side, emphasis should be laid on increased hydel generation which is necessary for affording more power availability especially for meeting system peak and improving the overall Plant Load Factor (PLF). Posi-

Table 2.13 Life Indices Of Some Important Minerals

Mineral / Ore / Metal	Recoverable reserves as on 1.1.1985 (m.tonnes)*	Depletion during 1985-97 (m.tonnes)	Recoverable reserves as on 1.1.1997 (m.tonnes)	Projected production during 1996-97 (m.tonnes)	Balance life at 1996-97 level of production (Years)++
	1	2	3	4	5
1. Crude oil + 1-1-91	993.00	230.00 (1991-97)	763.00	50.00	15.26
2. Natural gas \$ (B.Cu.m) As on 1-4-1990	858.00	161.00 (1990-97)	697.00	30.00	23.00
3. Coal(as on 1.1.91)					
i) Coking	8507.00	201.00 (1991-97)	8306.00	39.00	213.00
ii) Non-Coking	60346.00	1397.00 (1991-97)	58949.00	269.00	219.00
4. Bauxite	2333.00	80.00	2253.00	8.00	281.00
5. Copper metal # (as on 31.3.88)	3.95	0.431	3.52	0.055	64.00
6. Lead metal # (as on 1.1.89)	1.93	0.56	1.36	0.096	14.00
7. Zinc metal # (as on 1.1.89)	7.00	1.10	5.89	0.154	38.00
8. Gold (as on 1.1.88)	103000 kg. (Extractable)	16727.00	86273.00	1850.00	46.00
9. Iron ore	10440.00	686.00	9754.00	72.00	135.00
10. Chromite Ore	139.00	15.00	124.00	2.40	51.00
11. Magnesite	222.00	6.70	215.00	0.73	294.00
12. Manganese ore	83.17	17.65	65.52	1.80	36.00
13. Limestone	69353.00	876.00	68477.00	101.00	Adequate Reserves
14. Rock Phosphate High grade	14.78	8.79	5.99	0.72	8.00
15. Sillimanite) Massive	0.50	0.35	54.25	0.017	Beach Sand + 1000
ii) Beach sand	54.10				
16. Kyanite	1.55	0.51	1.04	0.056	18.00
17. Dolomite(useable grade)	4608.00	32.00	4576.00	3.20	Adequate Reserves

+ - Background note of Eighth Plan (1992-97)

++ - Life of mineral deposits would change on revision of recoverable reserves

\* - Based on Eighth Plan Working Group report on mineral Exploration, Aug. 1989

\$ - Figures are tentative as natural gas reserves depend upon reservoir characteristics

# - Producing & developing mines

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tive steps will have to be taken to shorten the gestation period of the construction of power plants. About 40 per cent of total 84000 MW at 60% load factor hydel potential lies in North-Eastern region which needs to be exploited fully. Gas based stations can be supplemented for peaking purposes. Reliable gas supply has to be ensured alongwith indigenization of higher capacity gas turbines. Availability of adequate supplies of heavy water should be ensured for achieving nuclear generating capacity targets.

2.7.5 Power sector is capital intensive and its demand is bound to increase in tune with economic development. But in view of the supply constraints arising from resource crunch, the approach should be towards improving efficiency in the generation and distribution of power supply. The time and cost over-runs of projects need to be checked. Domestic, industry and agriculture are the sectors where there is wide scope in the efficient use and conservation of energy. Better ways of Grid integration and demand management have to be evolved. Wind energy has a potential of 20,000 MW and mini/micro hydels have potential of 5000 MW which needs to be tapped. Other non-conventional sources like solar photovoltaics, ocean energy, MHD, geo-thermal energy etc., can become economically feasible with indigenisation of technology.

2.7.6 Consumption of coal has increased at the rate of 5.5 per cent per annum during the Sixth Plan and 7.44 per cent per annum during the Seventh Plan period. The production of coal will have to reach a level of 308 million tonnes by 1996-97 in order to achieve the plan targets for coal-based thermal power generation, and the output of iron and steel and other industries. Power sector consumes more than half of the total coal requirement. There is an increasing trend in the consumption of specific coal in the power sector due to drop in calorific value. The quality of coal may not improve much as the share of underground mining is not likely to improve during the next decade. In the steel sector, in view of the inadequate supply of indigenous coking coal both quality-wise and quantity-wise, import of coking coal would continue. Import of 3 million tonnes of coking coal during 1996-97 has been envisaged. In the domestic production, washery yield of clean coal during 1996-97 is expected to be around 55 per

cent only. There is need for renovation/modernisation of Indian washeries and avoiding time overrun in setting up of new washeries. The demand for coal is expected to reach a level of 460 million tonnes by 2006-07.

2.7.7 Crude oil production increased nearly three-fold in the Sixth Plan whereas in the Seventh Plan the increase, mainly accounted by Bombay high, was marginal (3.33 per cent per annum). During the Eighth Plan the increased crude production would come mainly from Bombay Off-shore, Cambay basin and Upper Assam. Marginal increase in production in Krishna-Godavary-Cauvery basin is also expected. The demand for petroleum products is outstripping the indigenous production. Domestic demand during 1996-97 and 2006-07 is anticipated to be 81 million tonnes and 125 million tonnes respectively. Besides the expansion of the existing refining capacity, it is necessary to adopt conservation measures, pay attention to demand management and take steps to develop substitutes. The Natural gas which is emerging as an important substitute for petroleum products could be used in fertilisers, petro-chemicals, power generation and for extraction of LPG for use as domestic fuel. With this, it would be possible to save Naphtha in fertilisers and petro-chemical sectors, Furnace oil in the power sector and Kerosene in the domestic sector. Utilisation of compressed natural gas could substitute diesel and petrol in transport sector and save foreign exchange substantially. However, given the balance life of oil and gas reserve at less than 25 years even with the present low consumption levels on one hand and the need for massive investments to develop the reserves on the other, an uncontrolled growth in consumption will make our balance of payment position unmanageable. A strict monitoring of the demand for petroleum products in the Eighth Plan and beyond is therefore an imperative need for managing the nation's fiscal health.

### **Long-Term Growth Perspective**

2.8.1 A visualisation of the pattern of long-term growth and options on growth strategy are necessary so that the medium term investments and policies may be directed towards some of the better options in the long-run. Keeping in view the long term goals of the society and taking into account the terminal conditions of the Eighth Plan, i.e., the conditions created by the

**Table 2.14 Some Macro Parameters of Growth  
(1992-93 to 2006-07)**

Period	GDP Growth Rate (AV)	Savings Rate (AV)	Investment Rate (AV.)	Growth Rate of Total Consumption	Growth Rate of Per cap. pvt. consumption
(1)	(2)	(3)	(4)	(5)	(6)
1992-93 to 1996-97	5.60	21.60	23.17	5.60	3.49
1997-98 to 2001-02	6.05	23.2	24.20	5.62	3.89
2002-03 to 2006-07	6.51	24.40	25.40	6.18	4.59

programmes and the policies within the Eighth Plan, a path of growth for the future can be charted out. In doing this, the rates of savings and investments as also the incremental capital output ratio are the factors which one has to project exogenously, while the rest of the parameters like growth rate, of GDP and rate of growth of consumption are worked out by the model itself.

2.8.2 Saving rate is treated as exogenous. The Seventh Five Year Plan achieved an average saving rate of about 20.4 per cent of GDP. An average saving rate of 21.6 per cent as observed towards the end of the Seventh Plan has been considered to be feasible for the Eighth Plan. An increase of the same magnitude (in terms of percentage points) in each of the next five year periods may be considered to be a modest expectation. Thus, the saving rate may be taken as 23.2 percent during the period 1997-02 and a saving rate of 24.4 per cent may be taken for the period 2002-07. The saving rates are achievable given the past behaviour of our savings and the savings record of many Asian countries. Assuming that the current account deficit is maintained at the level of 1.6 per cent of GDP in the first five years and at 1 per cent thereafter for 10 years the investment rate would be 23 per cent in the Eighth Plan, 24.2 per cent in the next five year period and 25.4 per cent in the subsequent five years. An ICOR of 4.1 has been assumed for the Eighth Plan. The ICOR was 4.1 in the Sixth Plan and it turns out to be 3.9 for the Seventh Plan but 4.3 on an average for the 7 year period upto 1991-92. Low growth

performance of the last two years has raised the ICOR. However, an ICOR of 4.1 would be a reasonable assumption for the Eighth Plan and 4.0 and 3.9 respectively for the subsequent two five year periods. On this basis, while the Eighth Plan growth rate would be 5.6 per cent per annum, a growth rate of 6 per cent is indicated for the next five years and a growth rate of 6.5 per cent for the period 2002-07. These calculations and their implications in terms of growth of consumption are presented in table 2.14. There will have to be a shift of emphasis in our planning process from the allocation of an outlay and its spending to its productive utilisation leading to a return on the investment even if it is an indirect return.

2.8.3 It can be seen that even modest improvement in the growth performance of the economy would give tremendous advantage in terms of growth in per capita consumption. The growth rate in the per capita private consumption throughout the period 1950 to 1980 remained at a low level of 1.05 per cent per annum. There was a significant improvement in this during the decade of the eighties when the growth rate increased to 3.08 per cent per annum. A growth rate of 3.90 per cent in the five year period next to Eighth Plan, and 4.6 per cent per annum subsequently will again be a good jump. This will amount to an increase of 80 per cent in absolute per capita consumption levels over the next 15 years. This will have considerable impact on eliminating poverty and on generating demand for the type of goods usually associated with higher income levels, production of which

is also more labour absorbing. When the growth in consumption crosses a threshold it starts having a multiplier effect on the economy through demand generation which further strengthens the stimulants to growth. The Indian economy may look forward to these advantages in the next phase of its development.

2.8.4 The processes of deregulation and structural adjustment recently initiated are bound to bring in a qualitative change in the outlook of the manufacturing sector during the next phase of development. A shift from the Public Sector to the Private Sector is anticipated in almost all the sectors of the industry especially in engineering industry. Larger foreign investments and entry of multinationals are anticipated in electronics, telecommunications, consumer durables. The liberalised industrial policy would offer substantial scope for the private sector for investment in gas based power generation and oil exploration. The next phase of development should see a vigorous push in the process of industrialisation and modernisation. Some indication of the possible options for a push in this direction are presented here.

2.8.5 The fertiliser industry has registered an impressive growth ever since the advent of the green revolution in the country. There has, however, been a slowdown in capacity additions accompanied by increasing demand in recent years. With an estimated food grain production target of 285 million tonnes by 2006-07, the evergrowing demand for fertilizer and the hazards of depending on imports for large quantities must be kept in view while planning for this industry in the future. It is assessed that the fertiliser consumption during the terminal year of the Eighth Plan will be around 18.3 million tonnes in terms of nutrients. This would leave a gap of 5.5 million tonnes of nutrients to be imported. Priority should be accorded to new gas based plants particularly in certain specific areas to remove regional imbalance in demand-supply position. Expansion and doubling of gas based fertiliser plants should also be taken up on a priority basis in order to reduce the capital investment and outgo of foreign exchange. Efforts also need to be enhanced to induce private investment in this industry.

2.8.6 The Seventh Plan saw a phenomenal growth in textiles exports. Textiles constitute

the single biggest commodity of export. Ready-made garments and cotton textiles put together account for more than 80 per cent of the textiles exports. It is necessary to press on these trends. The textile industry needs modernisation and technology upgradation. We have to regain our comparative advantage in this sector.

2.8.7 The demand for finished steel is likely to grow at an average growth of 6.7 per cent per annum and is estimated to be 21 million tonnes in 1996-97 and the industry would be fully geared to meet the demand indigenously and there may be a net exportable surplus of 1.8 million tonnes of steel. It is expected that about 13.8 million tonnes would come from main producers and the balance 9 million tonnes from secondary producers. It is envisaged that at the end of the next 15 years or so, the steel industry would produce a surplus of 4-5 million tonnes of steel for export after meeting an estimated domestic demand of 35 million tonnes. The prospect of steel export would be even brighter as the advanced countries like Japan are moving into high-tech areas and vacating steel. Decontrol on the home front, would pave the way for larger private sector participation in this industry.

2.8.8 Consequent on complete decontrol of cement in March, 1989 and subsequent delicensing of the industry in July 1991, the industry has made big strides both in production as well as capacity addition. The new industrial policy is likely to stimulate increased private participation. Though, the demand for cement grew by more than 8 per cent during the Seventh Plan period, the consumption of cement is estimated to grow at a moderate rate owing to the likely subdued construction activities during the present phase. A greater emphasis would be laid on exports of cement in the ensuing plan period by fully exploiting industry's potential to export taking advantage of liberalised policies and the neighbouring countries being net importers of cement.

2.8.9 The electronic industry had a remarkable growth rate during the past decade. The output growth rate was 25 per cent during the Sixth Plan and 34 per cent during the Seventh Plan. Due to foreign exchange crunch and import restrictions, the growth rate during 1990-91 has come down. The prospect of this industry needs to be

viewed in the light of the new industrial and trade policies. Since this industry is largely based on imported technology, which is changing fast, the prospect of electronics industry in the country will depend upon foreign investment and international competitiveness of the domestic products. Complementary to the growth of the electronics and more particularly computer industry will be the expansion in the software development particularly for export.

2.8.10 A well-integrated, multi-modal system, relying on application of the state of the art technology will be an essential element in the transport scenario. Mechanised transport is the largest consumer of energy, particularly the petroleum products, and hence, energy constraint would be a dominant element influencing strategic choice in respect of transport modes. Railways and road transport will continue to remain the dominant modes of transport. The Inland Water Transport, Coastal Shipping, Pipelines should increasingly play an important role in the country's transport system in the future. In view of the huge investments required for developing the transport infrastructure, private sector will have to be encouraged to play a more significant role essentially aimed at improving the operational systems such as in the areas of freight forwarding transport, express ways, creation of dedicated berthing facilities at ports, cargo handling equipments etc.

2.8.11 Inadequacy of road links is a constraint on growth of rural agriculture and rural industry. The Seventh Plan had set a target of providing road linkage to the villages with population of 1500 and above and to 50% of villages with population 1000-1500. It is estimated that 87 per cent villages with population above 1500 and 70 per cent of villages with population from 1000 - 1500 were connected by the end of Seventh Plan. It is anticipated that most of the villages with a population of 500 and above would be connected by all weather roads by the turn of the century. This, however, will be possible only if adequate resources are made available for this purpose. In view of the huge investments required for developing the transport infrastructure, active cooperation of the private sector will be encouraged in most of the transport sector.

2.8.12 Demand for communication and information services will grow at a fast rate in future. Modernisation and upgradation of technology must be given due attention to make the system adequately available and more reliable. The ultimate aim will be to improve the availability of telephone from the present level of 0.5 telephone for every 100 persons to 6-7 telephones for every 100 persons over a period of time. Extension of these services to rural areas is a must for creating environment for the growth of commercial agriculture, agri-business and rural industry.

2.8.13 Our areas of strength which can be developed further are :

- (i) Ability to perfect production techniques if an adequate scale of demand (offtake) is assured (e.g., power equipment and the conventional machine tools and bulk commodities such as sugar and cement);
- (ii) A stock of skilled manpower that can sustain a high growth in manufacturing and in the services sectors;
- (iii) A reserve of unexploited natural resources in hydel power, natural gas, atomic minerals;
- (iv) An expanding consumer market for goods and services which afford scale advantages in consumer durables, telecommunication, transport and certain commercial services;
- (v) Existence of a base of a diversified modern infrastructure, like electricity, transport, repair services, communication, education, banking and a variety of professional and technical services. This base can gain strength and grow, given the right type of environment.
- (vi) A well developed capital market from which massive resources can be raised on the strength of attractive projects.

2.8.14 These advantages can be used in manufacturing the bulk commodities such as sugar, cement and petrochemicals duly supported by import of technology (and capital). These advantages can also be used to integrate better with

the more open developing economies (Far East and Latin America) and expand the output of simpler ancillary equipment and components for the capital goods and consumer durables supplied by them to the Japanese, American and European market. We could establish linkages with the leading marketing chains for clothing and other consumer items and manufacture according to the designs specified by them. We can also plan for economic benefits from the availability of skilled manpower in "information technology" and "computer software" by organising the availability and utilisation of such manpower more effectively.

2.8.15 Since resources are limited, we should avoid channelising our resources to the activities where the nation cannot in the long run have a comparative advantage. Examples of areas that we can progressively vacate and utilise the imports option are ship building, atomic power equipment, technology intensive electronic components, i.e., chips and metallurgical industries except in the context of specific markets abroad.

2.8.16 In building strengths in areas in which we have comparative advantage, we need to pay particular attention to technology. The long term objective is to evolve a technology mix in production which conforms to our resources and needs. The experience in the past shows that wherever our thrust was purposive with clear perspective of economic options and goals, we achieved results. Notable successes have been in agriculture and to an extent in the application of medical research. In these areas, we set about

the task with the establishment of purpose-oriented research network and institutions, put in necessary investments with a certain degree of liberalism in imports of essential equipment etc. The research done in the laboratories was in accordance with our needs which could be successfully translated into economic benefits. Similar approach is required in the fields of industry and energy. These areas did not benefit to the same extent from research in the past, since technological excellence was, in general, pursued in isolation from the economic needs. The result was that scarce resources got tied up for a longer period due to the gap between research effort and a reasonable scale of economic benefits. Institutional reform has to be brought about in technology development. A variety of institutional set-ups (models) have been tried in the past. The successful ones need to be emulated. The role of the public sector in technology development should be confined to areas of high strategic significance on considerations of national and long-term economic security.

2.8.17 Identification of areas in which we have comparative advantage and channeling the resources to those areas are an integral part of planning. This is an ongoing process. Positive efforts will, however, be needed to convert potential areas of strength into reality. In an increasingly deregulated environment, while individual economic agents will make their own decisions where to expand, it should be possible through a mix of policies to steer the economy along desired direction. This, indeed, is the positive role of planning.

## CHAPTER 3

### MACRO-ECONOMIC DIMENSIONS

3.1.1 As a result of planned development over the last forty years and the consequent modernisation of the economy and the emergence of a large organised sector, the capacity of the economy to mobilise resources for further development is now well established. A reasonable stock of technological skills in men and machines and proven reserves of minerals and other resources are available. A diversified industrial and infrastructural base has been built up. We now have a robust and resilient agricultural economy. The Sixth and the Seventh Plans also paid particular attention to the strengthening and modernisation of infrastructure. More incentives to private sector investments were provided through progressive deregulation of industry and more liberalised imports of capital goods and components. There has been at least a five year period (1986-91) of good export performance. Corporate sector has generally welcomed and responded well to the market oriented shifts in industrial, trade and fiscal policies. At the same time capabilities exist in the economy to safeguard the interest of the small entrepreneurs and the small farmers. These achievements have given us strength to push forward and keep up the pace of development in the coming years. The task now is to utilise the human, material and financial resources for a pattern of growth which leads towards the goal of full employment and fulfilment of social aspirations and needs. Emphasis has also to be laid on a more efficient use of the available resources and the necessary environment for the same must be created.

#### Growth, Investment and Public Sector Outlay

3.2.1 The growth target for the next five years is based on an analysis of the recent growth experience, a careful assessment of the resources which could be mobilised and imperatives of meeting certain minimum of social needs and aspirations. The Seventh Plan achieved a growth rate of 5.8 per cent per annum against a target of 5 per cent. This was a good showing. However due to the setback in the expected growth performance during 1991-92 the average growth for the seven year period i.e. 1985-86 to

1991-92, would be 5.3 per cent per annum. The growth in this seven year period was supported by an investment rate of 23.1 per cent of GDP and this investment in turn was financed by domestic saving of 20.7 per cent of GDP and foreign savings (i.e., current account deficit) of 2.4 per cent. Looking to the good performance in the Seventh Plan and also keeping in view the requirement of generating employment at a certain minimum rate, there was a view that the Eighth Plan should aim at a higher growth rate. However, in view of the impact of structural adjustment programme, the resource crunch which the public sector is facing, and the need for correcting the fiscal imbalances, it would be prudent to plan more or less for the growth rate achieved during the decade and lay down foundations for higher growth in the future. Planning for a higher level of investment and cutting it as the plan proceeds because of inadequate resources will result in a less than optimal utilisation of resources.

3.2.2 Macro-economic and sectoral implications of alternative rates of growth in the Eighth Five Year Plan were considered by the National Development Council (NDC). The NDC approved, in December 1991, a growth target of 5.6 per cent per annum for the GDP. More detailed exercises and availability of further

**Table 3.1 : Implications of Target Rate of Growth during the Eighth Plan (1992 - 97)**

GDP Growth Rate	ICOR Average Rate of Domestic Savings	Current Account Deficit	Average Rate of Investment
( % per annum)	( Per Cent of GDP at market price)		
5.6	4.1	21.6	1.6
	23.2		

Abbreviations:

ICOR - Incremental Capital Output Ratio

GDP - Gross Domestic Product

information since then indicate that this growth is feasible. Some of the macro implications of the target rate of growth are set out in Table 3.1.

3.2.3 The incremental capital-output ratio (ICOR) is a summary expression for the existing technical conditions in the economy which determine the relationship between investment and additional output. Though, the ICOR is expressed as a relationship between investments and additional output of the same period (i.e., the plan period), it in fact depends on the pace of investment in the past creating additional output in the plan period and also takes into account the investment which will create capacities for growth in future. Capacity utilisation improved during the Seventh Plan and also there were good gains in operational efficiencies in a number of sectors. The average ICOR for the Seventh Plan period turned out to be 3.9. However, due to a dip in the growth rate during the subsequent two year period, the ICOR for the seven year period, 1985-86 to 1991-92, is estimated to be 4.3. While there is much scope for improving operational efficiencies, gains in output from better utilisation of existing capacities may not be available in the Eighth Plan to the same extent as during the Seventh Plan. This holds particularly in the power generation, rail transport, agriculture (in the north-west regions), oil production and mining. Moreover the stock of investments in pipeline today is less than what it was at the commencement of the Seventh Plan. Investments for "Human Capital", which is a priority area in the Eighth Plan, show up in improved performance in terms of output with a longer time lag than the industrial and infrastructure projects. Project costs in the energy and transport sectors are at present increasing as the more easily available natural resources have been exploited first and the more difficult ones remain to be harnessed. The efforts that are required to curb the ecological damage will also add to the costs. Expectations of productivity gains (and its consequent impact on ICOR) mainly rest on the extension of the best available technology to the underdeveloped regions and sectors of the economy, say, for example, to agriculture in the eastern region, to large segments of services in public sector and to the traditional (decentralised) sectors in industry. Though the immediate impact of measures for structural adjustments will lead to some fall in output, in the medium term the industrial

sector is expected to respond well to the liberalised policies. On balance of assessment it appears to be reasonable to assume an ICOR of 4.1 for the period of the Eighth Plan.

3.2.4 The projections of macro-aggregates and financial parameters are made at the prices prevailing in the base year of the Plan, i.e., 1991-92. The Plan model works with the input-output tables adjusted to the levels and structure of prices in 1991-92. Thus, the projections of savings, investments, balance of payments, etc., are all in terms of prices prevailing in 1991-92. No projection is made for the rate of inflation. It does not mean that there will be no inflation, however, it implies that there will be no erosion in resources in real terms. When actual financial allocations for the public sector plan are made through the annual budgets, prevailing rates of inflation are taken into account. Through prudent fiscal and monetary policies and management of production and distribution, the Plan would, however, attempt to keep the inflation at the lowest possible levels.

3.2.5 Maintaining a reasonable degree of price stability is essential for the smooth functioning of the economic system, protecting the interests of the poor and preventing any deterioration in the mobilisation of resources. In the past it has been found that while any increase in prices leads to corresponding increases in government expenditure, a corresponding increase in revenues does not occur. As a consequence, the resource gap widens. Price stability is essential in order to reverse the trend of dissavings in the government sector and to preserve the developmental content of public expenditure. The financing pattern of the Plan, therefore, relies on a much lower level of "fiscal deficit" and "deficit financing" with the objective of maintaining a reasonable degree of price stability.

3.2.6 The macro-economic aggregates and macro-parameters for the Eighth Plan are presented in tables 3.2 and 3.3. It will be seen that an improvement in the rate of saving is expected. The marginal rate of savings over the Eighth Plan would be 23.7 per cent. Investment rate would be only marginally higher than the average of the last seven years. The current account deficit as a proportion of GDP is projected to decline. This will have a more favourable impact on foreign debt accumulation and debt

**Table 3.2 Macro Aggregates for the Eighth Plan (1992-97)**

(Rs. Crores at 1991-92 prices)

	1991-92	1996-97 (Target)	Total 8th Plan
(0)	(1)	(2)	(3)
1. GDP at Factor Cost	519716	682473	3069138
2. GDP at Market Prices	582356	764730	3439053
3. Gross Domestic Savings	125789	165182	742835
4. Private Consumption	389211	504000	2266530
5. Gross Domestic Capital Formation	140348	172295	797698
6. Foreign Savings +	14559	7113	54863
7. Exports of Goods **	44292	83869	330153
8. Exports of Goods and Non Factor Services **	55762	102366	407342
9. Imports of Goods **	62345	93314	399650
10. Imports of Goods and Non Factor Services **	72848	112797	477128

Note: Foreign Trade figures for 1991-92 are estimated as normalised base for projections during the Eighth Plan.

+ The abnormally low imports in 1991-92 compared to 1990-91 resulted in lower foreign savings than the normal base which is shown here. Preliminary RBI data indicates foreign savings of Rs. 9000 Cr. but the national accounts data is not yet available for the year.

\*\* Exports and Imports projections for 1991-92 are the normalised projections, since the actuals are expected to be exceptionally low in this year.

service ratio. The Eighth Plan is expected to bring about a significant improvement in Export performance.

3.2.7 Private final consumption expenditure is projected to grow at the rate of 5.3 per cent per annum which amounts to a growth of 3.5 per cent per annum in per capita consumption (assuming a population growth of 1.8 per cent per annum). This is greater than the growth in per capita private consumption of 2.8 per cent per annum during the Seventh Plan. Since income distribution is also expected to improve because of various social welfare measures, a higher weightage has to be given to food consumption. This implies a better management of food economy with relative price stability than has been the case in the recent years.

3.2.8 Given the feasible level of domestic savings and resources from abroad, an investment level of Rs. 798000 crores is possible during the Eighth Plan. This implies an invest-

ment rate of 23.2 per cent of GDP. Given the stipulated incremental capital output ratio (ICOR), this investment will generate a growth of 5.6 per cent in GDP. The investment rates in the Sixth and the Seventh Plans were 21.1 per cent and 22.7 per cent respectively.

3.2.9 An important element of the macro-dimension of the plan is the size of the public sector outlay. Public sector outlay has two components: (a) investment and (b) current outlay. The current outlay corresponds to plan expenditure of a recurring and non-investment nature which is needed to initiate the accrual of benefits from the investment. In previous plan periods current outlay has been roughly of the order of 17 per cent of the plan investment. The current outlay is relatively higher in the social sectors which are primarily funded out of the budgets of Central and State Govts and the main among these are health, family welfare, education, welfare of weaker sections, etc. Keeping in view the overall sectoral priorities, a current

**Table 3.3 Macro - Parameters for the Eighth Plan (1992-97)**

Rates/Ratios	Seventh Plan(1985-90)	Seven Years including Seventh Plan (1985-92)	Eighth Plan (1992-97)	
0	1	2	3	
1. Rate of Growth in GDP (% per annum)		5.8	5.3	5.6
2. Domestic Saving (% of GDP)		20.3	20.7	21.6
3. Investment (% of GDP)		22.7	23.1	23.2
4. Current Account Deficit (% of GDP) +		2.4	2.4	1.6
5. ICOR		3.9	4.3	4.1
6. Growth Rate in :-				
Exports of Goods(% per annum)	#	8.1	* 8.5	13.6
Imports of Goods(% per annum)		10.0	* 7.5	8.4

+ In the Seventh Plan, the interest paid on NRI deposits was not included as part of Current Account Deficit (CAD) since RBI released the NRI capital inflow data after accounting for the interest paid. The CAD projection for Eighth Plan includes the interest paid on NRI deposits, as an item of import of non factor services.

# This is estimated on the basis of for five years of the Seventh Plan period. As per D.G.C.I.& S. quantum index, the estimates are 7.6% for plan period and 11.6% during the last four years of the Seventh Plan.

\* These represent only six years average since the year 1991-92 has been an abnormal year in respect of foreign trade.

outlay component at the level of about 20 per cent of public sector investment has been considered necessary for the Eighth Plan.

3.2.10 An outlay of Rs.434,100 crores is planned for public sector. This will have an investment component of Rs.361 thousand crores and a current outlay component of Rs.73100 crores. The public sector investment, then, will amount to 45.2 per cent of the total domestic investment, allowing for a much larger space for the private sector than has hitherto been given. The share of public sector investment in the total is shown in table 3.4. The sectoral pattern of investment and its financing in the Eighth Plan is presented in table 3.5.

3.2.11 Even accepting the most selective role for public sector, there is the 'requirement' side which has to be looked at. Since the projects have long gestation period in the infrastructure sector, the investments in the immediate

**Table 3.4 Share of Public Sector in Total Investment**

	Public Sector Investment (as % of total investment)	
	Projected	Realised
Fifth Plan (1974-79)	57.6	43.3
Sixth Plan (1980-85)	52.9	47.8
Seventh Plan (1985-90)	47.8	45.7
Eighth Plan (1992-97)	45.2	-

future determine the longer term growth possibilities for the economy. In the recent two annual plans (1990-92), the investment in oil, coal, power, railways and irrigation has been confined generally to the already approved on-going projects, and new projects for the future needs, in general, could not be provided for. Infrastructural bottlenecks can lead to a situation

**Table 3.5 Sectoral Pattern of Investment and its Financing in the Eighth Plan (1992-97)**

(Rs. Crores at 1991-92 Prices)

S.No.	Sector	Sources of Financing the Investment			Investment	Current Outlay	Aggregate outlay
		Own Saving	Transfer from Household Sector's Savings	Rest of the World			
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	1.Public Sector	68900	258400	33700	361000	73100	434100
	2.Private Corporate Sector	68930	587770	21300	149000		
	3.Household Sector	605170	-317170	-	288000		
		743000	-	55000	798000		

**Table 3.6 Share of Centre and States in Public Sector Plan Outlay**

(Rs. crores)

Item	Annual Plan 1991-92 ( At current prices)	Annual Plan 1992-93 ( At current prices)	Eighth Plan At 1991-92 prices
<b>1. Central Deptts.</b>			
1.1 Outlay	42,969	48,407	247,865
1.2 Budgetary Support	19,015	18,501	103,725
1.3 IEBR	23,954	29,906	144,140
States & UTs outlay	28,107*	32,365	186,235
<b>2. Union Territories</b>			
2.1 Outlay	1,277*	1,291	6,250
2.2 Budgetary Support	1,277*	1,291	6,250
<b>3. States</b>			
3.1 Outlay(1)	26,830*	31,074	179,985
3.2 Central Assistance	13,428	14,820	78,500
3.3 States own Resources	13,402	16,254	101,485
<b>Total Plan outlay -(1.1 + 2.1 + 3.1)</b>	<b>71,076*</b>	<b>80,772</b>	<b>434,100</b>

(1) Includes outlay for Area Programmes

\* Excludes Rs. 1072 crores Plan Loans to States which were not finally agreed to by Ministry of Finance and the "Model Villages" Scheme and "Equity Base for Cooperatives" which were subsequently dropped.

of the kind that prevailed in mid-seventies when shortages of cement, steel, coal and power were severe, and the annual rates of inflation had crossed 20 per cent. Private sector initiative can reduce the need for public sector investment. But some lag between policy changes and actual investment is inevitable. Though, power sector has been opened up for private sector, it will take sometime before adequate response materialises. The size of public sector investment and outlay has been determined after carefully considering these issues.

3.2.12 The distribution of public sector plan outlay of Rs.434100 crores between the States and the Centre is arrived at on the following considerations:

- i) A careful evaluation of the resource position of the Centre and the States and the need to maintain a certain degree of fiscal discipline;
- ii) The need to improve the share of States in the public sector plan since important sectors like agriculture particularly irrigation, health, education and other programmes contributing to human development are mainly the responsibility of the States;
- iii) The requirement of investment in the Central Plan for the development of basic infrastructure for sustaining long-term growth, such as petroleum, coal, railways and telecommunications etc.

Consistent with the expected resource position, the size of the States' Plans is projected at Rs. 179985 crores and the Central Plan at Rs. 254115 crores (including Rs.6250 crores for the UTs). These are shown in table 3.6. The share of the States in the Public Sector plan which has been declining through the Fifth, Sixth and the Seventh Plan, is sought to be raised from realised level of 39 per cent in the Seventh Plan to 41.5 per cent in the Eighth Plan. The States will be required to improve their resources, curb expenditure and improve and realise a positive contribution to the resources from their enterprises particularly in the electricity and transport sectors.

## Savings and Flow of Funds

3.3.1 The rate of savings is projected at an average of 21.6 per cent of GDP during the plan period. The realised average rate of savings was 19.7 per cent of GDP during the Sixth Plan and 20.4 per cent during the Seventh Plan. The slow pace of increase in domestic savings during the eighties as compared to the rate of improvement in savings in the earlier decades is accounted for by two factors. While the savings of the household sector has shown a smaller rise than in the previous decades partly influenced by the larger availability of consumer goods, both durable and non durable, the savings of the government sector has shown a sharp deterioration. The rates of savings during the Sixth and the Seventh Plans and the projected rates of savings for the Eighth Plan are shown in table 3.7. Further corresponding details are presented in table 3.8.

3.3.2 The savings of the household sector increased from 16 per cent of household disposable income in the Sixth Plan to 18.6 per cent in the Seventh Plan. In view of the increasing opportunities for consumption and urbanisation of the society, the increases in household savings in relation to their disposable income are not expected to be as sharp as in the previous five year plans. With the increase in the proportion of financial savings in the total savings, however, the major contribution of household savings in the Eighth Plan will be towards making larger resources available for financing the investment of the private corporate sector and the Public Sector. The financial savings component of the household savings has progressively increased as shown in table 3.9. Sharper increases in financial savings component were observed from mid-sixties to mid-seventies. The network of commercial banks expanded across the country, particularly in the rural areas in early seventies following the nationalisation of Banks in 1969 and this helped in mobilising financial savings. Thereafter, the financial component of household savings has more or less remained at the same level. In the recent period, the widening of the base of capital market has raised the possibility of a larger proportion of household savings being made in the form of financial assets. Fiscal measures to strengthen this trend will be pursued further in the Eighth Plan.

**Table 3.7 Rates of Savings**

(As Percentage of GDPmp)

	( At Current Prices )			Projected (At 1991-92 Prices)			
	Sixth Plan	Seventh Plan	Average of 7 yrs. (1985-86 to 1991-92)*	1991-92	1996-97	Eighth Plan (1992-97)	
	1	2	3	4	5	6	7
1. Public Sector (1.1+1.2)	3.69	2.33	2.00	1.44	2.07	2.00	
1.1 Govt Sector	1.10	-1.36	-1.74	-2.37	-1.08	-1.11	
1.2 Public Enterprises	2.59	3.69	3.74	3.81	3.15	3.11	
2. Private Corporate Sector	1.63	2.04	2.15	2.39	2.17	2.00	
3. Household Sector	14.33	16.00	16.60	17.77	17.36	17.60	
4. Gross Domestic Savings (1+2+3)	19.65	20.37	20.75	21.60	21.60	21.60	

Notes: (\*) Based on data from Quick Estimates for 1990-91 and projections for 1991-92.

Abbreviation:GDPmp = Gross Domestic Product at market prices.

3.3.3 The private corporate savings which increased from 1.6 per cent of GDP in Sixth Plan to a little over 2 per cent in the recent years are projected to remain at 2 per cent of GDP during the Eighth Plan.

3.3.4 Public sector savings have two components, i.e., the savings of the Government and savings of the public enterprises. Government's savings have shown a very discouraging performance during the 80's. While Government savings were positive during the Sixth Plan, they turned increasingly negative thereafter as shown in table 3.10. The expenditure of the Government as a proportion of GDP increased by 5 percentage points between the Sixth and the Seventh Plans, but the receipts increased by

about 2 percentage points only. The items responsible for rapid build up of expenditure were interests on public debt, and subsidies. The gross savings of Government reached minus 3 per cent of GDP in 1990-91. If this situation continues, the Government will be increasingly handicapped in making adequate provision even for the most essential of its activities in the area of social infrastructure and minimum needs. If the trends of the Seventh Plan were to continue, the savings of Government in the Eighth Plan period would be about minus 160,000 crores of rupees. No meaningful human development programme could be pursued in such a scenario of Government resources. The Eighth Plan has to make a determined effort to reverse the trend of declining Government receipts, rising Government expenditure and negative savings. The seriousness of the Central Government on this account has already been expressed in the budgets of 1991 and 1992. Thus, the availability of resources for financing the projected level of public sector outlay depends on reducing Government dis-savings from Rs.16000 crores in 1990-91 to an average of Rs. 7620 crores per annum during the Eighth Five Year Plan. This would be possible only if the contribution of direct taxes and non tax revenues increases and

**Table 3.9 Share of Financial Savings in Total Household Savings**

Period	Share (Per cent)
1966-72	25.1
1972-82	37.5
1982-89	50.3

**Table 3.8 Gross Domestic Savings By Sector Of Origin During Sixth, Seventh And Eighth Plan**

(Rs. Crores)

S.No & Item	At current prices						At 91-92 Prices				
	6th Plan Total % Avg						7th Plan Total % Avg	(Annual Plans)		8th Plan Total (1992- 97)	
		1985-86	1986-87	1987-88	1988-89	1989-90		1990-91	1991-92		1996-97
1 G.D.P.m	912881	261920	291974	332616	394992	450601	1732103	529537	582356	764730	3439053
2 Public Saving	33037	8457	8002	7249	7743	7054	38505	4690	8386	15864	68900
	3.69%	3.23%	2.74%	2.18%	1.96%	1.57%	2.33%	0.89%	1.44%	2.07%	2.00%
2.1 Govt. Sector	-1766	-3649	-5977	-9391	-13170	-17639	-49826	-22802	-21183	-18551	-83644
	-0.03%	-1.39%	-2.05%	-2.82%	-3.33%	-3.91%	-2.70%	-4.31%	-3.64%	-2.43%	-2.43%
2.2 Saving of R a i l w a y s &Communication	4167	843	1170	1637	2199	2873	8722	3726	4252	5030	20334
	0.44%	0.32%	0.40%	0.49%	0.56%	0.64%	0.48%	0.70%	0.73%	0.66%	0.59%
2.3 Saving of Non-Department al Enterprices	20316	7512	8908	10556	13594	15864	56434	17082	17941	19075	86666
	2.15%	2.87%	3.05%	3.17%	3.44%	3.52%	3.21%	3.23%	3.08%	2.49%	2.52%
2.3.1 Deprecia- tion	19264	6258	7360	8455	10032	12986	45091	13967	14536	14051	66093
	2.09%	2.39%	2.52%	2.54%	2.54%	2.88%	2.57%	2.64%	2.50%	1.84%	1.92%
2.3.2 Retained Profits	1052	1254	1548	2101	3562	2878	11343	3115	3405	5024	20573
	0.06%	0.48%	0.53%	0.63%	0.90%	0.64%	0.64%	0.59%	0.58%	0.66%	0.60%
2.4 Depreciation of Govt. Sector	10320	3751	3901	4447	5120	5956	23175	6684	7376	10310	45544
	1.12%	1.43%	1.34%	1.34%	1.30%	1.32%	1.34%	1.26%	1.27%	1.35%	1.32%
3 Total (2.2 + 2.3 + 2.4)	34803	12106	13979	16640	20913	24693	88331	27492	29569	34415	152544
	3.72%	4.62%	4.79%	5.00%	5.29%	5.48%	5.04%	5.19%	5.08%	4.50%	4.44%
4 Private Saving	144424	43207	45736	60312	75555	93417	318227	111364	117403	149318	674100
	15.96%	16.50%	15.66%	18.13%	19.13%	20.73%	18.03%	21.03%	20.16%	19.53%	19.60%
4.1 Household sector	129573	37999	40696	54718	67439	81319	282171	97441	103463	132738	605170
	14.33%	14.51%	13.94%	16.45%	17.07%	18.05%	16.00%	18.40%	17.77%	17.36%	17.60%
4.2 Private corporate sector	14851	5208	5040	5594	8116	12098	36056	13923	13940	16580	68930
	1.63%	1.99%	1.73%	1.68%	2.05%	2.68%	2.03%	2.63%	2.39%	2.17%	2.00%
5 Total domestic saving (4+2)	177461	51664	53738	67561	83298	100471	356732	116054	125789	165182	743000
	19.65%	19.73%	18.41%	20.31%	21.09%	22.30%	20.37%	21.92%	21.60%	21.60%	21.60%

Note : Data for 1989-90 & 1990-91 are from the Quick Estimates of National Accounts, 1990-91.

Percentages are with respect to GDP at market prices.

the Government's consumption expenditure is contained. Subsidies need to be carefully examined, rationalised and reduced. The subsidies need to be targetted mainly towards the weaker sections and within them particularly those who are located in the poverty prone districts/blocks. Limits on fiscal deficits will have a favourable impact on interest burden in the future. There is a need for reduction in Government expenditure in nominal terms.

3.3.5 In raising the receipts of Government by about 3 percentage points of GDP during 1992-97, major efforts are needed for extending the coverage of direct taxes and the excise duties. This is all the more necessary since the receipts from custom duties will fall because the level of tariff protection to the domestic industries is to be brought down. A move towards presumptive taxation in the Central Budget 1992-93 has already been announced and generally welcomed. The receipts from government property (Centre and States) arise mainly from the dividends from public enterprises and the interest on loans. The dividends and other returns should be much higher and commensurate with their command of public enterprises over assets whose market value is far more than what is shown in their balance sheets. Enterprises that hold no prospects of giving a return to the budgets of their owner governments (Centre or State) will have to be disinvested from. More often the cause of poor returns is shown as fulfilment of "social obligation" by the enterprises. But quantitative measurements of such costs are generally not available. The public enterprises should assess and display the hidden subsidies which their operations give to the suppliers of their inputs, to their labour and to their customers. The receipts from entrepreneurship and property of governments are projected to increase from 1.2 per cent of GDP in the Seventh Plan to 1.5 per cent of GDP in the Eighth Plan.

3.3.6 The savings of public enterprises have increased steadily from 1.7 per cent of GDP in 1980-81 to about 4 per cent of GDP in 1989-90. This has been possible because of the expansion of their operations which in turn was made possible by large investments made in the industries and infrastructure (power, railways, other transport, communication, petroleum, coal, etc.) during the Fourth to Sixth Plan periods. While the overall trends have been encouraging,

it needs to be recognised that the bulk of the contribution through retained profits (as distinct from depreciation) has come from petroleum, communications and railways. A substantial part of the savings here have come from the rise in administered prices of their goods and services rather than reduction in their current expenditures. In other areas the savings of public enterprises have not been sufficient for their capital expenditure and therefore were not able to generate a surplus for paying adequate returns to the government. In the ensuing phase of economic reform, higher efficiency in operations of the enterprises will have to replace progressively the gains that were possible from monopoly power, particularly since the public enterprises now will have to face competition in the capital market as well as in the output market, both domestically and abroad. The savings of public enterprises are projected to rise to 3.1 per cent of GDP in the Eighth Plan as compared to 2.6 per cent in the Sixth Plan and 3.7 per cent in the Seventh Plan.

3.3.7 The scheme of financing the Eighth Plan public sector outlay is given in table 3.11. The financing pattern of public sector plan has two components, one is the budgetary support to the plan and the other is the internal and extra-budgetary resources of public enterprises. In recent years the budgetary support was almost entirely met out of borrowings, since the balance from current revenues (BCR) has been negative. Adequate budgetary support is needed for the social sectors - education, health, family welfare, welfare of weaker sections, etc. Sectors like irrigation, rural development, agricultural research and extension, etc., also depend heavily on budgetary support as they are not commercially viable. The capability to provide adequate budget support to the Plan while reducing the fiscal deficits (i.e., borrowings of government) rests on the budgetary savings made by the governments at the Centre and the States. The BCR during the Seventh Plan was about 2 per cent of the total public sector outlays in real terms. The projected BCR at Rs.35005 crores (Centre and States) would be about 8.0% of the total public sector plan outlay. These estimates of BCR are consistent with the projected government savings and current plan outlay. Considerable improvement will be needed over the past performance both at the Centre and the States. Budgetary resources of the Centre dur-

**Table 3.10 Government <sup>(a)</sup>Saving : During Sixth, Seventh and Eighth Plan**

Rs. Crores

S. No. & Item	At current prices						At 91-92 Prices				
	6th Plan	1985-	1986-	1987-	1988-	1989-	7th	(Annual Plans)			8th
	Total % Avg	86	87	88	89	90	Plan Total % Avg	1990- 91	1991- 92	1996- 97	Plan Total (1991- 97)
1	2	3	4	5	6	7	8	9	10	11	12
1 G.D.P.m	912881	261920	291974	332616	394992	450601	1732103	522537	582356	764730	3439053
2 Receipts (2.1 to 2.3)	150743	47805	55599	63511	73404	84787	325106	96404	110688	168538	717462
	16.45%	18.25%	19.04%	19.09%	18.58%	18.82%	18.76%	18.22%	19.01%	22.04%	20.86%
2.1 Receipts from entrepreneurship and property (Govt)	7203	2977	4374	4461	4026	4687	20525	4753	3400	13000	51959
	0.77%	1.14%	1.50%	1.34%	1.02%	1.04%	1.21%	0.80%	1.44%	1.70%	1.51%
2.2 Direct and indirect taxes (2.2.1+2.2.2)	140963	43561	50042	57848	67766	78226	297443	90303	99734	151613	648617
	15.40%	16.63%	17.14%	17.39%	17.16%	17.36%	17.14%	17.05%	17.13%	19.83%	18.88%
2.2.1 Direct Taxes	24032	6574	7328	8001	10363	11331	43617	14378	15535	14854	104356
	2.64%	2.51%	2.51%	2.41%	2.63%	2.52%	2.51%	2.72%	2.67%	3.25%	3.01%
2.2.2 Indirect Taxes	116931	36987	42714	49847	57403	66895	253826	75925	84199	126759	545267
	12.76%	14.12%	14.63%	14.99%	14.53%	14.84%	14.62%	14.34%	14.46%	16.58%	15.86%
2.3 Miscellaneous items	2577	1267	1183	1202	1619	1870	7138	1922	2554	3925	16886
	0.27%	0.48%	0.41%	0.36%	0.41%	0.42%	0.41%	0.36%	0.44%	0.51%	0.49%
3 Expenditure (3.1 to 3.6)	152509	51454	61576	72902	86574	102426	374932	119296	131871	187089	801106
	16.48%	19.64%	21.09%	21.92%	21.92%	22.73%	21.46%	22.53%	22.64%	24.46%	23.29%
3.1 Subsidies	24388	8543	9795	11497	14135	17843	61813	18987	20531	22671	107322
	2.60%	3.26%	3.35%	3.46%	3.58%	3.96%	3.52%	3.59%	3.53%	2.96%	3.12%
3.2 Interest on Public Debt	14895	6115	7592	9678	12157	15783	51325	19973	24077	42763	164749
	1.56%	2.33%	2.60%	2.91%	3.08%	3.50%	2.89%	3.77%	4.13%	5.59%	4.79%
3.3 Current Transfers	20586	6994	8697	9973	12327	14388	52379	16933	17321	28397	111922
	2.23%	2.67%	2.98%	3.00%	3.12%	3.19%	2.99%	3.20%	2.97%	3.71%	3.26%
3.4 Current Transfers to ROW	121	41	23	43	95	43	245	51	59	80	315
	0.01%	0.02%	0.01%	0.01%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
3.5 Consumption Expenditure	92204	29174	34625	40843	47203	54319	206164	63325	69883	93178	416728
	10.04%	11.14%	11.86%	12.28%	11.95%	12.05%	11.86%	11.96%	12.00%	12.18%	12.12%
3.6 Inter - Govt. Accounting Adjustment	315	587	844	868	657	50	3006	27	0	0	0
	0.03%	0.22%	0.29%	0.26%	0.17%	0.01%	0.19%	0.01%	0.00%	0.00%	0.00%

Table 3.10(contd.)

	1	2	3	4	5	6	7	8	9	10	11	12
4. Notional Depreciation (included in item 3.5)	10320	3751	3901	4447	5120	5956	23175	6684	7376	10310	45544	
	1.12%	1.43%	1.34%	1.34%	1.30%	1.32%	1.34%	1.26%	1.27%	1.35%	1.32%	
5. Gross Saving (2-3+4)	8554	102	-2075	-4944	-8050	-11683	-26651	-16118	-13807	-8241	-38100	
	1.00%	0.04%	-0.71%	-1.49%	-2.04%	-2.59%	-1.36%	-3.04%	-2.37%	-1.08%	-1.11%	

(a) Government Administrative Departments & Departmental Commercial Enterprises other than Railways and Tele-communications

Note : Data for 1989-90 & 1990-91 are from the Quick Estimates of National Accounts, 1990-91.

Percentages are with respect to GDP at market prices.

Table 3.11 Public Sector Plan Outlay and its Financing by Centre and States

(Rs. Crores at 1991-92 prices)

S.No.	Items	Centre	States	Total
0	1	2	3	4
1.	Balance from Current Revenue	22020	12985	35005
2.	Public Enterprises	144140	4000	148140
2.1-	Ext. Com. Borrowing & Sup. Credit (Net of repayment)	(5000)	-	(5000)
2.2	Public Bonds by Enterprises	37300	-	37300
3.	Government Borrowings (1)	117755	58300	176055
4.	Negotiated Loans	-	26200	26200
5.	Net Capital Inflow from Abroad	28700	-	28700
5.1-	Govt Loans	24500	-	24500
5.2-	Govt Grants	4200	-	4200
6.	Deficit Financing	20000	-	20000
7.	<b>Total Resources (1 to 6)</b>	<b>332615</b>	<b>101485</b>	<b>434100</b>
8.	Central Assistance	-78500	78500	0
9.	<b>Resources for Plan (7 + 8)</b>	<b>254115</b>	<b>179985</b>	<b>434100</b>

Notes:(1) Includes market borrowings, small savings, other loans taken by central & state governments, state provident funds and net miscellaneous capital receipts.

(2) External aid is routed to States as a part of central assistance.

ing the Eighth Plan having been assessed at Rs. 188475 crores, an amount of Rs. 78,500 crores would be transferred to the States as plan assistance and grants.

3.3.8 The financing pattern of the Eighth Plan public sector outlay stipulates reduced share of market borrowing and increased share of miscellaneous capital receipts (MCR) in total available resources as a result of selective and partial disinvestments in some of the public sector enterprises.

3.3.9 About 7.8 per cent of the total public sector outlay in the Eighth Plan is expected to be financed by net inflows from abroad. A part of the net inflow of capital from abroad will take the form of external commercial borrowings (ECB's) by public enterprise, and therefore will not be available as a resource for budgetary support. Enterprise-wise distribution of the ECB's in public sector will have to be consistent with the objectives of public sector plan.

3.3.10 Deficit financing was projected to be 8 per cent of the outlay during the Seventh Plan. As against this, the actual deficit financing amounted to 17 per cent of the plan expenditure. The Eighth Plan would draw less than 5 per cent of its public sector outlay from this source of financing, so as to keep inflation in check.

3.3.11 The Public Sector Plan relies heavily on a larger availability of internal resources of the enterprises. Many of the public enterprises, such as the financial enterprises, airlines and the consultancy organisations have large surpluses available from their operations. These will be channelised to other enterprises whose capital expenditure requires extra budgetary resources over and above their own internal resources. This will be done either through the budget or through the capital market or by transfers among enterprises within the administrative control of the same Department.

3.3.12 The contribution of PSEs and their resource mobilization through issue of bonds etc., accounted for about 21.2 per cent of the Seventh Plan expenditure. The Eighth Plan stipulates this share to be as high as 34.10 per cent of the total public sector outlay. Greater reliance would be put on the public sector enterprises in the Central sector anticipating their

contribution to be Rs. 1,44,140 crores. In the re-oriented approach, public sector enterprises would be streamlined to impart greater viability in their operations in the context of competitive development. The Eighth Plan emphasises that the State Public Sector enterprises would, in reversal of their negative contribution, generate Rs. 4000 crores by means of imparting operational efficiency and by appropriate pricing of the products of utilities like electricity, transport services etc.

3.3.13 The ability of the economy to mobilise resources from abroad on affordable terms was put to severe test in recent years. The current account deficit rose to 2.4 per cent of GDP during the Seventh Plan as against the targeted 1.6 per cent. The economy tended to rely, beyond its means, on external capital. Increase in imports from hard currency areas and diversion of substantial part of our exports to rupee payment areas increased our external debt of hard currency foreign exchange. The decline in soft aid for infrastructure development made us borrow in the external commercial market at high costs. While resort to exceptional financing from donors could salvage the situation to an extent, it is imperative that during the Eighth Plan the dependence on inflow of external capital (foreign savings) should be reduced. The current account deficit is projected at Rs. 55000 crores, i.e., 1.6 per cent of GDP. If the growth of the economy is not to be starved of the required raw-materials, capital goods and technology, adequate imports will have to be provided for. Therefore, in containing the current account deficit to a low level, exports will have to assume a dominant role. Exports are, therefore, projected to grow at 13.6 per cent per annum in real terms during the Eighth Plan period.

3.3.14 The Eighth Five Year Plan allocates a higher share of external resources to the private sector as shown in table 3.12.

3.3.15 Under the envisaged scenario, in order to support the public sector investment of the magnitude envisaged, nearly 81% of the financial savings of the household sector will have to be transferred to the public sector. In the context of the liberlisation of the financial system and, in particular, the interest rate structure, the public sector will have to compete with private sector for the household savings. This implies

a higher cost and this can be borne only if the public sector earns a higher return. The stipulated pattern of the inter-sectoral flow of funds during the Eighth Plan is shown in table 3.13.

### Sectoral Pattern of Growth and Investment

3.4.1 Given the overall growth target of the economy during the Eighth Plan, the sectoral pattern of output and related growth rates are obtained through the consistency model which starts with the final demand and fully takes into account the inter-sectoral linkages via inputs and outputs. The main components of the final demand are private final consumption, the gov-

**Table 3.12 Distribution of Inflow of External Funds to Public and Private Sector**

	Public Sector	Private Sector	Total
1	2	3	4
Seventh Plan	82.4	17.6	100.00
Eighth Plan	61.3	38.7	100.00

ernment final consumption, exports, imports and capital formation. While consumption and exports are exogenously determined, imports and capital formation are endogenous to the model. Each one of these components is worked out through a sub-model which takes into account the dominant parameters obtained from analysis of past data. The resultant pattern of growth, both in terms of gross value added and in terms of value of gross output, is described in table 3.14.

3.4.2 It may be noted that the growth rates in value of gross output are higher than the growth rates in the gross value added. This represents increasing ratio of inputs to output, which is the result of the increasing roundaboutness of the production process. Agriculture sector is expected to grow at the rate of 3.1 per cent per annum. This can be considered to be a good growth rate for the sector, though it is a little lower than the average achieved during the Eighties. The average in the Eighties was pushed up by a single year's growth performance, i.e., the year 1988-89. Otherwise, agriculture had a very fluctuating growth. Growth

**Table 3.13 Domestic Investment and Intersectoral Flow of Funds During the Eighth Plan (1992-97)**

(Rs. Crores at 1991-92 Prices)

Item	Public Sector	Private Corporate Sector	Household Sector	All Sector
(1)	(2)	(3)	(4)	(5)
Gross Investment :	361000	149000	288000	798000
	10.50%	4.33%	8.37%	23.20%
Financed by:				
1) Own Savings	68900	68930	605170	743000
	2.00%	2.00%	17.60%	21.60%
2) Borrowings				
2.1 From Households	258400	58770	-317170	0
	7.51%	1.71%	-9.22%	0.00%
2.2 From Rest of the World	33700	21300	0	55000
	0.98%	0.62%	0.00%	1.60%

Note: 1. Percentages are with reference to GDP at market prices during the 5 years of the Eighth Plan.  
2. For the Eighth Plan financial savings of household sector as a percentage of total household savings is projected at about 52%.

**Table 3.14 Sectoral Growth Rates of Gross Value Added at Factor Cost (GVA) and Value of Gross Output**

Sl. No.	Sector	Trend Growth Rate of G.V.A. 81-82 to 90-91 (10 Years)	Projected Growth Rate 92-93 to 96-97 (percent per annum)		Sectoral Share in GDP (Percent)	
			G.V.A.	Value of Gross Output	1991-92	1996-97
1.	2.	3.	4.	5.	6.	7.
1.	Agriculture	3.8	3.1	4.1	27.7	24.6
2.	Mining & Quarrying	6.8	8.0	8.9	2.0	2.3
3.	Manufacturing	7.2	7.3	8.2	21.5	23.3
4.	Electricity, Gas & Water	9.0	7.8	7.6	2.4	2.7
5.	Construction	3.6	4.7	5.3	5.1	4.9
6.	Transport	7.3	6.7	7.7	5.9	6.2
7.	Communication	6.2	6.1	6.9	1.2	1.2
8.	Other Services	6.5	6.0	6.6	34.2	34.8
9.	Total	5.6	5.6	6.7	100.0	100.0

in mining and manufacturing is to be somewhat higher than it was during the eighties. The infrastructure sectors like electricity and transport are projected at a little lower than the growth achieved during the eighties. This is mainly because the Eighth Plan will have to make vigorous efforts to achieve higher efficiency in the use of the products of these sectors. Table 3.14 also shows sectoral shares in GDP in the base year and the terminal year of the Eighth Plan. The share of mining and manufacturing together will, for the first time, exceed the share of agriculture in the year 1996-97.

3.4.3 Sectoral distribution of investment in the Eighth Five Year Plan has been derived from the pattern of sectoral output. The investments are related to output with a lag between investment and output. The estimates of average lags between investment and output are obtained through the analysis of past trends in investment-output relationships but with some modifications made in the light of expected changes in technology and efficiency in the use of energy

and other inputs. Gross Investment during the Eighth Plan distributed according to broad sectors of economic activity is presented in table 3.15. Agriculture, Irrigation and allied sectors will account for 18.65 per cent of total investment. Mining and Manufacturing will get 28.57 per cent; Electricity, Transport and Communication will take 27.08 per cent of the total and the remaining investment will be in the construction and services sectors. The sectoral investment in the five year period (1992-97) include the requirements for sustaining the growth in output in the post-plan period. A significant shift in investment is proposed in favour of Agriculture and allied sectors. Investment in agriculture had been declining over years, while the need for agricultural growth is all the more for maintaining food security as well as for generating employment. This Plan intends, therefore, to tilt the allocation in favour of agriculture. Attempt has been made to maintain the relative share of infrastructure sector in order to strengthen the foundations for growth in future.

**Table 3.15 Sectoral Investment during the Eighth Plan (1992-93 to 1996-97)**

(Rs. crores at 1991-92 prices)

Sl. No.	Sector	Public	Private	Total	Share of Public Sector in Total Investment by Sectors (%)	Sectoral Distribution		
						6th Plan	7th Plan	8th Plan
1.	2.	3.	4.	5.	6.	7.	8.	9.
1.	Agriculture	52000	96800	148800	34.95	15.24	11.23	18.65
2.	Mining & Quarrying	28500	11100	39600	71.97	6.06	6.70	4.96
3.	Manufacturing	47100	141300	188400	25.00	23.60	26.00	23.61
4.	Electricity, Gas & Water	92000	10120	102120	90.09	12.07	13.65	12.80
5.	Construction	3300	17240	20540	16.07	2.73	1.86	2.57
6.	Transport	49200	38710	87910	55.97	9.42	9.93	11.02
7.	Communication	25000	1000	26000	96.15	1.50	2.03	3.26
8.	Services	63900	120730	184630	34.61	29.38	28.60	23.13
9.	Total	361000	437000	798000	45.24	100.00	100.00	100.00

Note: Sixth & Seventh Plan figures are calculated at 1980-81 prices.

3.4.4 Distribution of Investment between public and private sectors at the sectoral level is based on the proposed reorientation in the relative roles of the private and the public sector objectives. The broad industrial groups where private sector is expected to have a much larger share than hitherto are electricity, communications, mining and quarrying particularly oil and coal, large industries in manufacturing sector (petro-chemicals, metals, fertilisers and heavy capital goods) and the organised segment of commercial services.

3.4.5 Employment implications of growth are presented in table 3.16. With the planned pattern of investment and production, the employment potential will grow at about 2.6 per cent per annum. In absolute terms it implies generation of about 8 million jobs per annum during the first couple of years of the Eighth Plan, and about 9 million jobs per year during the latter years, and more than 10 million jobs per year in

the post-Eighth Plan period. These employment projections are based on projected employment elasticities, which, in turn are based on plans to increase agricultural intensity and agricultural productivity, particularly in the eastern region and the dry belts. The pattern of industrialisation and choice of technique, wherever possible without sacrificing productivity, have to be such as to increase the possibility of labour absorption in manufacturing and other sectors. Services will also have to play a major role in generating employment.

#### **Public Sector Outlays by Heads of Development**

3.5.1 Allocations of investment by sectors of economic activities like agriculture, industry, transport, etc., are related to output targets in these activities. The public sector plan in these activities is implemented through programmes and projects which are administered by Departments of Central or a State Government and are

**Table 3.16 Sectoral Value Added and Employment Growth During Eighth Plan (1992-97)**

(Percent)

S.No. & Sector (1)	Sectoral Growth (Value Added) (2)	Employment Elasticity		Employment Growth	
		Achieved 1977-78 to 1983 (3)	Achieved 1983 to 1987- 88 (4)	Target for 8th Plan (5)	Using Elasticity as in (5) (6)
1. Agriculture	3.1	0.49	0.36	0.50	1.6
2. Mining and Quarrying	8.0	0.67	0.85	0.85	6.8
3. Manufacturing	7.3	0.68	0.26	0.50	3.7
4. Construction	4.7	1.00	1.00	1.00	4.7
5. Electricity, Gas & Water	7.8	0.74	0.48	0.50	3.9
6. Transport & Communication	6.6	0.92	0.35	0.60	3.9
7. Other Services	6.0	0.99	0.42	0.70	4.2
<b>Total</b>	<b>5.6</b>	<b>0.54</b>	<b>0.38</b>	<b>0.47</b>	<b>2.6</b>

provided for in the budget under various developmental heads. And hence, for implementational purposes allocations need also to be shown by 'heads of development'. These allocations are done for the total of public sector outlay which includes investment as well as the component of the current outlay.

3.5.2 In making these allocations high priority has been given to the programmes which enable the creation of "human capital". The programmes aimed at improving the income generating capability of the weaker sections and assuring adequate availability of food and wage goods also merit a higher share in the developmental expenditure of the Government. The emphasis on agriculture, rural development, special area programmes and irrigation follows from this strategy. Due care has also been taken to provide adequately as far as possible in the face of resource constraints, for the infrastructure sector, i.e., energy, basic industries, transport (rail, sea and air), and telecommunications, after allowing for the possibilities of private sector participation in these sectors. The allocation of outlays are presented in table 3.17. The table also gives an estimate of States/UTs-

wise outlays and estimated budgetary support and internal and extra-budgetary resources for the Central Plan. Table 3.18 gives the details of outlays at the level of sub-heads of development.

3.5.3 The distribution of public sector outlay between Centre and States is determined by the respective resource generation capabilities, on the one hand, and the distribution of the developmental responsibilities between the Centre and the States, on the other. As already mentioned, the States' own resources (Rs.101485 crores) will be augmented by making available Central Assistance for their Plan at a level of Rs.78,500 crores. In some of the developmental heads and programmes, such as, family welfare, eradication of disease/epidemics, reduction of illiteracy, poverty alleviation, etc., the Centrally sponsored schemes may continue. However, the number of such schemes will have to be reduced to the minimum essential. In some sectors such as power, roads/highways, large industries, village and small industries and science and technology, the investments made through the Central Plan over the past 10 to 15 years have been significant, giving adequate leverage to the Centre for influencing the out-

**Table 3.17 Public Sector Outlay by Major Heads of Development - Eighth Plan (1992-97) : Centre, States and Union Territories**

(Rs. Crores at 1991-92 prices)

Sl. No.	Head of Development	Centre			States	U.T.S.	Total	Eighth Plan % To Total	Seventh Plan % To Total
		Budget Support	IEBR	Total					
1	2	3	4	5	6	7	8	9	10
I.	Agriculture and Allied Activities \$	12394.00	224.00	12618.00	42135.35	239.15	54992.50	12.67	14.27
II.	Rural Development	24170.00	0.00	24170.00	10213.26	42.10	34425.36	7.93	5.01
III.	Special Area Programmes	0.00	0.00	0.00	6750.16	0.00	6750.16	1.55	1.75
IV.	Energy*	13136.00	53659.00	66795.00	47291.58	1474.51	115561.09	26.62	30.48
V.	Industry and Minerals	9186.00	28353.00	37539.00	9284.89	97.86	46921.75	10.81	12.48
VI.	Transport	8636.00	32341.00	40977.00	13786.58	1161.99	55925.57	12.88	12.76
VII.	Communication	715.00	24382.00	25097.00	12.50	0.48	25109.98	5.78	3.60
VIII.	Science and Technology	3739.00	200.00	3939.00	188.72	3.99	4131.71	0.95	1.13
IX.	Ecology and Environment#	1200.00	0.00	1200.00	3654.16	55.82	4909.98	1.13	1.27
X.	General Economic and General Services	1040.55	44.00	1084.55	5079.04	196.41	6360.00	1.47	0.94
XI.	Social Services	29508.45	4937.00	34445.45	41588.76	2977.69	79011.90	18.20	16.31
<b>Grand Total</b>		<b>103725.00</b>	<b>144140.00</b>	<b>247865.00</b>	<b>179985.00</b>	<b>6250.00</b>	<b>434100.00</b>	<b>100.00</b>	<b>100.00</b>

\* - Includes allocations for Integrated Rural Energy Planning Programme.

\$ Includes Irrigation and Flood Control.

# Includes allocations for Forestry and Wildlife.

comes in these sectors. Further expansion of the Centre's role will be at the expense of the initiatives expected from the States and local authorities. Table 3.20 gives details on State/Union Territory-wise and development head-wise outlays.

3.5.4 The Central Sector bears a residual responsibility for the plan objectives to the extent that these could not be realised through the State Plans or through private sector initiatives. At the same time it needs to be admitted that the traditional accounting and supervision mechanisms for keeping watch on public sector spending have not been fully effective. A more purposive identification of beneficiaries and focussed targetting in respect of public sector expenditure is essential if the Government has to perform its role in the face of severe resource shortages. Programmes need to be evaluated by organisations other than those who administer them. Programme Evaluation Organisation in the Planning Commission, National Sample Survey Organisation and well reputed research institutions will have to be constantly involved with the task of evaluation of programmes and performance.

3.5.5 Departmentwise allocations of outlays in the Central Sector and their financing through budgetary support and through internal and extra budgetary resources are indicated in table 3.19. As a rule, the budgetary support for infrastructures will be confined to i) making provision for external aid for creation of new assets; and (ii) realising longer term objectives in areas which the market would not be able to take care of (i.e., hydel power, rail transport, infrastructure for the undeveloped hinterlands, etc.).

3.5.6 The internal resources of public enterprises will be made available for capital expenditure after considering i) possible increases in prices of their services and products; ii) a reasonable return to the Government on equity (valued at market prices); and iii) repayment of loans to the Centre. Interest on Government loans to enterprises will be reckoned at rates not less than the borrowing rate of the Government at the margin.

3.5.7 Allocation of extra budgetary resources (EBR) to departments is indicative at this

stage, and will be reviewed keeping in view the performance measured at the capital market.

3.5.7.1 Outlays as envisaged here cannot anticipate the actual requirements of certain projects, still to be finalised in sectors such as steel and telecommunication. To the extent, the concerned ministries can finance the requirements of projects such as the modernisation of IISCO or Rourkela Steel Plant from out of their own internally generated resources, the corresponding outlays for these sectors may have to be marginally raised, after considering the savings in expenditure on other schemes, in the sector, and materialisation of benefits therefrom.

3.5.7.2 To realise the plan objectives of employment generation, universalisation of elementary education, removal of illiteracy, increasing agricultural output in the eastern region, larger output and employment in livestock/milch cattle based activities, providing substitute domestic fuels for fuel wood and kerosene in rural areas, the budget support for the Departments of Rural Development, Education, Agriculture and Cooperation, Agricultural Research & Education, Animal Husbandry and Non-Conventional Energy Sources has been raised sharply in comparison to the present annual expenditure of the respective departments. The actual allocation in the Annual Plans will be subject to

- i) utilisation of plan expenditure for creation of productive assets rather than on office staff, administrative expenditure, office buildings and equipment etc.;
- ii) evaluation of the benefits of ongoing programmes and the new programmes by an independent agency other than the implementing department, such as the Program Evaluation Organisation, National Sample Survey Organisation or other organisations specified by the Planning Commission; and
- iii) revenue earnings from the assets created being maximised and credited to the implementing agency so as to bring about a reasonable parity between costs and benefits during the plan period.

**Table : 3.18 Public Sector Outlay by Heads of Development - Eighth Plan (1992-97)**

(Rs. Crores at 1991-92 prices)

Sl. No. & Head of Development	Centre			States	U.T.s	Total
	Budget Support	IEBR\$	Total			
1	2	3	4	5	6	7
<b>I. Agriculture &amp; Allied Activities</b>	10894.00	224.00	11118.00	11190.25	158.96	22467.21
1. Crop Husbandry	4681.00	0.00	4681.00	4555.88	37.93	9274.81
2. Soil & Water Conservation	800.00	0.00	800.00	1497.44	7.38	2304.82
3. Animal Husbandry	400.00	0.00	400.00	1079.95	50.86	1530.81
4. Dairy Development	900.00	0.00	900.00	405.71	1.80	1307.51
5. Fisheries	467.00	0.00	467.00	733.45	32.37	1232.82
6. Plantations	132.00	58.00	190.00	17.41	0.00	207.41
7. Food, Storage & Warehousing	320.00	166.00	486.00	58.10	0.00	544.10
8. Agricultural Research & Education	1300.00	0.00	1300.00	711.39	6.31	2017.70
9. Agricultural Financial Institutions	244.00	0.00	244.00	276.68	0.00	520.68
10. Cooperation	1550.00	0.00	1550.00	1485.89	21.23	3057.12
11. Other Agricultural Programmes	100.00	0.00	100.00	368.35	1.08	469.43
<b>II. Rural Development</b>	24170.00	0.00	24170.00	10213.26	42.10	34425.36
1. Special Programme for Rural Development	4950.00	0.00	4950.00	2866.46	1.09	7817.55
2. Rural Employment	18400.00	0.00	18400.00	5244.88	0.00	23644.88
3. Land Reforms	240.00	0.00	240.00	845.54	1.88	1087.42
4. Other Rural Development Programmes	580.00	0.00	580.00	1256.38	39.13	1875.51
<b>III. Special Area Programmes</b>	0.00	0.00	0.00	6750.16	0.00	6750.16
1. Hill Areas	0.00	0.00	0.00	1450.00	0.00	1450.00
2. North Eastern Areas	0.00	0.00	0.00	1160.00	0.00	1160.00
3. Other Special Area Programmes	0.00	0.00	0.00	4140.16	0.00	4140.16
(a) Backward Areas	0.00	0.00	0.00	2250.16	0.00	2250.16
(b) Tribal Areas	0.00	0.00	0.00	1250.00	0.00	1250.00
(c) Others	0.00	0.00	0.00	640.00	0.00	640.00
<b>IV Irrigation &amp; Flood Control</b>	1500.00	0.00	1500.00	30945.10	80.19	32525.29
1. Major & Medium Irrigation	95.00	0.00	95.00	22310.21	9.32	22414.53
2. Minor Irrigation	293.00	0.00	293.00	5662.47	21.79	5977.26
3. Command Area Development	830.00	0.00	830.00	1679.33	0.80	2510.13
4. Flood Control and Drainage	282.00	0.00	282.00	1293.09	48.28	1623.37

Table : 3.18 Public Sector Outlay by Head of Development - Eighth Plan (1992-97)(contd.)

(Rs. Crores at 1991-92 prices)

Sl. No. & Head of Development	Centre			States	U.T.s	Total
	Budget Support	IEBR\$	Total			
1	2	3	4	5	6	7
<b>V. Energy</b>	12,710.00	50,59.00	60,795.00	47291.58	1471.51	114,561.09
1. Power	8992.00	22,779.00	31181.00	45961.86	1445.83	79588.74
2. Petroleum	527.00	23473.00	24000.00			24000.00
3. Coal & Lignite	2600.00	7907.00	10507.00			10507.00
4. Non Conventional Sources of Energy	1107.00	0.00	1107.00	329.72	28.63	1465.35
<b>VI. Industry &amp; Minerals</b>	9186.00	28,712.00	37539.00	9234.89	97.86	46921.75
1. Village & Small Industries	2458.00	0.00	2458.00	3803.05	73.15	6334.20
2. Iron & Steel Industries	774.00	1,685.00	14579.00			14579.00
3. Non Ferrous Mining & Metallurgical Industries	352.00	1746.00	2098.00	313.74	0.00	2911.74
4. Cement & Non-metallic Mineral Industries	0.00	300.00	300.00			300.00
5. Fertilizer Industries	1018.00	4466.00	5484.00			5484.00
6. Petrochemical Industries	38.70	4543.50	4582.20			4582.20
7. Chemical & Pharmaceutical Industries	23.30	223.50	246.80			246.80
8. Engineering Industries	449.22	1771.61	2220.83			2220.83
9. Telecommunication & Electronic Industries	493.00	579.00	1072.00			1072.00
10. Consumer Industries	224.78	518.39	743.17			743.17
11. Atomic Energy Industries	800.00	400.00	1200.00			1200.00
12. Other Industries	80.00	0.00	80.00	4668.10	24.71	4772.81
13. Other Outlays on Industries & Minerals	2475.00	0.00	2475.00			2475.00
<b>VII. Transport</b>	8636.00	32341.00	40977.00	13786.58	1161.99	55925.57
1. Railways	5375.00	21827.00	27202.00			27202.00
2. Ports & Lighthouses	500.00	2773.00	3273.00	260.85	79.73	3613.58
3. Shipping	150.00	3250.00	3400.00		268.91	3668.91
4. Civil Aviation	107.00	3891.00	3998.00	45.26	40.00	4083.26
5. Roads & Bridges	2000.00	600.00	2600.00	9516.19	716.99	12833.18
6. Road Transport	264.00	0.00	264.00	3799.47	55.63	4119.10
7. Inland Water Transport	240.00	0.00	240.00	91.14	0.00	331.14
8. Other Transport Services				73.67	0.73	74.40

Table 3.10 Public Sector Outlay by Heads of Development - Eighth Plan (1992-97)(contd.)

(Rs. Crores at 1991-92 prices)

Sl. No & Head of Development	Centre			States	U.T.s	Total
	Budget Support	IEBR\$	Total			
1	2	3	4	5	6	7
<b>VIII. Communication</b>	715.00	24382.00	25097.00	12.50	0.48	25109.98
1. Postal Services	325.00	0.00	325.00			325.00
2. Telecommunication Services	364.00	23582.00	23946.00			23946.00
3. Other Communication Services	26.00	800.00	826.00	12.50	0.48	838.98
<b>IX. Science, Technology &amp; Environment</b>	4939.00	200.00	5139.00	3842.88	59.81	9041.69
1. Atomic Energy Research	600.00	0.00	600.00			600.00
2. Space Research	1604.00	200.00	1804.00			1804.00
3. Oceanographic Research	115.00	0.00	115.00			115.00
4. Other Scientific Research	1420.00	0.00	1420.00	188.72	3.99	1612.71
5. Ecology & Environment	675.00	0.00	675.00	149.00	4.11	828.11
6. Forestry & Wildlife	525.00	0.00	525.00	3505.16	51.71	4081.87
<b>X. General Economic Services</b>	924.00	44.00	968.00	3540.66*	40.86	4549.52*
1. Secretariat Economic Services	7.00	0.00	7.00	395.03	3.37	405.40
2. Tourism	240.00	32.00	272.00	505.18	26.92	804.10
3. Foreign Trade & Export Promotion	115.00	12.00	127.00			127.00
4. Census, Surveys & Statistics	106.00	0.00	106.00	84.72	3.15	193.87
5. Meteorology	130.00	0.00	130.00			130.00
6. Civil Supplies	30.00	0.00	30.00	123.50	5.72	159.22
7. General Financial & Trading Institutions	75.00	0.00	75.00			75.00
8. Technical & Economic Cooperation with other Countries	0.00	0.00	0.00			0.00
9. Other General Economic Services	221.00	0.00	221.00	2396.24	1.70	2618.94
<b>XI. Social Services</b>	29508.45	4937.00	34445.45	41588.76	2977.69	79011.90
1. General Education	6619.00	0.00	6619.00	9607.19	587.16	16813.35
2. Technical Education	824.00	0.00	824.00	1804.66	157.72	2786.38
3. Sports & Youth Services	350.00	0.00	350.00	509.06	30.54	889.60
4. Art & Culture	350.00	35.00	385.00	324.76	17.93	727.69
5. Medical & Public Health	1800.00	0.00	1800.00	5307.77	468.15	7575.92
6. Family Welfare	6500.00	0.00	6500.00			6500.00
7. Water Supply & Sanitation	5743.00	225.00	5968.00	9847.26	895.77	16711.03
8. Housing	831.35	860.00	1691.35	3409.08	172.59	5273.02
9. Urban Development	692.10	600.00	1292.10	3461.73	523.15	5276.98

**Table : 3.18 Public Sector Outlay by Heads of Development - Eighth Plan (1992-97)(contd.)**

(Rs. Crores at 1991-92 prices)

Sl. No. & Head of Development	Centre			States	U.T.s	Total
	Budget Support	IEBR\$	Total			
1	2	3	4	5	6	7
10. Information and Publicity	184.05	15.00	199.05	215.68	6.78	421.51
11. Broadcasting	232.95	3202.00	3434.95			3434.95
12. Welfare of SC,ST and Other Backward Classes	2549.42	0.00	2549.42	3050.97	35.09	5635.48
13. Labour & Employment	449.58	0.00	449.58	839.98	24.41	1313.97
14. Social Welfare	2373.00	0.00	2373.00	1467.72	14.49	3855.21
15. Nutrition	10.00	0.00	10.00	1742.40	43.91	1796.31
16. Secretariat Social Services				0.50	0.00	0.50
<b>XII. General Services</b>	<b>116.55</b>	<b>0.00</b>	<b>116.55</b>	<b>1538.38*</b>	<b>155.55</b>	<b>1810.48*</b>
1. Secretariat-General Services	5.00	0.00	5.00			5.00
2. Stationery & Printing	0.50	0.00	0.50	85.17	6.09	91.76
3. Police	25.00	0.00	25.00			
3. Public Works	36.05	0.00	36.05	1224.99	107.21	1368.25
4. Other Administrative Services	50.00	0.00	50.00	198.37	42.25	290.62
<b>GRAND TOTAL</b>	<b>103725.00</b>	<b>144140.00</b>	<b>247865.00</b>	<b>179985.00</b>	<b>6250.00</b>	<b>434100.00</b>

\* Figures may not add-up to total Schematic details pertaining to one State are awaited.

\$ Where rules at present do not permit creation of internal resources outside the Consolidated Fund of India, IEBR has been shown in anticipation of evolution of appropriate mechanism to create such resources.

**Table 3.19 Central Sector Outlays For The Eighth Plan (1992-97)**

(Rs. Crores)

Eighth Plan (1992-97) (At 1991-92 Prices)				
Sl. No	Ministry/ Department	Outlay	Budgetary Support	Internal and Extra Budgetary Resources
1	2	3	4	5
1.	Animal Husbandry and Dairying	1300	1300	0
2.	Environment and Forests	1200	1200	0
3.	Food	310	144	166
4.	Food Processing Industries	146	146	0
5.	Agriculture Res. & Education	1300	1300	0
6.	Agriculture and Cooperation	7400	7400	0
7.	Rural Development	30000	30000	0
8.	Water Resources	1500	1500	0
9.	Power	25920	7941	17979
10.	Petroleum & Natural Gas	26552	527	26025
11.	Coal	11507	2800	8707
12.	Non-Conventional Energy Sources	857	857	0
13.	Small Scale, Agro & Rural Indust.	1627	1627	0
14.	Steel	14579	774	13805
15.	Mines	2083	337	1746
16.	Industrial Development	1162	1162	0
17.	Fertilisers	5484	1018	4466
18.	Chemicals and Petrochemicals	2402	62	2340
19.	Heavy Industries	2771	388	2383
20.	Telecommunications	25137	390	24747
21.	Electronics	588	475	113
22.	Textiles	1007	927	80
22.1	Consumer Industries segment	177	97	80
22.2	Vill. & Small Industries segmt.	831	831	0
23.	Atomic Energy	6161	2161	4000
24.	Railways	27202	5375	21827
25.	Surface Transport	9929	3304	6625
26.	Civil Aviation	3998	107	3892
27.	Postal Services	325	325	0
28.	Science and Technology	640	640	0
29.	Space	1804	1604	200
30.	Ocean Development	130	130	0
31.	Bio-Technology	265	265	0
32.	Scientific and Indstl. Research	655	655	0
33.	Tourism	272	240	32

**Table 3.19 Central Sector Outlays For The Eighth Plan (1992-97)(contd.)**

(Rs. Crores)

Eighth Plan (1992-97) (As 1991-92 Prices)				
Sl. No.	Ministry/ Department	Outlay	Budgetary Support	Internal and External Budgetary Resources
1	2	3	4	5
34.	Commerce	351	281	70
35.	Statistics	69	69	0
36.	Civil Supplies and PDS	45	45	0
37.	Economic Affairs	1944	1944	0
38.	Expenditure	13	13	0
39.	Education	7443	7443	0
40.	Youth Affairs and Sports	350	350	0
41.	Art & Culture	385	350	35
42.	Health	1800	1800	0
43.	Family welfare	6500	6500	0
44.	Urban Development	3158	1473	1685
45.	Information and Broadcasting	3634	417	3217
46.	Welfare	2923	2923	0
47.	Labour	451	451	0
48.	Women and Child Development	2000	2000	0
49.	Home Affairs	37	37	0
50.	Supply	13	13	0
51.	Personnel, Public Grievances & Pensions	34	34	0
52.	Official Languages	8	8	0
53.	Planning	496	496	0
Total		247865	103725	144140

**Table - 3.20 : State/Union Territory-wise and Broad Sector-wise outlay for the Eighth Plan 1992-97**

(Rs. Crores at 1991-92 Prices)

S.No. States and Union Territories	HEADS OF DEVELOPMENT												Total
	Agriculture & Allied Activities & Irrigation & Flood Control	Rural Development	Special Area Programme	Energy (incl. IREP)	Industry & Minerals	Transport	Communication	Science and Tech.	Ecology and Environment (incl. Forestry & Wild life)	Social Services	Others		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Andhra Pradesh	2844.58	532.97	450.00	3043.62	272.50	1153.54	0.00	2.00	68.42	2066.53	65.84	10500.00	
2. Arunachal Pradesh	180.96	36.32	0.00	151.96	24.49	343.93	0.00	0.47	47.34	321.63	47.90	1155.00	
3. Assam	776.61	186.66	11.84	1196.85	322.76	294.86	0.00	4.62	116.99	1642.04	108.77	4662.00	
4. Bihar	3977.29	1089.92	77.33	2149.13	458.14	1462.61	0.00	7.82	190.60	2918.54	668.62	13000.00	
5. Goa	178.75	14.60	0.00	55.75	36.20	107.45	0.00	3.00	11.30	297.10	56.85	761.00	
6. Gujarat	4188.00	421.20	0.00	2678.50	667.00	640.00	9.00	5.50	309.50	2255.40	325.90	11500.00	
7. Haryana	966.68	119.30	20.00	1711.84	220.47	391.38	0.00	6.62	123.70	1968.80	171.21	5700.00	
8. Himachal Pradesh	349.35	74.20	0.00	510.25	75.75	328.15	3.00	2.75	211.85	748.15	198.55	2502.00	
9. Jammu & Kashmir	536.02	96.80	216.50	1180.28	194.00	280.60	0.00	1.90	107.60	1226.00	160.30	4000.00	
10. Karnataka	3079.24	427.50	575.00	3046.50	984.00	448.00	0.00	8.00	209.76	3260.25	261.75	12300.00	
11. Kerala	1352.50	303.97	2.50	1238.00	810.00	433.00	0.00	21.93	98.05	1077.18	122.87	5460.00	
12. Madhya Pradesh	3232.59	523.49	0.00	3581.80	465.72	429.26	0.00	6.41	212.58	2079.01	569.14	11100.00	
13. Maharashtra	4177.11	1712.61	216.56	4582.71	814.46	1731.72	0.00	5.68	504.64	4187.13	587.38	18520.00	
14. Manipur	245.49	14.50	0.00	187.45	39.80	160.60	0.00	4.00	24.00	255.90	47.26	979.00	
15. Meghalaya	149.26	37.59	10.67	172.23	42.70	207.29	0.00	1.93	61.91	274.63	70.79	1029.00	
16. Mizoram	83.10	130.25	0.00	104.00	44.25	103.10	0.00	1.95	31.30	212.45	52.60	763.00	
17. Nagaland	109.50	96.50	10.50	60.80	49.00	161.70	0.00	1.00	28.90	225.80	100.30	844.00	
18. Orissa	3723.03	402.35	0.00	2647.70	785.70	592.90	0.00	45.56	112.01	1543.76	146.99	10000.00	
19. Punjab	1151.60	187.29	50.91	2429.00	162.92	357.84	0.00	7.50	60.28	1887.48	275.18	6570.00	
20. Rajasthan	2880.36	1021.76	84.00	3255.48	535.55	783.97	0.00	7.00	339.51	2461.62	130.75	11500.00	
21. Sikkim	69.00	11.80	0.00	135.50	20.80	85.00	0.00	2.50	19.00	167.90	38.50	550.00	
22. Tamil Nadu	1413.15	446.00	0.00	3020.00	550.00	707.00	0.00	10.00	215.00	3779.65	59.20	10200.00	

**Table - 3.20 : State/Union Territory-wise and Broad Sector-wise outlay for the Eighth Plan 1992-97(contd.)**

(Rs.Crores at 1991-92 Prices)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
23.Tripura	279.00	73.75	90.00	121.25	64.60	105.00	0.50	2.25	27.25	350.30	16.10	1130.00	
24.Uttar Pradesh	4670.45	1569.15	290.00	7006.26	569.30	1902.53	0.00	10.00	379.54	4009.20	593.57	21000.00	
25.West Bengal	1521.73	682.78	144.35	3024.72	1074.78	575.15	0.00	18.33	143.13	2372.31	202.72	9760.00	
26.Special Area Programmes			4500.00 *									4500.00	
Total - A :States	42135.35	10213.26	6750.16	47291.58	9284.89	13786.58	12.50	188.72	3654.16	41588.76	5079.04	179985.00	
1.A & Nicobar Islands	35.83	2.20	0.00	64.72	6.90	394.85	0.00	1.35	25.25	131.41	22.49	685.00	
2.Chandigarh	4.82	5.00	0.00	55.40	2.84	16.45	0.00	0.15	8.60	298.01	8.73	400.00	
3.Dadra & Nagar Haveli	21.55	2.63	0.00	5.51	3.25	6.76	0.00	0.38	8.00	26.66	5.26	80.00	
4.Daman & Diu	9.49	0.55	0.00	7.47	2.76	11.97	0.00	0.40	1.10	22.32	8.94	65.00	
5.Delhi	88.35	21.25	0.00	1223.50	30.00	660.00	0.00	0.30	9.35	2334.50	132.75	4500.00	
6.Lakshadweep	25.20	1.89	0.00	15.51	3.40	42.14	0.48	1.28	0.85	24.04	5.21	120.00	
7.Pondicheery	53.90	8.58	0.00	102.40	48.71	29.82	0.00	0.13	2.67	140.76	13.03	400.00	
Total - B Union Territories	239.14	42.10	0.00	1474.51	97.86	1161.99	0.48	3.99	55.82	2977.70	196.41	6250.00	
Grand Total : (States & Union Territories)	42374.49	10255.36	6750.16	48766.09	9382.75	14948.57	12.98	192.71	3709.98	44566.46	5275.45	186235.00	
* -	Special Area Programmes												
NEC-	1160.00												
TSP-	1250.00												
HADP -	1450.00												
BADP -	640.00												
Total	4500.00												

## Structure of Output

3.6.1 The output profile in the Eighth Five Year Plan in respect of important commodities and services, which are relevant on considerations of investment, long term growth or trade balance, is presented in Table 3.20. The targets are indicative, and are based on 60 sector consistency model. The following considerations have been broadly kept in view while preparing the indicative output profile for the next five years:

- a) The progressive elimination of protection to domestic industries, particularly in the organised sector, and its ultimate reflection in improved competitive efficiency should be reflected in larger foreign trade of the bulk commodities. It should be desirable to import as well as to export the bulk commodities so as to bring the domestic production structure in line with the external levels of productive efficiency.
- b) Even in the case of commodities where domestic production has a strong base, it would be prudent to plan for imports to meet the fluctuating component of the demand, so that the domestic capacity utilisation is maximised. Fertiliser is an example.
- c) It is recognised that the indigenous technology cannot immediately adjust to the international levels particularly in village and small industries, where also the wage component of value added is high. Therefore, a fair measure of protection to this segment of the domestic industry will have to be ensured for a few years.

3.6.2 The Eighth Plan for agricultural development aims at generating surplus for exports in foodgrains and attaining self-sufficiency in respect of pulses and oilseeds. The agricultural sector is expected to grow at an average annual rate of little more than 4 per cent in terms of gross value of output and 3 per cent in terms of value added.

3.6.3 In order to attain the desired growth in agriculture, special efforts will be made for enhancing the productivity and reducing the instability in production. Since two-third of the

cultivated area is still unirrigated and largely rainfed, a greater emphasis will be laid on dry land farming. Efforts will be made to spread the benefits of Green Revolution to other parts of the country particularly to the eastern region which has adequate rainfall and fertile soil. In order to provide assured and regulated water supply there is need to develop large number of tubewells in this region. Investments will be made in expansion of irrigation in general, with emphasis on the completion of on-going irrigation projects and reducing time and cost overruns in all major and medium irrigation projects. Attention will be paid to improving irrigation efficiency and reducing wastages of water and damages to land. Appropriate pricing of water, quantitative control on water application to land and better institutional arrangements for efficient and equitable distribution of water are some of the important measures stipulated in order to achieve efficiency and equity in irrigation sector. Targets for agricultural production in respect of foodgrains and some other important crops are presented in table 3.22.

3.6.4 The output in the mining and manufacturing sector during the Eighth Plan period is estimated to grow at about 8 per cent per annum. Details of material balances in respect of coal and electricity and details of demand in respect of petroleum products and railway traffic are presented in tables 3.23 to 3.26. These commodities being either in the nature of infrastructure or crucial inputs, are at the very base of industrial growth. Achievements of targets in these sectors is very important. Though the scarcity of resources during the Eighth Plan is likely to cause some concern regarding the performance of these sectors, the proposed entry of private sector in sectors like power, energy and steel is likely to ease the investment problem to some extent. Measures like improved capacity utilisation, efficiency in use of inputs, particularly energy, sensitiveness to market signals, etc. will help improve the performance in these sectors. The recent policy changes and the liberalised environment created for increased foreign investments are likely to help further in achieving the desired results in the industrial sector.

3.6.5 Power, iron and steel, cement and railways account for over 80 per cent of the total consumption of coal (Table 3.23). In power

**Table - 3.21 Material Balance For Selected Commodities**

Sl.No. & Commodity	Unit	1991-92	1996-97
<b>1. Foodgrains</b>	Mill.Tonnes.		
Production		172.50	210.00
Export/Stock		(-)6.30	2.00
Consumption		178.80	208.00
<b>2. Oilseeds</b>	Mill.Tonnes.		
Production		17.50	23.00
Consumption		17.50	23.00
<b>3. Sugarcane</b>	Mill.Tonnes.		
Production		235.00	275.00
Consumption		235.00	275.00
<b>4. Cotton</b>	Mill.Bales.		
Production		10.50	14.00
Export		0.60	0.30
Consumption		9.90	13.70
<b>5. Milk</b>	Mill.Tonnes.		
Production		57.50	70.00
Consumption		57.50	70.00
<b>6. Coal</b>	Mill.Tonnes.		
Production		229.26	308.00
Import		6.09	3.00
Export		0.11	1.00
Change in Stock		6.41	-
Consumption		228.83	310.00
<b>7. Crude Oil</b>	Mill.Tonnes.		
Production		30.34	50.00
Import		24.00	13.32
Change in Stock		2.92	
Consumption		51.42	63.32
<b>8. Iron Ore</b>	Mill.Tonnes.		
Production		56.50	72.00
Export		32.00	32.00
Consumption		24.50	40.00
<b>9. Sugar</b>	Mill.Tonnes.		
Production		12.00	15.50
Import			1.00
Export		0.60	4.00
Change in Stock			(-)1.00 \$
Consumption		11.40	13.50
<b>10. Cloth</b>	Bill.Mtrs.		
Production		18.26	24.70
Export (Net)	Rs.Crores	12000.00	28000.00
Consumption		16.68	22.80

Table - 3.21 Material Balance For Selected Commodities(contd.)

Commodity	Unit	1991-92	1996-97
<b>11. Petroleum products</b>	Mill. Tonnes.		
Production		49.15 *	61.57 *
Import		9.44	22.92
Export		2.70	3.30
Change in Stock		(-)0.77	-
Consumption		56.66	81.19
<b>12. Nitrogenous Fertilizers</b>	Mill. Tonnes.		
Production		7.30	9.80
Import		0.50	1.70
Change in Stock		(-)0.70	-
Consumption		8.50	11.50
<b>13. Phosphatic Fertilizers</b>	Mill. Tonnes.		
Production		2.50	3.00
Import		0.90	2.00
Change in Stock		(-)0.20	-
Consumption		3.60	5.00
<b>14. Potassic Fertilisers</b>	Mill. Tonnes.		
Import		1.30	1.80
Change in stock		(-)0.10	-
Consumption		1.40	1.80
<b>Total Fertiliser nutrients</b>	Mill. Tonnes.		
Production		9.80	12.80
Import		2.70	5.50
Change in Stock		(-)1.00	-
Consumption		13.50	18.30
<b>15. Cement</b>	Mill. Tonnes.		
Production		53.00	76.00
Import			2.00
Export		1.00	7.00
Consumption		52.00	71.00
<b>16. Finished Steel (main + mini)</b>	Mill. Tonnes.		
Production		14.50	22.80
Import (canalised)		1.00	1.00
Export		0.30	2.80
Consumption		15.20	21.00
<b>17. Aluminium</b>	Th. Tonnes		
Production		514.17	656.00
Import		3.00	16.00
Export		68.00	-
Consumption		449.17	672.00

**Table - 3.21 Material Balance For Selected Commodities(contd.)**

Commodity	Unit	1991-92	1996-97
<b>18. Copper (refined)</b>	Th. Tonnes		
Production		45.49	55.00
Import(Incl.d.non-canalised)		104.51	145.00
Consumption		150.00	200.00
<b>19. Zinc (Primary Metal)</b>	Th. Tonnes		
Production		102.00	154.00
Import		10.00	26.00
Consumption		112.00 **	180.00
<b>20. Lead (Primary Metal)</b>	Th. Tonnes		
Production		48.39	96.00
Import(Incl.d.non-canalised)		20.00	4.00
Consumption		68.39	100.00
<b>21. Electricity</b>	Bill. KWH		
Generation(incl.non-utilities)		311.21	448.00
Import		1.43	2.00
Consumption		312.64	450.00
<b>22. Railways</b>	Mill. Tonnes		
(Originating traffic)		363.00	443.40

\$ The closing stock of sugar as on 31.1.92 was 4.93 million tonnes.

\* Includes production of LPG from natural gas one million tonne & 2.05 mill.tons. for 1991-92 & 1996-97 respectively

\*\* Abnormally Low Consumption

Table 3.22 Estimates of Area and Output for 1991-92 and target for 1996-97

Sl. No.	Commodity	Output Unit	1991-92			1996-97			Annual Growth in Prod. *
			Area	Prod.	Yield	Area	Prod.	Yield	
			4	5	6	7	8	9	
1	Rice	M.T.	42.50	72.50	1706	43.50	88.00	2023	3.95
2	Wheat	,,,	23.50	56.00	2383	24.25	66.00	2722	3.34
3	Coarse Cereals	,,,	37.50	30.00	800	37.75	39.00	1033	5.40
4	Pulses	,,,	23.50	14.00	596	24.50	17.00	694	3.96
5	All foodgrains	,,,	127.00	172.50	1358	130.00	210.00	1615	4.01
6	Oilseeds	,,,	23.50	17.50	745	24.50	23.00	939	5.62
7	Sugercane	,,,	3.70	235.00	63514	3.90	275.00	70513	3.19
8	Cotton	MB(170)	7.40	10.50	241	7.50	14.00	317	5.92
9	Jute & Mesta	MB(180)	1.00	9.00	1620	1.00	9.50	1710	1.09
10	Other Crops		19.60			23.70			
11	All Crops		182.20			190.60			

MB(170) = Million Bales of 170 kg.

MB(180) = Million Bales of 180 kg.

\* Compound

sector about 30538 MW of capacity addition is anticipated during the Eighth Plan. With this, the total generating capacity by 1996-97 in utilities will be 99620 MW. The share of thermal generation would continue to be higher, even though, gas based generation will replace coal based generation to some extent. The total electricity generation from utiliaround ties is

8 Bkwh, of  
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further. As

per modernisation programme taken up in the coal washeries, the washery yield is likely to go up and accordingly the total coal demand for steel plants works out to 40.00 million tonnes.

3.6.6 The demand of petroleum products will continue to surpass the indigenous production (Table 3.24). The rate of growth during the Seventh Plan was 6.87 per cent per annum and with the continuing shift towards road transport and depletion of fuel wood for use as household fuel in rural areas, it is likely to grow at the same level during the Eighth Plan. The growth in consumption of petroleum products will have to be restricted without affecting the overall economic growth. Oil conservation and demand management would be given priority.

3.6.7 Oil production in 1989-90 was 34.10 million tonnes which declined to 33.02 million tonnes and 30.34 million tonnes in 1990-91 and 1991-92 respectively. The decline may continue into the early years of Eighth Plan. The fall in

**Table - 3.23 Demand-Supply Balance, Coal  
(1996-97)**

		(Million Tonnes)	
S.No	Item	1991-92	1996-97
1.	Steel Plants & Coke Ovens	31.66	42.00
2.	Sponge Iron	0.40	2.00
3.	Power (Utility)	134.60	185.30
		(2.30)	(4.70)
4.	Railways	4.42	3.00
5.	Cement	9.97	17.50
6.	Fertilisers	4.23	4.00
7.	LTC, Soft Coke, SSF	0.99	4.00
8.	Other Industries )		
	a) Captive Power )		15.00
		) 38.50	(2.10)
	b) Bricks etc. )		33.20
			(0.20)
	9. Colliery Consumption	4.06	4.00
10.	Domestic Requirement (1 to 9)	228.83	310.00
		(2.30)	(7.00)
11.	Export	0.11	1.00
12.	Total Requirement (10+11)	228.94	311.00
		(2.30)	(7.00)
13.	Production	229.26	308.00
14.	Import	6.09	3.00
15.	Change in Stock (13+14-12)	+6.41	0.00

Figures in bracket indicate washery middlings.

oil production has come at a time when the balance of payments position is under severe strain. The higher oil imports will reduce the availability of resources for investment needed for growth in the post Eighth Plan period. It is planned to develop western offshore oil fields during the Eighth Plan, which may raise the production to a level of 50.00 million tonnes by 1996-97. Bombay high will contribute about 60-65 per cent and the rest would be from Krishna-Godavari basin, Cambay basin and Upper Assam oil fields. In order to maintain the Reserve-to-Production ratio with respect to crude oil at a reasonable level, it will be necessary

to lay emphasis on oil exploration and development of wells for accretion of additional reserves. Recent changes in trade & industry policies are likely to encourage foreign investments. Production of natural gas is progressively increasing. In 1989-90 the production of natural gas was 16.99 billion cubic metres and is envisaged to be 30.00 billion cubic metres in 1996-97. Natural gas would serve as the substitute for petroleum products during the Eighth Plan in fertilizer, petrochemicals, power and domestic sectors. The compressed natural gas (CNG) in transport sector would cut imports of HSD to a limited extent.

3.6.8 The consumption of fertilizers has increased from 5.52 million tonnes in 1980-81 to an estimated 12.57 million tonnes in 1990-91 registering a growth rate of 8.6 per cent per annum during the period. The demand for fertilizer nutrients during the terminal year of the Eighth Plan (1996-97) has been estimated at 18.3 million tonnes. The capacity for the production of fertilisers has not been increasing at the same pace, leading to increased dependence on imports. The installed capacity in 1990 was 8.15 million tonnes and 2.72 million tonnes respectively for nitrogenous (N) and phosphatic (P) fertilizers. There has been no significant addition to the capacity in the last three years. However, capacity utilisation during the Seventh Plan has improved. While projecting the production for fertilizer during the Eighth Plan, a capacity utilisation of 90 per cent is assumed in respect of N and P fertilizers. The entire demand of potassic fertilizer is met through imports as there has been no indigenous production. In order to sustain agricultural growth, it is necessary to provide for expansion of the industry further in order to reduce dependence on imported fertiliser.

3.6.9 The production of cement during 1990-91 has touched an all time high of 48.70 million tonnes against an earlier high of 45.80 million tonnes achieved during the terminal year of the Seventh Plan. The private sector accounts for 84 per cent of the total cement production. The industry's capacity utilisation is showing a gradual improvement over the previous years. In projecting the target for production of cement during the Eighth Plan, an average of 80 per cent capacity utilisation is assumed. This would imply the need for an additional capacity of 29.3

Table - 3.24 Sectorwise Demand of Petroleum Products in 1996-97

(000 Tonnes)

End Use Products	Transport				Industry(1)												Agriculture			Electric		Total		
	Rail	Water	Way	Road	Air	Iron & Steel	Textil	Cement	Ceramic Glass	Chem	Alum	Sugar	Mining	Engg	Fertil	Const others	Indust Total	Misc	Tractor	Pumpset	Plantation		Utility	Domestic Use
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
<b>Light Dist.</b>																								
LPG																403							3634	4037
Mogas				7504												150								7654
Naphtha						25			3483					2756		6264						70		6334
SBP/Hexane	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	497
Others	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	497
<b>Sub Total</b>			7504		25			3483						2756		6817						70	3634	18522
<b>Middle Dist.</b>																								
SKO																529							11571	12100
HSD	2085	538	20092		74	310	414	30	169	8	66	745	213	43	250	2322	600	3082	3244			425		32217
ATF				2452																				2452
LDO	9	85	18		47	31	18	36	94	10	3	9	81	7	250	586	375			40		328		1441
Others																								624
<b>Sub Total</b>	2094	623	20110	2452	121	341	432	66	263	18	69	754	294	50	500	3437	975	3082	3284			582	11571	48834
<b>Heavy Dist.</b>																								
FO	27	636	15		235	376	77	112	395	159	15	35	175		600	2179	270				140	1947		5214
LSHS/HHS			5		275	352	49	137	254	70	4	24	52	2215	200	3632	20				40			3697
Lubes & Grease																								1335
Bitumens																2579								2579
Pet Coke	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	1017
Others	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	)	1017
<b>Sub Total</b>	27	636	20		510	728	126	249	649	229	19	59	227	2215	3379	8163	290				180	1947		13842
<b>Total</b>	2121	1259	27634	2452	656	1069	558	315	4395	247	88	813	521	5021	3879	18417	1265	3082	3284	180	2599	15205		81198

(1) Includes demand for captive power generation and certain transportation needs.

million tonnes during the Eighth Plan. In the recent years considerable investment, financed by foreign aid, has been made for modernisation of cement industry in the private sector. This has improved the efficiency of operations in the industry. Cement industry should start contributing to earning of foreign exchange by exports during the Eighth Plan.

3.6.10 The success of planning in steel sector can be seen from not only the efficiency of integrated steel plants like Bhilai and Bokaro in public sector and TISCO in private sector but also from the timely entry of secondary steel producers to complement the role of integrated steel plants. With the liberalisation of economy a new boost has been given to the inflow of international capital, technology and capital goods. The steel sector has been delicensed and the units which satisfy international norms in terms of costs and quality can find new investment opportunities in India. Prices of steel products are not administered now, which had been the practice for many decades in India. The share of public sector in production of steel is expected to decline from the present 54 per cent to below 50 per cent by the end of the Eighth Plan and simultaneously, its share will be replaced by the production from the private sector in organised and unorganised sectors. The advent of sponge iron making in India using non-coking coal and natural gas will reduce the dependencies of secondary steel sector on imported scrap as their raw-material. New technologies will dominate the steel sectors activity in the Eighth Plan and beyond, particularly in the organised sector.

3.6.11 The estimated demand for finished steel is about 21 million tonnes by 1996-97. The whole demand for finished steel will be met through domestic production. However, imports of one million tonnes is envisaged for those items which are either in short supply or are of qualities which are not manufactured in India due to reasons of economies of scale. Like the cement industry, large investments have been made in the Seventh Plan for modernisation of steel plants. An export of about three million tonnes would be feasible.

3.6.12 Growth in electricity generation from utilities and non-utilities was 8.44 per cent per annum in the Sixth Plan and 9.46 per cent per

annum in the Seventh plan. Gross electricity generation in 1989-90 was 266 billion kwh. The consumption of electricity at consumer's end was about 196 Bkwh in 1989-90.

3.6.13 The demand for electricity at consumers' end is placed at 336 Bkwh in 1996-97, indicating a growth of 8.21 per cent during the Eighth Plan. Demand of power is rising consistently because of its easy availability and relatively lower price. Non-utilities are expected to generate about 30.0 Bkwh. If the T&D losses and auxiliary losses are contained at the level of 21.0 per cent and 7.0 per cent respectively, the generation from utilities will be around 418 Bkwh (Table 3.25). For achieving the targetted generation of electricity additional capacity required to be set up during the Eighth Plan will be about 30538 MW. There have been continuous increases in outlays for this sector over the Plan periods. The Central sector is emerging as a major contributor since the last decade. Centre's share now stands at about 26 per cent of the total installed generating capacity. The Eighth Plan envisages giving larger role in electricity generation to the private sector. This sector's share in capacity at present is only 2.4 per cent. Separate industrial or consumption zones can be created for private sector so that they can have their own generation and evacuation structures. Terms of private sector participation need to be clearly spelt out.

3.6.14 A project-wise analysis indicates that it may be possible to achieve a capacity addition of 30538 MW during the plan period. This includes a capacity of 2810 MW which will be added in the private sector. A further addition of about 2000-3000 MW in private sector will help in improving the power supply position further during the course of the Eighth Plan. About Rs. 67000 crores will be available for investment in the Central and State sectors for the projects likely to yield benefit around the end of the Eighth Plan. Priorities should also be given to new starts and advance action should be taken on hydro projects to improve its share during the subsequent Plan. There is great need to check the pilferages and curb the transmission and distribution losses by way of adopting separate metering systems. There is need for further improvement in the integrated operation of regional grids and creation of a national grid for better load management. Hence a higher provi-

Table 3.25 Demand - Supply Balance, Electricity

(Billion Kwh)

S.No.	Item	1991-92	1996-97	Compound Gr. rate (percent)
<b>A.</b>	<b>Demand</b>			
	1. Industrial	112.60	155.00	6.60
	2. Domestic	34.12	65.46	13.92
	3. Agriculture	53.48	76.00	7.28
	4. Others	26.14	39.38	8.54
	<b>Total</b>	<b>226.34</b>	<b>335.84</b>	<b>8.21</b>
<b>B.</b>	<b>Supply</b>			
	1. Generation by Utilities(2+4+5-3)	286.71	418.21	7.84
	2. Auxiliary Consumption	22.51	29.27	-
	3. Import	1.43	2.00	-
	4. T & D Losses	61.09	82.10	-
	5. Supply from Utilities	204.54	308.84	8.59
	6. Generation by Non-Utilities (7+8)	24.50	30.00	4.13
	7. Auxiliary Consumption	2.70	3.00	-
	8. Supply from Non-Utilities	21.80	27.00	4.37
	9. Total Availability (1+3+6)	312.64	450.21	7.57
	<b>Total Supply (5+8)</b>	<b>226.34</b>	<b>335.84</b>	<b>8.21</b>

sion of Rs. 79,589 crores in Public Sector Plan has been made for power sector development. There is also the need to pay attention to demand management by suitably spreading out the load of energy intensive economic activities over the 24 hours of the day. Hour specific tariffs and such other measures may be necessary.

3.6.15 The projected demand for railway transportation in 1996-97 is presented in table 3.26. The

railway system are expected to carry a load of about 443 million tonnes (originating) in 1996-97 as against 363 million tonnes in 1991-92. Thus the growth rate during Eighth Plan in the originating traffic will be 4.1 per cent against 4.77 per cent achieved during the Seventh Plan. The Plan envisages that the growth in passenger traffic will be about 5.0 per cent per annum.

**Table 3.26 Demand for Railway Traffic  
1996-97**

(Million tonnes of originating traffic)

Sl. No.	Commodity	1996-97 (Target)
1	2	3
1.	Intigrated steel plants	
	(i) Finshed products from steel plants (Saleable steel and pig iron for sale)	17.2
	(ii) Raw materials for steel plants other than coal	44.0
	<b>Total :</b>	61.2
2.	Coal (incl. Railway)	179.4
3.	Iron ore for export	14.4
4.	Cement	41.8
5.	Foodgrains	32.6
6.	Fertilisers (materials)	25.3
7.	POL products	31.2
8.	Other Goods	35.0
9.	Railway materials (Excl. coal)	22.5
	<b>Grand total :</b>	443.4

### Balance of Payments

3.7.1 The balance of payments situation has been continuously under strain for the past several years. During the Seventh Plan period the current account deficit averaged at around Rs. 8457 crores per annum as against an average of Rs. 2616 crores during the Sixth Plan period. The BoP situation remained under pressure due mainly to large trade deficit and fall in the surplus on invisible account. The already difficult balance of payments situation was aggravated by the rise in oil price in 1990.

3.7.2 The immediate response to the BoP crisis was a severe curtailment of imports and raising exports through exchange rate adjustment. This strategy produced a drop in the current account deficit from 2.6 per cent in 1990-91 to around 1.6 per cent in 1991-92. The

adverse effect of a severe curtailment of imports on economic growth and more particularly industrial production is strong as already seen in 1991-92. Particularly alarming is the sharp drop (by about Rs.4765 crores) in the import of capital goods. The solution of the BoP problem, if the economic growth is to be sustained, lies not in sacrificing the foreign trade, but in pursuing structural adjustment policy which makes exports more attractive and the imports more sensitive to the price signals. In the longer term, exports of bulk commodities in contrast to traditional exports, which are the mainstay of exports at present will have to be aimed at. Therefore, the projected material balances of sugar, steel, cement, etc., provide for a greater share of foreign trade in their supplies.

3.7.3 A pre-condition for the beneficial effect of devaluation on balance of payments is that the gains from devaluation are not offset by domestic inflation. As already outlined earlier, the fiscal deficit of the Government is being controlled which should bring about a moderation in money supply growth. Additional measures like containment of Government consumption expenditure and ensuring adequate supplies of food and other wage goods are necessary.

3.7.4 Table 3.27 shows the evolution of key BoP indicators for the Eighties and the projections for the Eighth Plan (1992-97).

3.7.5 During the Seventh Plan period, the ratio of current deficit to GDP averaged 2.4 per cent, i.e., far above the figure of 1.6 per cent projected for this period in the plan document. This deterioration in the balance of payments occurred despite a robust growth in exports in the last three years of the plan. But the net receipts from invisibles declined significantly during this period. The already difficult balance of payments situation was accentuated in 1990-91 by a sharp rise in oil prices and by other effects of Gulf War. With access to commercial borrowings going down and non-resident deposits showing no improvement, it was found difficult in 1991-92 to finance the current account deficit. The current account deficit during 1991-92 is estimated to be around Rs.7000 crores as against Rs.13942 crores in the previous year. The reduction in current account deficit during 1991-92 was mainly due to the

**Table 3.27 Key Indicators of India's Balance of Payments**

(As per cent of G.D.P.)

Year/Period	Exports	Imports	Trade Balance	Net Invisibles	Current Account Deficit
1	2	3	4	5	6
Average(1980-85)	5.00	8.33	(-3.33)	1.90	1.43
Average(1985-90)	5.21	8.33	(-3.13)	0.75	2.38
Eighth Plan (1992-97) (Projections)	9.60	11.62	(-2.02)	0.42	1.60

severe import curtailment measures in the wake of the precarious balance of payments situation. Import curbs affected the growth rate of G.D.P. and also the exports.

3.7.6 The significant changes in the industry and trade policies and exchange rate adjustments made during the year 1991-92, will have their implications on the functioning of Indian Economy and the BoP situation during the Eighth Five Year Plan. It is imperative that during the Eighth Plan, steps are taken to correct the fundamental weaknesses in India's external situation, so that the external imbalance does not cause serious disruption to the economy. It is, therefore, necessary to plan for a drastically reduced inflow of resources from outside. It is assumed that foreign savings would be 1.6 per cent of GDP in the Eighth Plan. This is a level of deficit that can be sustained by normal capital flows. This also implies high expectations about growth in exports. In absolute terms the foreign savings requirements are projected at around Rs. 55,000 crores. The projected balance of payments position during the Eighth Plan is given in Table 3.28. Steps will have to be taken to realize a healthier pattern of financing this order of current account deficit.

3.7.7 The manner of financing of the current account deficit during the Seventh Plan was such that 25 per cent of the financing need was met by way of external assistance from multilateral and bilateral donors, 25 per cent by way of commercial borrowings, 24 per cent through non-resident deposits under Foreign Currency Non-Resident Accounts Scheme (F.C.N.R.A.)

**Table 3.28 Balance of Payments Position During the Eighth Five Year Plan (1992-97)**

(Rs. Crores)

	1991-92	1996-97	Total 8th Plan
Exports	44292	83869	330153
Imports *	62345 (51700)	93314	399650
Trade Balance*	(-18053)	(-) 9445	(-) 69497
Invisibles *	3494	2332	14634
C.A.D. *	14559 (7000)	7113	54863

\* These are normalised projections for the base year. Actuals during 1991-92 are lower than these, as indicated in brackets and explained later.

and Non-Resident External Rupee Account Scheme (NR (E) R.A.), about 14 per cent from other capital transactions and the remaining by the draw-down of reserves (Table 3.29).

3.7.8 The pattern of financing of CAD is expected to change in the Eighth Plan. The component of commercial borrowings will go down while that of direct foreign investment is expected to go up. Supportive policies have already been announced.

3.7.9 On examination of long-term trends and taking into account special needs of imports particularly in respect of bulk commodities, an

**Table 3.29 Financing the Current Account Deficit**

	Seventh Plan ----- ( Rs.crores at current prices)	Eighth Plan ----- ( Rs.crores at 1991-92 prices)
	1	2
1. Current Account Deficit including Errors and Omissions	42,284	55,000
<b>Financed By</b>		
2. External Assistance including official transfers *	10,572	28,700
3. Commercial Borrowings	10,592	5,000
4. Non-Residents Deposits	10,164	3,000
5. Other Capital	5,879	21,300
6. Use of Reserves	5,077	(-) 3,000

\* Net of repayments to IMF and others.

Note: The CAD at 1991-92 US \$ will be 22 billion in Eighth Plan.

import to GDP elasticity of 1.5 was assessed to be reasonable for the period of the Eighth Plan. This would project an import growth of 8.4 per cent per annum, on a normal base. However, the base year 1991-92 turned out to be a very exceptional year in respect of imports due to severe curbs on imports, and hence this is not the appropriate base on which imports could be projected. For the purposes of projecting the growth rate, imports have been assumed at Rs. 62345 crores for the year 1991-92 whereas the actual in that year turned out to be only Rs.51700 crores. The total import bill during the plan period has been estimated at Rs. 3,99,650 crores at 1991-92 prices.

3.7.10 Import requirements of major export oriented commodities have been worked out on the basis of the import intensity of the items and their export targets for the Eighth Plan. The import requirements of iron and steel scrap have been worked out on the basis of production

profile of mini steel plants and the availability of scrap within the country and its requirement during the plan period. In case of some commodities, possibilities of import substitution have also been kept in view. Import requirements of other groups have been projected on the basis of import elasticities with respect to G.D.P. Past relationship of imports with respect to gross domestic capital formation, gross value added, industrial production, etc., have also been taken into account while making the projections of capital goods imports. Commodity-wise import projections are presented in table 3.30.

3.7.11 The decline in domestic production of crude oil in the initial years of the Plan coupled with the slower build up of the crude oil refining capacity makes it necessary to provide adequately for import of oil and petroleum products. One-fifth of the projected provision for imports during the Plan will be for these commodities. This will require a restraint on the import of other commodities, particularly of capital goods and transport equipment. Projections of fertilizers imports are based on demand-supply balances. Adequate provision has been made for export related imports, particularly of the gems and precious stones. Contingency imports of cereals and edible oils are also provided for in the projections. The investment profile, particularly of projects requiring capital goods, and the commodity-specific trade policies in the Plan period will have to conform to the projected import profile. Provision of Rs. 7000 crores has been made for the imports of edible oils, food-grains and pulses as contingency imports. The item "statistical adjustment" accounts for the difference between trade figures reported by Directorate General of Commercial Intelligence and Statistics (DGCI&S) and the one reported by the Reserve Bank of India.

3.7.12 Boosting exports is a key element of the foreign trade strategy during the Eighth Five Year Plan. Exports are expected to grow at 13.6 per cent per annum in volume terms. Commodity-wise details of export projections are set out in table 3.31.

3.7.13 The primary commodities would constitute 19 per cent of exports while the manufactured commodities would account for 76 per cent. Amongst primary commodities a large

proportions of earnings from incremental exports during the Eighth Plan will be from the exports of marine products, oil cakes, rice, cashew kernel, fruits, vegetables, miscellaneous processed foods, sugar and spices. Since market is not a big problem for the exports of these commodities, surplus availability for exports has been the main consideration in making projections. Among the manufactured products the promising ones will be the products of handicrafts, gems and jewellery, readymade garments, engineering goods, basic chemicals, leather and manufactures, cotton yarn and fabrics. Large investments have been made in capacity creation and modernisation of certain industries particularly sugar, cement and steel. It is high time a beginning in the exports of these commodities is also made.

3.7.14 A part of the gap in the merchandise trade has been covered by invisibles. The balance of invisibles has been positive. However, there is declining trend in the balance in the recent periods. Fifty Seven per cent of the trade gap during the Sixth Plan was covered by invisibles. This component declined to 24 per cent during the Seventh Plan. The situation has been worsening during the last 2-3 years and the balance of invisibles has been reduced to almost a negligible figure. The main reasons are that interest payments have gone up and earnings from foreign travel and private transfers have remained static. The Eighth Five Year Plan is expected to reverse this trend and take specific measures to raise earnings from tourism and services. Invisibles are projected to amount to 14600 crores of rupees, which will cover about 27 per cent of the gap in merchandise trade during the Eighth Five Year Plan.

**Table 3.30 Import Projections for the Eighth Plan**

(Rs. Crores at 1991-92 prices)

S.No & Commodities/Groups	1991-92(P)	1996-97	Rate of Growth(%)	Total
(1)	(2)	(3)	(4)	(5)
<b>(A) Selected Bulk Imports</b>	22198.2	32550.2	8.0	135895.0
	(21834.2)	(32550.2)	(8.3)	
1. Crude Oil and petroleum products, of which	13129.5	17300.1	5.7	74660.0
(a) Crude oil	7868.6	4407.6	-10.9	28160.0
(b) Petroleum products	5260.9	12892.5	19.6	46500.0
2. Fertilizers (manufactured and raw materials) of which	4500.0	8988.6	14.8	34474.0
(a) Fertilizers manufactured	2025.8	4757.8	18.6	17403.0
(b) Fertiliser raw materials, of which	2474.2	4230.8	11.3	17071.0
(i) Sulphur	348.9	900.9	20.9	3194.0
(ii) Rock phosphate	494.0	1110.1	17.6	4121.0
(iii) Phosphoric acid	1360.7	1522.6	2.3	7283.0
(iv) Anhydrous ammonia	270.6	697.2	20.8	2473.0
3. Finished steel, tool, alloy and special steel, of which	1540.2	1760.3	2.7	8312.0
(a) Finished steel	1255.0	1255.0	0.0	6275.0
(b) Tool, alloy and special steel	285.2	505.3	12.1	2037.0
4. Major non-ferrous metals, of which	803.0	1193.6	8.3	5065.0
(a) Aluminium	9.3	49.6	39.8	141.0
(b) Copper	642.0	890.7	6.8	3923.0
(c) Zinc	33.0	85.8	21.1	304.0
(d) Lead	37.9	7.6	-27.5	79.0
(e) Tin	26.8	40.2	8.4	172.0
(f) Nickel	54.0	119.7	17.3	446.0
5. Coking coal	1036.3	516.3	-13.0	3477.0
6. Newsprint	341.0	791.3	18.3	2907.0
7. Synthetic & regenerated fibres	48.2	-	-	-
8. Contingency imports - cereals, cereal preparations, pulses, vegetable oils and fats *	800.0	2000.0	20.1	7000.0
	(436.0)	(2000.0)	(35.6)	

**Table 3.30(contd.) Import Projections for the Eighth Plan**

(Rs. Crores at 1991-92 prices)

S.No & Commodities/Groups	1991-92(P)	1996-97	Rate of Growth(%)	Total
(1)	(2)	(3)	(4)	(5)
B. Others, of which	31546.8 (25965.8)	47892.8 (47892.8)	8.7 (13.0)	208630.0
1. Machinery and transport equip.	16200.0 (11435.0)	25098.0 (25098.0)	9.2 (17.0)	106140.0
2. Precious and semi- precious stones	5500.0 (4822.0)	10200.0 (10200.0)	13.1 (16.2)	40446.0
3. Chemicals excluding fertilizers, fertilizer raw materials, artificial resins and plastic materials @	2519.0	2200.0	-2.7	11620.0
4. Artificial resins and plastic materials	1403.0	700.0	-13.0	4711.0
5. Iron & steel scrap	800.0	1800.0	17.6	6680.0
6. Wood & timber	418.5	693.0	10.6	2861.0
7. Miscellaneous	4706.3 (4568.3)	7201.8 (7201.8)	8.9 (9.5)	36172.0
C. Total(A + B DGCI&S)	53745.0 (47800.0)	80443.0 (80443.0)	8.4 (11.0)	344525.0
D. Statistical adjustment @@	8600.0 (3900.0)	12871.0 (12871.0)	8.4 (27.0)	55125.0
E. Grand Total (C + D) @@@	62345.0 (51700.0)	93314.0 (93314.0)	8.4 (12.5)	399650.0
US \$ Million	24938.0 (20680.0)	37325.6 (37325.6)	8.4 (12.5)	159860.0

P: Povisional

\* Represents notional amount.

@ Data are not comparable with DGCI&S because a sizeable proportion is included under fertilizer raw materials.

@ @ The difference between RBI's Balance of Payments data and DGCI&S figures on merchandise trade.

@@@ Assumed normalised imports.

Note: The imports in 1991-92 were abnormally low due to highly adverse BoP position. The curbs were particularly severe in capital goods and transport equipment. The 1991-92 import figures are the normalised estimates. Figures shown in brackets are the constrained actuals.

**Table 3.31 Export Projections for the Eighth Plan**

(Rs. Crores at 1991-92 prices)

S.No & Commodities/Group	1991-92(P)	1996-97	Rate of Growth(%)	Total
(1)	(2)	(3)	(4)	(5)
<b>I Agricultural &amp; allied products of which:</b>	7700	12064	9.4	50235
1. Tea	1132	1324	3.2	6224
2 Coffee	310	342	2.0	1646
3 Tobacco unmanufactured & manufactured	377	450	3.6	2099
4 Oil cakes	871	1250	7.5	5437
5 Spices	370	447	3.9	2074
6 Cashew kernels	668	1047	9.4	4410
7 Raw cotton	316	323	0.4	1600
8 Rice	755	1127	8.3	4831
9 Marine products	1374	2077	8.6	8863
10 Meat and meat preparations	231	354	8.9	1503
11 Misc. processed foods (inclu. processed fruits & juices)	332	700	16.1	2654
12 Fruits & vegetables	349	573	10.4	2373
13 Sugar & molasses	144	1100	50.2	2861
14 Not classified	471	950	15.1	3660
<b>II. Ores and Minerals of which:</b>	2280	2662	3.1	12416
1 Iron ore	1432	1400	0.0	7000
2 Mica, coal & other ores & processed minerals	848	1262	8.3	5416
<b>III. Manufactured goods Of which:</b>	32384	6511	15.0	250800
1 Cotton yarn fabrics & manufactures	3209	5896	12.9	23456
2 Readymade garments	5411	11552	16.4	43633
3 Natural silk yarn, fabrics, made ups, etc.	347	617	12.2	2483
4 Manmade yarn, fabrics and made ups	823	1288	9.4	5427
5 Woolen yarn, fabrics and made ups, etc.	73	147	15.0	567
6 Jute manufactures	388	588	8.7	2507
7 Coir and manufactures	70	150	16.5	567
8 Carpet mill-made	235	387	10.5	1601
9 Sports goods	108	177	10.4	733
10 Rubber manufactured products	305	746	19.6	2693
11 Glass, glassware, ceramics, refractories, cement, etc.	153	600	31.4	1868
12 Leather and leather manufactures	3076	5463	12.2	21995
13 Engineering goods	5107	10277	15.0	39611
14 Chemicals and allied products	3897	7810	14.9	30144

**Table 3.31(contd.) Export Projections for the Eighth Plan**

(Rs. Crores at 1991-92 prices)

S.No & Commodities/Group	1991-92(P)	1996-97	Rate of Growth(%)	Total
(1)	(2)	(3)	(4)	(5)
15 Handicrafts of which:	8346	17455	15.9	66339
a. Gems and jewellery	6750	14702	16.8	55155
b. Carpet handmade	1000	1546	9.1	6543
c. Works of art	596	1207	15.2	4641
16 Not classified	836	1961	18.6	7176
IV. Petroleum crude and products	1022	1340	5.6	6029
V. Others	38*	1075		4279
	(442)	(1075)	(19.5)	
VI. Total I - V DGCIS	43424	82255	13.6	323759
	(43828)	(82255)	(13.4)	
VII. Statistical Adjustment	868	1614	13.2	6394
<b>Total Exports</b>	44292	83869	13.6	330153
	(44696)	(83869)	(13.4)	
U.S. Dollar (Million)	17720	33548	13.6	132061
	(17878)	(33548)	(13.4)	

P : Provisional

\* Since actual exports are nearly Rs. 400 crores more than the assumed exports, the residual works out to this amount which otherwise should be around Rs. 450 crores.

Note:- Figures in brackets are provisional exports.

## CHAPTER 4

### POLICY FRAMEWORK

#### Introduction

4.1.1 The Eighth Plan aims at an average annual growth rate of 5.6 percent and an average industrial growth rate of about 7.5 percent. These growth targets are planned to be achieved with relative price stability and a substantial improvement in the country's balance of payments position. It is envisaged that there will be a reasonable degree of price stability and that the ratio of current account deficit to GDP will be maintained at about 1.6 percent.

4.1.2 Performance of the economy in the base year has not been that encouraging. Industrial growth in 1991-92 is estimated to be negligible and the overall growth of the economy is estimated to be not more than 3 percent. The annual inflation rate in 1991-92 has been about 13 percent. On the balance of payments front, although there has been some improvement in the foreign exchange reserves (partly due to the borrowings from International Monetary Fund and partly because of enhanced foreign exchange remittances by non-residents), exports are exceptionally sluggish. Given this performance in 1991-92, a quick turn-around in the economy is required, if the major macroeconomic targets of the Eighth Plan are to be achieved.

4.1.3 One of the reasons for the sluggish export performance in 1991-92 was the collapse of our trade with the Rupee Trade Area. The dollar value of our exports to the Rupee Trade Area declined by over 40 percent in 1991-92. This adverse effect on our exports was further confounded by the recession in the major industrialised countries of the West. The poor export performance, among other factors, had its toll on industrial growth. To some extent, therefore, our economic performance during the Eighth Plan period will depend upon the external economic environment. A quick recovery in the industrialised economies of the West should give a boost to our exports and this will not only be of great help in tackling our balance of payments problems but also in giving a fillip to industrial growth.

4.1.4 While external environment is extremely important, it will be unrealistic to rely solely on favourable external conditions for a turn-around in the economy. Instead, it will be safer to take the external economic condition as it unfolds and concentrate on providing a domestic economic environment which is conducive to efficient growth of the economy. Experience shows that a set of well co-ordinated macroeconomic policies is of utmost importance in ensuring such an economic environment. In general, the following macroeconomic policies need careful consideration during the Eighth Plan period:

- (a) The policy regime governing trade, technology and transborder capital flows,
- (b) Industrial deregulation and administered price policy,
- (c) Financial sector reforms, and
- (d) The stance of demand management as reflected in monetary and fiscal policies.

4.1.5 Broadly speaking, the first three of these policies taken together constitute what has now come to be known as "structural" policies, i.e. policies by and large aimed at improving the supply-side of the economy. The last one corresponds to what has traditionally been covered under "stabilisation" policies, i.e., policies aimed at controlling aggregate demand in accordance with the long run growth path of an economy. Recently, Government has initiated significant policy changes on both these areas of economic policy. However, the process of reforms initiated recently represents only a beginning. We have to carry it further if we want to reap the full benefits of these reforms. Therefore, sustaining the pace of economic reforms will be the major challenge during the Eighth Plan period. While both macroeconomic stabilisation and structural policies are important to ensure an economic environment which is conducive to efficient growth of the economy, a whole set of sector-specific policies also has an important bearing on efficiency and growth.

This chapter, however, limits its focus only on the macroeconomic policy issues. The sector-specific policy issues are discussed in volume II.

### **Policies on Trade, Technology and Capital Flows**

4.2.1 Global development experience of the past few decades shows that a policy regime with fewer barriers to trade, both tariff and non-tariff, and which provides equal incentives for exports as well as production for the domestic market enables countries to achieve not only impressive export growth but also rapid and sustainable economic growth. Furthermore, experience of many countries including our own has also exposed the inherent limitations of an inward-oriented, import substituting trade regime. It is not only that such a trade regime hampers the efficiency of resource use and consequently growth but also that it is unsuccessful in even ensuring a viable balance of payments. A key task during the Eighth Plan, therefore, is to move our trade policy regime towards greater openness and to reap the full benefits of international trade.

4.2.2 Since June, 1991, the Government has initiated a series of trade policy changes with a view to integrating the Indian economy better with the rest of the world. The value of the rupee was adjusted downward by about 20 percent in July, 1991. This was followed by a liberalisation of the foreign trade regime through some reduction in the quantitative restrictions. The import policy regime was revamped by shifting a significant number of items outside the purview of import licensing. Exporters were given entitlements equal to 30 to 40 percent of their export earnings in the form of EXIM Scrips against which even restricted items were allowed to be imported. Alongwith these, the Government dispensed with a number of export-incentives including the cash compensatory support to exports. As a first step towards a gradual reduction in the tariffs, the Union Budget for 1991-92 reduced the maximum rate of import duty from more than 300 percent to 150 percent.

4.2.3 Within eight months of introducing these trade policy changes, the Government initiated another set of policy changes in the areas of trade and transborder capital flows coinciding with the Union Budget for 1992-93, these changes being

more far reaching than the ones initiated in July 1991. The EXIM scrip scheme was replaced by a system of partial convertibility of the rupee on the current account of the balance of payments. Under the new system, all foreign exchange remittances, whether earned through exports of goods and services or remittances, can be converted into rupees in the following manner: 40% of the foreign exchange remitted can be converted at the official exchange rate while the remaining 60% at a market determined rate. The foreign exchange surrendered at the official exchange rate will be available to meet the foreign exchange requirements of essential imports such as petroleum and oil products, fertilisers, defence and life saving drugs. All other imports, except for a "negative" list are freely importable provided the foreign exchange for these imports are obtained from the market. Similarly, the foreign exchange required for other payments on private account including travel, debt service payments, dividends, royalties and other remittances will have to be obtained at the market rate. In another significant step, to arrest the diversion of foreign exchange to illegal channels, the Government has legalised the import of gold. Returning Indians and NRIs are now allowed to import 5 kilograms of gold per passenger with a modest import duty. Along with this, the Government has introduced a Gold Bond Scheme, with a view to help mobilise the idle Private gold reserves of the country to supplement official reserves.

4.2.4 The Export-Import Policy (EXIM policy) for the Eighth Plan period announced subsequent to the Union budget has operationalised many of the trade policy changes announced in the Budget. The new EXIM policy has now specified the "negative" list of imports, the import of which is either banned, canalised or subject to import licence. Similarly, the EXIM policy has specified a "negative" list of exports, the exports of which is either banned, canalised or subject to export licence. In addition to specifying the negative lists of imports and exports, the EXIM policy has announced a set of incentives for exports and deemed exports.

4.2.5 The process of lowering the customs tariff rates, which was initiated in the 1991-92 Union budget was carried further in the 1992-93 budget. The maximum tariff rate was further lowered to 110 percent in the 1992-93 Budget.

The items on which tariffs have been lowered comprise capital goods, petro-chemicals, newsprint, asbestos, and pesticides used in agriculture.

### **Further Trade Policy Reforms:**

4.2.6 During the Eighth Plan period, further trade policy reforms are needed to be carried out so that the economy is better integrated with the rest of the world. The key objectives of these reforms should be two-fold: (i) a further pruning of the "negative" lists of imports and exports, and (ii) a gradual reduction in both the level and dispersion of tariff rates. At this stage, it is difficult to pinpoint the specific items which need to be taken out of the negative lists. As a broad guideline, as the foreign exchange situation improves and the economy becomes more resilient, our objective should be to remove most raw-materials and components from the negative list of imports. In later phases of reforms, the manufactured items should also be removed from the "negative" list and by the end of the Eighth Plan the negative list of imports should contain only items which would be banned for reasons such as environment and safety. Any protection deemed necessary for domestic industry should basically be given through the exchange rate and the tariffs. Introduction of the partial convertibility on the current account is a highly desirable move. However, as the domestic economy gets more stabilised and as the external environment improves, we should move away from the dual exchange market system, unify the exchange rates and make rupee fully convertible on the current account. It should be possible to achieve the objective in stages before the end of the Plan period.

4.2.7 Along with the reforms of the import policy and the exchange rate regime, the structure of our tariffs requires substantial rationalisation. Broadly, our objective should be to eliminate the existing distortions in the tariff structure and effect a substantial reduction in the tariffs by the end of the Eighth Plan. The recent tariff reductions, though substantial, still leave us with tariff levels on manufactured items which are far too high. It should be the objective of policy to move to a trade regime in which the average tariff level comes down to about 25% within a period of three to four years. As a first step towards this, our efforts should be to eliminate the most serious distortions first. One

of the most serious distortions of our tariff structure has been the unusually high tariff rates on intermediate and capital goods. The Union Budget for 1992-93 has reduced these rates marginally. We need to reduce these rates further. Subsequently, as the domestic industry becomes more resilient, we may liberalise import of certain consumer goods and lower their tariffs.

### **Policies on Capital Flows:**

4.2.8 As part of the package of recent trade policy reforms, the Government has liberalised capital flows in the form of foreign direct investment. Specific measures in this direction are (i) automatic approval of foreign technology collaboration as well as foreign equity participation upto 51 percent in about 31 areas; (ii) delinking technology transfer from equity investment to impart flexibility in sourcing of technology imports; (iii) automatic clearance for import of capital goods in cases where foreign exchange flows through foreign equity. More recently, the Foreign Exchange and Regulations Act (FERA) has been amended to place FERA companies on par with Indian companies for all operational purposes. Foreign companies are now permitted to use their trade marks, accept appointment as agents or technical or management advisors. They are also allowed to borrow and accept deposits from the public and acquire and sell immovable property.

4.2.9 These relaxations of foreign investment policy are in the right direction. Yet, if India were to attract significant flows of foreign investment and technology in an increasingly interdependent world, the Government should continuously monitor the progress on this front, compare our policies on foreign investment with those of the other developing countries and make swift changes in them if required. After all, our share of world capital flows will depend not just on our set of policies, but on our policies vis-a-vis those of other developing countries. Overall, our strategy during the Eighth Plan should be one of relying less on external commercial borrowings and more on foreign direct investment for financing the current account deficit. It should be possible to increase the flow of direct foreign investment to about \$ 1 billion per year by the end of the Plan period. This would still be a modest amount given the size of the economy. This would require a continuous watch on

our foreign investment policy and strong initiatives from our side.

### **Industrial Deregulation and Administered Price Policy**

4.3.1 Historically, like our trade policy regime, our domestic economic policies, be it in the product or the factor markets, have been highly restrictive. Domestic economic activities have been subject to a wide array of detailed and discretionary Government controls. In the industrial sector, such controls took various forms: barrier to entry and expansion implemented through industrial licensing; reservation of a large number of industries for the public sector as well as the small scale sector; highly time-consuming procedures required for the exit of firms from an industry; and price and distribution controls on various industrial products. In recent years, it has been increasingly realised that this regulatory apparatus on domestic enterprises has led to wide-spread inefficiency in the economy in general and the industrial sector in particular. The Government has, therefore, been relaxing some of these controls in recent years and especially during the last few months.

4.3.2 The thrust of the new industrial policy announced in July, 1991 is on removing bureaucratic controls that thwart industrial development and opening up a large number of industries to the private sector. The requirement of industrial licensing has been abolished for all but 18 product categories such as defence equipments, industrial explosives, electronic aerospace, coal, petroleum, alcohol, hazardous chemicals, pharmaceuticals and drugs, and certain consumer goods such as sugar, edible oils, refrigerators, motor cars and consumer electronics. The maximum asset limit on the size of the companies which has hitherto been enforced under the Monopolies and Restrictive Trade Practices Act has been scrapped. As a result, firms will be able to grow to optimum size and reap the benefits of economies of scale - a process which was until now hindered by the anti-monopoly legislation. The location policy for industries has been substantially simplified and liberalised. The Government has also abolished the phased manufacturing programme, under which domestic manufacturers were hitherto required to increase the domestic input-content of their products in a specified time period. In

another significant step, the number of industries reserved for the public sector has been drastically reduced, thus opening a large number of industries for the private sector.

4.3.3 These relaxations of the regulatory apparatus governing domestic economic activity have certainly eased the barriers to entry in the industrial sector. It should help to make the industrial sector more competitive both domestically and internationally. The thrust of the industrial policy during the Eighth Plan period should be to sustain the pace of these deregulatory measures. In this context, two areas appear to need attention (i) industrial deregulation and ii) administered price policy.

### **Further Delicensing of Industries:**

4.3.4 With the recent policy changes, industrial production subject to licensing control has been reduced to about 20 per cent. However, some aspects of the new industrial policy seem to be somewhat restrictive. For example, the continuation of the licensing requirements for industries such as sugar and edible oils has no clear justification. Equally important, there are no strong reasons as to why the production of consumer durables such as motor cars, refrigerators and consumer electronics should be subject to industrial licensing. During the Eighth Plan, therefore, there is a need to further shorten the list of industries requiring industrial licensing. Most of the consumer goods industries which now require industrial licensing should be delicensed. Only industries related to defence, explosives and hazardous chemicals should be in the restricted list of industries requiring industrial licensing.

### **Policy Towards Unviable Units:**

4.3.5 A liberal policy towards the entry and expansion of firms is a necessary condition for inducing competition and enhancing the efficiency of resource use. However, the benefits of such a policy will be greatly reduced if we do not have a rational policy towards unviable firms. For maximum gain in efficiency, removal of entry barriers should also be accompanied by freedom to exit. Our industrial exit policy is highly restrictive and time-consuming. This is one of the major factors behind the wide-spread sickness in the industrial sector, both in the public and the private sectors. Rules and procedures regarding the exit policy for

industry, therefore, need a thorough review with the aim of making it much easier for any economically unviable firm to close down.

4.3.6 A key consideration in evolving a practical industrial exit policy should be that it should protect the legitimate interests of labour, whether in the public or the private sector. In the case of units which can be made economically viable by restructuring the unit and retraining/redeploying the labour, no effort should be spared to do this. Only in the case of units where even restructuring would not render it economically viable should the option of closure of the unit be allowed. Even here, to minimise the adverse effects of closure of a unit on labour, several options like the introduction of compulsory insurance or the creation of a fund to pay retrenchment benefits to employees should be tried. The Government has already set up the National Renewal Fund with a view to providing assistance to cover the cost of retraining and redeployment of labour affected by the restructuring of an industrial unit. It is expected that the National Renewal Fund will help in the restructuring of about 30 to 40 public sector units within the next two to three years involving effective rehabilitation of many of these units. Where this is not possible, it will help to compensate labour or assist in their rehabilitation. Similar other options need to be explored.

#### **Small Scale Industries:**

4.3.7 Another area which needs a thorough examination relates to small scale industries. The small scale sector has a unique place in a strategy of labour-intensive industrial growth. Due to several policy initiatives taken by the Government, this sector has helped to achieve a reasonable growth in industrial employment, especially at a time when employment in the organised industrial sector has stagnated. Yet, one of the major problems with this sector has been the lack of adequate modernisation and technological upgradation. To take advantage of the technological changes which are taking place in the present day world, it would be necessary for the small scale units to modernise and upgrade their technology. This would help them to compete effectively with the larger industrial units.

#### **Administered Prices:**

4.3.8 The proposed rationalisation/relaxation of entry and exit policy should enhance the competitiveness of the industrial sector. These benefits will be somewhat reduced if the Government continues to administer prices and the distribution of various industrial products. At present, the prices of industrial products such as natural gas, petroleum, petroleum products, coal, electricity, fertilizer, sugar and various non-ferrous metals are being administered by the Government. A thorough review of the usefulness of these price controls needs to be carried out. Wherever the product concerned is internationally tradable, the Government should decontrol the prices. In order to ensure that such price decontrols do not allow the existing producers to hike prices and hence enjoy "rents", the tariff rates on the import of these products should be suitably adjusted downwards, as had recently been done in the case of steel. Without such a supportive tariff adjustment, decontrol of hitherto administered prices may lead to unreasonable increase in the prices, thereby hurting the consumers.

4.3.9 Unlike in the case of tradable goods, it is difficult to deal with administered prices of non-tradable goods, such as, say, electricity and public transportation in which the Government sector has a near monopoly. In these cases, the best that can be done is to ensure that the enterprises producing/providing these goods and services cover the Long Run Marginal Cost of Production (LRMC). The basic idea is that prices should cover capital and current costs of efficient production. While the determination of the LRMC of production is sometimes difficult, the Bureau of Industrial Costs and Prices (BICP) has successfully demonstrated that in the majority of industries the computation of LRMC is practicable. Therefore, for effective implementation of such a normative approach to administered prices of non-tradable goods, an organisation such as the BICP may be charged with the responsibility of undertaking comprehensive studies of cost-price structures of such products every three to five years. It is, however, important to distinguish between fixing the normative prices based on LRMC for an industry at a point of time and providing for justifiable changes in costs over time. In this context, a two-step approach which has been suggested by the Ministry of Finance in its paper on

Administered Price Policy in 1986 may be followed. First, the base level of prices should be fixed after carrying out detailed studies of costs on a normative level of efficiency. Once this has been done, changes arising from increases in input costs should thereafter be made automatic.

### **Financial Sector Reforms**

4.4.1 A vibrant and competitive financial system is necessary to support the proposed reforms in the structural aspects of the real economy. Over the years, the Indian banking and the financial system has made impressive progress in extending its geographical spread and functional reach. The widening and deepening of the banking system has been a major factor in promoting financial intermediation in the economy and in the growth of financial savings. The credit reach also has been extensive and the banking system now caters to the needs of several million borrowers especially in agriculture and small industry. Besides the banking system, the Development Financial Institutions (DFIs) have also provided the much-needed institutional support for investment in the private sector. The last decade has also witnessed considerable diversification of the money and the capital market. Despite this commendable progress, there has been a steady erosion of the operational efficiency of the banking system. The balance sheet of the performance of the financial sector is thus mixed, strong in achieving certain socio-economic goals and in general widening the credit coverage but weak in viability.

4.4.2 The Committee on the Financial System which has recently submitted its report to the Government of India, has identified the major factors responsible for the decline in the efficiency and the profitability of the banking sector. These are: (a) directed investment; (b) directed credit programmes; (c) massive and somewhat uneconomic expansion of bank branches and (d) inadequate attention to portfolio quality. There have also been weaknesses in the internal organisational structure of the banks, lack of sufficient delegation of authority and inadequate internal controls. Some of these weaknesses are common to both commercial banks and the Development Financial Institutions.

4.4.3 With a view to giving more operational freedom to the institutions and to inducing

greater competition in the financial sector, some of the controls on the financial sector have been relaxed. Until recently, the lending rates of DFIs were fixed by the Government. As part of the recent policy changes, the DFIs are now allowed to charge interest based on market conditions subject to a floor rate of 15 percent. Similarly, the interest rates on corporate debentures, which were earlier fixed by the Government have been freed. The whole interest rate structure for commercial banks has been adjusted upwards. As a result, the minimum lending rate of commercial banks (on loans above Rs.2 lakhs), has been raised and banks are given the freedom to charge interest rates subject to this floor rate, depending upon their perception of the credit risk of the borrowers. In addition, the term deposit rates of commercial banks has recently been partially deregulated; banks are now free to set these rates subject only to a ceiling. In another important step, the mandatory convertibility clause, under which DFIs could convert 20 percent of their term loans into equity, has been scrapped, thereby removing a long standing irritant to industry. The Government has also discontinued the tax-exempt status of the Industrial Development Bank of India, the country's leading development financial institution so as to put it on a more competitive footing with the other DFIs. Similarly, the mutual fund business in the financial sector, which until now was reserved for the public sector banks and Financial Institutions, has been opened up to the private sector. More recently, the formula-based pricing of new issues of capital by companies, hitherto being enforced by the Controller of Capital Issues, has been abolished. Companies are now free to price their new capital issues based on market conditions. The overall thrust of the reforms of the financial sector during the Eighth Plan should be to ensure that the financial system operates on the basis of operational flexibility and functional autonomy with a view to enhancing efficiency, productivity and profitability. As a general principle, the Government should allow the entry of private sector into areas which were hitherto reserved only to the public sector, including the banking system.

### **Statutory Liquidity Requirements:**

4.4.4 With regard to the banking system, the Statutory Liquidity Requirement (SLR), which was originally introduced as a prudential requirement, has, over time, become a major

instrument for financing the public sector. The SLR which was about 20 percent of banks' net liabilities when it was originally introduced, has now increased to over 38 percent. Since the average interest rate on banks' SLR-related investments is artificially pegged at fairly low level, the increase in the SLR has adversely affected the profitability of the banks. The Central Government has already reduced its fiscal deficit from about 8.5 percent of GDP in 1990-91 to about 6.5 in 1991-92 and has initiated measures to reduce it further to about 5 percent in 1992-93. It has also expressed its intentions to reduce the fiscal deficit further to about 3 to 4 percent of GDP by the mid-1990s. As the fiscal deficit comes down, it should be possible to reduce the SLR substantially during the next few years. This would not only give flexibility to the lending operations of the banks but also enable them to lend a larger proportion of their funds to the commercial sector.

#### **Directed Credit Programmes:**

4.4.5 The directed credit programme under the priority sector lending operations of the banks have served a useful purpose in extending the reach of the banking system to cover sectors which were generally neglected before nationalisation of banks in 1969. The proportion of priority sector lending to total bank credit to the non-government sector was negligible in the beginning of the 70's but now it is about 40 percent. Since these priority sector loans are made at concessional interest rates, the banks' profitability has been adversely affected. Clearly, there is a case for a review of those categories who are entitled to borrow at concessional rates from the banking system. One immediate way of doing this is to eliminate large borrowers from the coverage of the priority sector. No more than two concessional rates of interest for priority sector lending should be prescribed so as to keep the burden on the banking system within limits.

#### **Structure of Interest Rates:**

4.4.6 The proposed reduction in SLR and the directed credit programmes should enhance the flexibility of the banking system a great deal. However, the benefits of these changes would be greatly reduced if the structure of interest rates continues to be administered by the Government. In spite of the recent emphasis on the

deregulation of the interest rates, the structure of interest rates is highly complex and rigid. The financial system must clearly move towards an interest rate regime which is free from direct controls. Obviously, interest rate is an important policy instrument and monetary authorities the world over try to influence the level of interest rate through the various instruments that are available to them. It is not, however, argued that monetary authorities should abdicate an important function of theirs. The general level of interest rate should be influenced by the monetary authorities taking into account the overall economic environment, without necessarily imposing a rigid structure of interest rates. In moving towards a more deregulated structure of interest rates, there is considerable historical evidence to show that such experiments succeed only when the inflationary pressures are under control. Sharp increases in nominal and real rates of interest can result in adverse economic consequences. However, the broad outlines of the reform agenda on interest rates are quite clear. At least initially, from an elaborate administered structure of interest rates, we should move towards a more simplified system where only a few rates are prescribed by the monetary authorities.

#### **Development Financial Institutions:**

4.4.7 Over the years, the DFIs have been nurtured and developed by active Government support, especially in the form of concessional finance. However, active Government intervention in the functioning of the DFIs has also resulted in lack of operational flexibility and competition among these institutions. To remedy the situation, we need to have a two-pronged effort. On the one hand, the DFIs should be given adequate autonomy in matters of loan sanctioning and internal administration. On the other hand, the DFIs should be made to operate in a more competitive environment. For the latter, the privileged access of the DFIs to concessional finance through SLR and other arrangements should be gradually reduced. Instead the DFIs should obtain their resources from the market on competitive terms. In addition, the present system of consortium lending by the DFIs should be discouraged. Besides other things, this would require that the present system of cross-holding of equity and cross-representation on the Boards of the DFIs are done away with.

### **Prudential Norms and Guidelines:**

4.4.8 The financial liberalisation measures proposed above should, however, be accompanied by formulation of clear-cut prudential norms and guidelines governing the functioning of the various institutions in the financial sector. This is especially important because, during the last decade or so, several new institutions have appeared on the financial scene. Merchant banks, mutual funds, leasing companies, venture capital companies and factoring companies have now joined the already existing institutions in extending a range of financial services. However, the regulatory framework for many of these institutions is still not developed. The Government should, therefore, formulate and enforce prudential norms and guidelines relating, among other things, to capital adequacy, debt-equity ratio, adherence to sound accounting and financial policies, disclosure, regulation and valuation of assets.

4.4.9 Two particularly important aspects of prudential regulation which have assumed greater importance in the recent period relate to capital adequacy and provisioning. The Indian system has so far been slack in relation to both these aspects. Capital adequacy did not perhaps receive adequate emphasis because of the dubious assumption that banks and financial institutions owned by the Government cannot fail or cannot run into problems. With major Indian banks now having branches operating in important money market centres of the world, this question can no longer be ignored. This apart, even banks operating domestically need to build an adequate capital base. Realising this, the Reserve Bank of India has recently prescribed that all banks with international presence should achieve the capital adequacy ratio (i.e. the ratio of un-impaired capital funds to the aggregate of the risk weighted assets) of 8 percent by March 1994 and other banks should achieve a capital adequacy ratio of 4 percent by March 1993 and of 8 percent by March 1996. This is a step in the right direction though this is a highly challenging task for the banks. Given the budgetary constraints and the overall resource crunch facing the Government, it may be difficult for the Government to provide additional capital to public sector banks in the future years. Hence if banks were to achieve the prescribed capital adequacy norms they may have to tap the capital market for raising funds both in the form of loans

and equity capital. This would involve a dilution of Government ownership to a limited extent which may serve a useful purpose. What has been said about banks holds good in relation to term lending institutions as well as other financial institutions. Whether they be leasing companies or hire purchase companies or investment companies, prescription of appropriate capital requirements is a must since capital is the last line of protection for all depositors.

4.4.10 Another important aspect of prudential regulations relates to adequate provisioning for bad and doubtful debts. If the profits of banks and other financial institutions are to be a true reflection of their functioning, loan losses must be adequately provided for. It is feared that many banks may not have adequate profits to provide for bad and doubtful debts. Nevertheless, both in relation to banks and the term lending institutions, uniform accounting practices relating to income recognition and provisioning against doubtful debts need to be prescribed. Once again, in recent months the Reserve Bank of India has taken certain measures towards this effect. Besides requiring the banks to present their balance sheet and profit and loss accounts in a particular format so as to better reflect their actual financial help, banks are now required to classify their assets into different categories and make enough provisioning against bad and doubtful debts in a phased manner over a three year period. Such provisioning requirements should be gradually made applicable to other financial institutions too.

### **Demand Management Policies**

4.5.1 Structural policy reforms such as trade liberalisation, industrial and financial deregulation, proposed above, would ensure an efficient use of resources. In the medium term, therefore, these policies would help augment aggregate supply. However, if aggregate demand continuously outstrips aggregate supply, it is difficult to maintain a reasonable degree of price stability and sustainable balance of payments. This, in turn, could lead to slow-down in growth, making it difficult to sustain the pace of on going structural reforms itself. Empirical evidence from a large number of developing countries shows that structural policy reforms, implemented against large macroeconomic imbalances, have generally failed to produce the intended beneficial effects. Appropriate de-

mand- management policies, aimed at keeping aggregate demand largely in line with increases in aggregate supply, therefore, is a necessary prerequisite for successful macroeconomic management. The key policy ingredients required for this are a prudent fiscal policy and a conservative monetary policy.

4.5.2 A three-pronged fiscal and monetary policy package aimed at, (i) providing a better balance between aggregate demand and supply, (ii) minimising the distortions effects of the tax system and, (iii) forcing public enterprises to minimise costs and maximise efficiency, should form a key component of such a set of macroeconomic policy initiatives.

#### **Fiscal-Monetary Framework for Macroeconomic Stability:**

4.5.3 A common cause behind the twin problems of high domestic inflation and the worsening balance of payments in recent years has been the large and growing fiscal deficit of the Government. Fiscal deficit of the Government (Centre, States and Union Territories together) which was less than 7% of GDP at the beginning of the seventies rose to about 9% by the beginning of the eighties and by 1990-91 constituted over 11% of GDP. What is even more important, the increase in the growing fiscal deficit was almost entirely due to the sharp deterioration of the balance on revenue account. For example, in 1970-71 the Government had a revenue surplus of about 0.3% of GDP, but by 1985-86, it ran a revenue deficit of about 2% of GDP, which in 1990-91 rose to over 4%. Such high levels of fiscal deficits, both overall and on revenue account, are simply not sustainable. Hence, putting the fiscal house in order is a necessary pre-requisite to obtain a better balance between aggregate demand and supply.

4.5.4 Efforts have already been initiated on fiscal adjustment by the Central Government in its last two Budgets. Centre's fiscal deficit which was about 8.5 percent of GDP in 1990-91 has been reduced to about 6.5 percent in 1991-92 and is proposed to be reduced further to about 5 percent in 1992- 93. The Central Government has also announced its fiscal adjustment programme for the medium term according to which its fiscal deficit as a percent of GDP is expected to be brought down to about 3 to 4 percent by the mid-nineties. These efforts at fiscal adjust-

ment by the Central Government should be supported by similar efforts by the State Governments. Such adjustment is primarily required in terms of containing non-Plan revenue expenditure of the States. If this is accompanied by maximum resource mobilisation through tax and non-tax sources, the States' balance from current revenues (BCR) which has been negative during the last few years can be brought to a level consistent with the overall surplus requirements projected in the Eighth Plan. Some States would still have negative BCR which need to be limited to prudent levels. Overall, a major aim of fiscal policy should be to roll back the fiscal deficit of the Centre and States taken together as a percentage of GDP, from an average of 10.6 percent during the Seventh Plan and from about 11 percent in 1990-91 to an average of about 7 percent during the Eighth Plan period. 4.5.5 Such a fiscal adjustment would necessarily bring down the borrowing requirements of the Government, including the borrowings from the Reserve Bank of India. The Government should plan its borrowings from the Reserve Bank of India in such a way as to ensure that the annual growth of money supply is brought down from about 17% in recent years to about 11 to 12 percent during the Eighth Plan period. The income elasticity of demand for money in recent years has been about 1.5. Therefore, with the economy growing at about 5 to 6 percent per year, monetary growth of this magnitude should enable the Government to contain the trend rate of inflation to about 5 percent per year.

#### **Government Expenditure Containment:**

4.5.6 Since the fiscal imbalance in recent years has occurred at a time when the tax to GDP ratio has increased steadily, reduction in the fiscal deficit to GDP ratio needs to be brought about mainly by containing Government expenditures. Government expenditure which constituted about 19% of GDP in 1970-71 rose sharply to 26% by the beginning of the eighties and constituted about 31% of GDP in 1990-91. A sustainable fiscal scenario would require that Government expenditure as a ratio of GDP is reduced to an average of about 28 percent during the Eighth Plan period. While such expenditure containment is absolutely essential, enough care should be taken to see that Government's capital expenditures in key infrastructural and social sectors do not suffer. This would call for con-

certed effort at containing the revenue expenditure of the Government.

4.5.7 The task of achieving the required containment in Government expenditure appears challenging. Among the components of Government expenditure, two items which have grown substantially in recent years are (i) consumption expenditure of the Government, and (ii) subsidy payments. The consumption expenditure of the Government consisting mainly of defence expenditure and the administrative expenditure has increased steadily from about 9% of GDP in 1980-81 to about 12% in 1990-91. Almost all of this increase was due to the increase in administrative expenditure of the Government, from a little over 6 percent of GDP in 1980-81 to about 9 percent in 1990-91, whereas defence expenditure after increasing sharply from about 3 percent of GDP in 1980-81 to 4 percent in 1987-88 has steadily declined to about 3 percent by 1990-91. With suitable deregulation of industry and trade and a movement away from detailed and discretionary "microplanning" of the economy, many of the supervisory and regulatory functions of the Government should be minimised. This would help a great deal in containing the growth of Government's administrative expenditure in the future. The recent efforts to reduce defence expenditure as a percentage of GDP is a positive development and should be continued during the Eighth Plan period so that valuable resources could be diverted to more productive sectors.

4.5.8 Subsidy payments which constituted less than one percent of GDP in the early seventies rose to over 2% by the early eighties and stood close to 4% in 1990-91. Since 1991-92 the Central Government has taken measures to reduce its subsidy payments. A clearly enunciated policy to contain Government subsidies needs to be formulated with the objective of rolling back subsidy payments as a percentage of GDP substantially by the end of the Eighth Plan. The key components of subsidy payments, where there appears to be some scope for containment, are subsidies on fertiliser, food and interest subsidy. Among these, the interest subsidy can, and should be, reduced substantially almost immediately.

#### **Fertiliser Subsidy:**

4.5.9 Broadly speaking, the fertiliser subsidy consists of two major components, one which goes to the farmers and the other which goes to the fertiliser industry and its input suppliers. The latter component has been necessitated by a combination of higher domestic prices of capital goods, inputs to fertiliser industry and the plant-specific retention pricing of fertilisers. The plant-specific retention pricing does not give enough incentive to fertiliser plants to increase efficiency and reduce costs. Containing fertiliser subsidy would require moving away from the present policy of plant-specific retention pricing towards a more uniform pricing of fertilisers, with due attention to efficiency consideration. In addition, it is extremely important to streamline the pricing of capital goods to the fertiliser industry.

4.5.10 A drastic reduction in the component of the fertiliser subsidy going to the farm sector through large increases in the farmgate price of fertilisers may adversely affect agricultural production in the short run. Further, large increase in the farmgate price of fertilisers would also be somewhat inequitable in that it would hurt the most small and the marginal farmers with little marketable surpluses. But, the fiscal situation is so grim that we simply cannot afford to continue with a system which imposes a large and growing burden of fertilizer subsidy. Realising this, the Government has already increased the farmgate price of fertilisers to large farmers by 30 percent in 1991-92. Even with this adjustment, the fertilizer subsidy burden is too large. If the Plan is to be financed in a non-inflationary manner, it will be necessary to take steps to contain the subsidy burden in the current year at the budgeted level and to reduce it substantially during the Plan period. Another, and perhaps a more effective, way of containing the fertiliser subsidy to the farm sector could be to ensure a more efficient use of fertilisers by the farmers. This would require emphasis on more scientific use of fertilisers by the farmers through strengthening of the extension services during the Eighth Plan period.

#### **Food Subsidy:**

4.5.11 By its very nature, the benefits of present Public Distribution System (PDS), are

highly dispersed across the society and hence the benefits to the poorer sections of the population are not as much as they ought to have been. During the Eighth Plan period, a concerted effort needs to be made to target Public Distribution System more or less exclusively to the relatively poorer sections of the population. As a first step towards this, the P.D.S facilities should be discontinued to the non-poor segment of the population. Along with this, attempts should be made to extend the coverage of the P.D.S. to the poorer sections of the population both in the rural and urban areas. This would help to fulfil the social obligations of the P.D.S. Such a reorientation of the PDS may not lead to significant reductions in the food subsidy since it may mainly shift the subsidy away from the non-targeted groups towards the targeted groups. However, there is some scope to contain the food subsidy by making the operations of the Food Corporation of India (FCI) more efficient. Through efficient procurement and market intervention operations, it is possible to reduce the required buffer stock of foodgrains, which would reduce the carrying cost of foodgrains. Coupled with measures to increase the efficiency of the working of the FCI, this should help reduce the food subsidy somewhat.

#### **Government Capital Expenditure:**

4.5.12 Expenditure containment of the order suggested above would help a great deal in effecting a non-recessionary fiscal adjustment in that it would not put too much strain on Government's capital expenditures. Some reduction in capital expenditures as a percentage of GDP may, however, become unavoidable. An obvious candidate for effecting expenditure containment on the capital budget is Government's Budget support to public enterprises, both on Plan and non-plan account. During the Seventh Plan period, the Central Government's budget support to public enterprises constituted about 2.5 percent of GDP. It has been reduced to about 1.7 percent in 1990-91, to about 1.3 percent in 1991-92 and further to about 1 percent for 1992-93. Over the Eighth Plan period, such budget support to public enterprises should be further reduced. In future, budget support should be provided only for social sectors. Budget support to commercial public enterprises in such areas as industry, surface transport, steel and mines, tourism etc. should be phased out during the Eighth Plan period. These enter-

prises should be made to raise funds from the capital market rather than continue to rely on soft funding through budget.

#### **Revenue Mobilisation and Tax Reforms:**

4.5.13 The expenditure containment measures proposed above would substantially reduce the fiscal deficit during the Eighth Plan period. Yet, some efforts at additional revenue generation both through tax and non-tax sources may be necessary. Broadly speaking, Government revenues as a percentage of GDP may have to increase from about 20 percent in 1990-91 to about 22 percent by the end of the Eighth Plan, giving an average revenue-to-GDP ratio of about 21.5 percent during the Eighth Plan period. Given that the built-in revenue elasticity with respect to GDP is not significantly larger than unity, almost all of this increase in the revenue-to-GDP ratio will have to come from additional revenue mobilisation efforts. The required additional revenues may have to be generated by a judicious mixture of broadening the tax base, rationalising the tax rates and through non-tax sources. An overall simplification and rationalisation of the tax system would help not only in broadening the tax base but also in providing a simple and rational incentive structure which would be conducive to an efficient growth of the industrial sector.

4.5.14 On excise levies, the attempt should be to: (i) reduce the number and dispersion of tax rates; (ii) abolish commodity-specific and user-specific exemptions; and (iii) move the system further towards a value-added tax. At present, the revenue from Union excise duties form about 10 percent of registered manufacturing sector's output. However, only about 40 percent of the registered manufacturing output is subject to excise levies. Even a marginal increase in the coverage of excise levies along with a simplified and reasonable rate structure should yield fairly large additional revenues. As a first step towards this end, the multiplicity of rates should be reduced considerably and we should move towards a system with three to four excise rates on broad homogenous groups of commodities, with somewhat lower rates on intermediate and capital goods and somewhat higher rates on consumer goods. Along with this, all commodity-specific and user-specific exemptions should be abolished. Furthermore, the recent initiatives at moving the excise tax system towards a

value added tax by the introduction of Modvat should be continued.

4.5.15 Ideally, the long run objective of our domestic indirect tax reform should be one of replacing the various indirect taxes which are prevailing at present by a unified value added tax. Realising that the value added tax is perhaps one of the most robust taxes which can be designed to raise substantial revenues with least distortions, a number of countries in recent years, both developed and developing, have carried out such tax reform measures. One of the major hurdles in the introduction of a complete value added tax in India is the constitutional sharing of taxing powers between the Central Government and the State Governments. Under the present system, excise duties are being levied by the Central Government whereas sales tax is under the jurisdiction of the State Governments. Introduction of a full-fledged value added tax would require some harmonisation of the taxing powers and a rational basis for sharing the proceeds of the tax between the Centre and the States. This would require modifications in the present constitutional arrangement governing the taxing powers between the Centre and the States.

4.5.16 On the customs tariff, there appears to be a dilemma. On the one hand, the task of fiscal deficit reduction that is needed over the next few years would require us to maintain the existing tariff rates or even to raise it so as to compress the fiscal gap. On the other hand, there is a growing consensus that since our tariff rates are one of the highest in the world, any growth-promoting fiscal and balance of payments adjustment would require both a lowering of the tariff levels and a reduction in its dispersal. We have been increasingly using tariffs as a fiscal instrument to raise additional revenues in the recent years. This tendency needs to be reversed during the Eighth Plan period. Instead, our objectives on the trade policy front, which have been discussed earlier, should be guiding changes in the tariff structure.

4.5.17 On direct taxes, we have already initiated a set of rationalisation measures over the last few years. The rates of both personal income tax and corporation tax have been reduced and a few exemptions and allowances have been

abolished. This is a desirable development in line with successful experience in other countries. At present, the number of personal income tax payers is only about 4 million, accounting for about 0.5% of the total population and about 2% of the urban population. The income assessed for personal income taxation at present is only about 10% of our national income (net National Product) and about 15% of the non-agricultural income. Certainly, enough scope exists for widening the income tax net and broaden its base. Even some widening of the tax base should yield substantial increases in the revenues. Towards this end, a comprehensive review of the tax system has already been done by an Official Committee of the Government. The Government has already implemented many of the recommendations of this Committee in the 1992-93 Union Budget. Among other things, the Government has already introduced a form of presumptive tax with a fairly low rate on certain categories of potential tax payers. During the Eighth Plan period, the coverage of this presumptive tax should be enlarged further. Another potential source of broadening the direct tax base is to bring the relatively richer farmers into the direct tax net. The ratio of direct taxes relating to the agricultural sector (which includes land revenue and agricultural income tax) to agricultural GDP has fallen over the years from about 1.2 percent in 1950-51 to less than 0.7 percent in 1989-90. At the minimum, this trend needs to be reversed. It is, therefore, high time that the Government introduces some version of agricultural taxation, which have been recommended by various official Committees for more than a few decades now.

4.5.18 With regard to business taxation, our practice has been, and continues to be, to combine generous fiscal concessions with relatively high statutory tax rates. Not only does this lead to an erosion of the tax base but also to wide variation in the effective rates of tax for different businesses. Phasing out these fiscal concessions, combined with more uniform statutory rates across various types of business, will be desirable on efficiency as well as administrative considerations. Overall, the Government's objective should be one of evolving a simple and stable tax regime with reasonable tax rates but stricter enforcement.

### **User Charges on Public Utilities:**

4.5.19 An area where there appears to be a significant potential for additional revenue mobilisation is in the case of user charges on public services. User charges on many publicly provided utilities such as, irrigation, electricity, water and higher education are much below their costs of provision. Studies have indicated that the volume of unrecovered costs on such services in recent years could be as high as about 14% of GDP for the Government sector as a whole and about 5% of GDP for the Central Government alone. The overall recovery rates (i.e. the cost of publicly provided services recovered from the users) on services provided by the Central Government is as low as about 35 percent; it is even lower at about 14% for the services provided by the State Governments. The rate of recovery on publicly provided economic services is a little over 40% for the Government sector as a whole. Among the economic services provided by the Government, the recovery rates are as low as 35% on electricity and power and a little over 20% on irrigation.

4.5.20 Because of the inherent inefficiency of the Government departments which provide these public utilities, the actual costs of provision of many of these services themselves are much higher than what they ought to be. To that extent, the whole of the unrecovered costs on these public utilities does not constitute a subsidy to the users of these utilities. Nevertheless, it appears reasonable to assume that at least a part of these unrecovered costs of public utilities is, in fact, a subsidy to the users. In view of this, some increase in the user charges on some of these public utilities, especially utilities like electricity, irrigation, water and transportation, would become necessary during the Eighth Plan period. At the same time, the Government

departments providing these utilities should be forced to become more efficient by imposing harder budget constraints on them. Since many of these public utilities fall under the jurisdiction of the State Governments, cooperation from them would be required for any significant additional resource mobilisation from the public utilities, be it through raising the user charges or through cutting down the costs of provision of these utilities.

### **Summing Up**

4.6.1 The set of macroeconomic policies proposed above, if effectively implemented, should help a great deal in achieving the growth targets of the Plan with reasonable price stability and a sustainable balance of payments. Moreover, since these policies would help allocate national resources largely in line with the principle of comparative advantage and hence in favour of labour-intensive sectors, the resultant pattern of growth should help achieve a better employment growth. Overall, therefore, these policies should help achieve efficient labour-intensive growth. By expanding employment opportunities at a faster pace, such a growth process should help raise the living standards of the bottom layers of the population. However, the size and the dimensions of the poverty problem is so large that the trickle-down process by itself may not be sufficient to make a significant dent on the socio-economic problems of the bottom layers of the population within a socially acceptable time horizon. It is keeping this in mind that the recent Five Year Plans have emphasised the importance of the direct anti-poverty programmes. This is a highly relevant approach and the Eighth Plan should continue with this approach, even though the specific nature and contents of the anti-poverty programmes may need certain modifications for a more effective direct attack on poverty.

## CHAPTER 5

# FINANCING THE PLAN

### Introduction

5.1.1 This Chapter after reviewing the financing of the Seventh Five Year Plan (1985-90) and the Annual Plans (1990- 92), provides the projected financing of the Annual Plan 1992-93 and the Eighth Plan, 1992-97. The Chapter brings out the changes in the actual financing compared to the projections during the Seventh Plan 1985-90 and Annual Plans 1990-92. It examines the critical issues that have risen in the financing of investment by the Central and State Governments as well as the public undertakings.

5.1.2 Financing the Plan has three major dimensions: first, estimating major sources of finance; secondly, allocating these resources to user sectors (both public and private) for investment; and thirdly, checking the consistency of the sources and application of resources with the overall growth of income, consumption and savings.

5.1.3 The sources of financing projected in the Eighth Plan differ from the Seventh Plan in many respects. These projections reflect reduced dependence on borrowings, domestic as well as foreign and on deficit financing, and place greater reliance on resource mobilisation through buoyancy in revenues and economy in non-Plan (revenue) expenditure(NPRE). Thus, the Eighth Plan calls for much greater effort towards raising the resources domestically and deriving more out of the same expenditure, in support of the targetted GDP growth at 5.6 per cent. The projections of Plan financing, imply rationalisation of fiscal, monetary and financial policies.

5.1.4 Since the Seventh Plan projections were made at 1984-85 prices, the review of performance is also made at these prices using estimated gross domestic product (factor cost) deflators. Data for the review are based on actual/RE figures of Central Government for Central sector and Central assistance to States; for others, they are based on information supplied by the State Governments.

5.1.5 The Seventh Plan financing placed considerable reliance on additional resource mobilisation (ARM) and contribution of public enterprises. The pattern that has emerged after five years shows the shortfalls in contribution of public enterprises and ARM, on the one hand, and substantial increase in non-plan revenue expenditure on the other. It reveals a nearly three-fold deficit in Balance from Current Revenues (BCR), at base rates, one third actualised surplus at current rates i.e., including ARM and more than two-fold of level of deficit financing compared to the original projections.

5.1.6 While the average growth of GDP during the Seventh Plan (5.8%) exceeded the projected rate (5%), the domestic savings rate (estimated at 20.4%) fell short of the projected rate (24.3%). The average savings rate during the Seventh Plan was just about the average rate during the Sixth Plan. The shortfall in domestic savings rate was largely on account of lower rates of public sector and private corporate savings. The household savings rate is estimated to have increased significantly to 18.1 percent by 1989-90, compared to 13.7 percent in the base year.

5.1.7 A review of savings and investment during the Seventh Plan, as compared to the projections, reveals three major features: First, household savings financed household investment to the extent of 8 percent of GDP as was projected. But, the overall gross (domestic) savings rate (20.4%) turned out to be substantially below the projections (24.3%). The lower proportion was largely due to a change in the basis of estimating GDP in the new series, which raised GDP from 1980-81 onwards by over 8 percent as compared to the old series. The corresponding ratio (comparable to 24.3%) in terms of New Series of GDP would be around 22 per cent. Secondly, the overall rate of gross investment during the Seventh Plan is estimated to be 22.7 percent compared to the projected 25.3 per cent. Much of this shortfall was in the public sector. Thirdly, despite some shortfall in investments, domestic borrowings and inflows from the rest of the world in the public sector

were consistently in excess of projections. The private corporate borrowings, domestic and foreign also exceeded the projections.

5.1.8 The Seventh Plan review shows significant deterioration in budgetary savings and in the BCR of the Centre and the States. Budgetary dissaving amounted to over 2 percent of GDP and BCR worked out to (-) 0.65 percent of GDP for the Centre during the Seventh Plan period. The overall fiscal (gross) deficit of the Centre amounted to 3.2 percent of GDP during the Plan. The budget deficits of the Central Government far exceeded the projections leading to pressure on the balance of payments necessitating foreign borrowings on a much larger scale than projected.

5.1.9 During the Seventh Plan period, the role of the capital market as the medium for mobilising additional resources expanded greatly. The aggregate level of new capital issues by the non-Government public and private limited companies reached about Rs.7,910 crores in 1989-90, compared to little over Rs.1,787 crores in 1984-85. These companies raised about Rs.23,200 crores during the Plan period. The composition of resources raised changed in favour of debentures. This period was marked by some large-sized or mega issues each exceeding Rs. 100 crores. Institutional investors have played a major role in this process.

### **Financing of Public Sector Outlay in the Seventh Plan**

5.2.1 The actual financing pattern of the public sector Plan compared to the projections for the Centre (including UTs), Central public sector enterprises (CPEs) and the States and their PSEs are set out in Statement 5.1 based on the latest estimates as included in the Annual Plan reviews.

5.2.2 At 1984-85 prices, the deterioration in the Centre's and the States' BCR (i.e., the excess of non-plan revenue expenditure (NPRE), over revenue receipts), excluding ARM worked out to be over Rs. 7253 crores compared to the projected level of BCR at (-) Rs. 5249 crores and the contribution of public enterprises also

fell substantially short. The Centre's BCR, even after ARM, deteriorated, at current prices, sharply from a positive Rs.959 crores in 1984-85 to a negative Rs.4214 crores in 1989-90. Among States, the BCR (including ARM), of 10 special category States deteriorated from a little over Rs.42 crores in 1985-86 to about minus Rs.474 crores in 1989-90, while in the case of the 15 non special category States the BCR, including ARM, deteriorated from Rs.3306 crores in 1985-86 to Rs.2124 crores by 1989-90. The deterioration in the BCR of the Centre and the States including ARM, was the result of increased expenditure on pay and allowances, interest payment liabilities and other NPRE, notably subsidies. In certain States, even net Miscellaneous Capital Receipts (MCR) i.e., recoveries of loans and advances and deposits and advances less of disbursements by way of repayment of loans to the Centre and financial institutions, non-Plan loans and advances; and construction of official buildings, non-Plan capital outlay, etc. were negative at a substantial level, mainly because of higher loan repayment liability. There were increased losses of certain CPEs and States' electricity and transport undertakings.

5.2.3 This erosion of own resources was met by increased borrowings and RBI support or deficit financing. Market borrowings and MCR far exceeded the projections and deficit financing was more than twice the projected level at base year prices. Public enterprises' borrowings increased rapidly. Though domestic resources contributed the major part of investible funds, plan financing turned out to be inflationary. With the increase in borrowings, the burden of debt servicing has become significant and this would loom large over the finances of the Centre and the States during the Eighth Plan.

5.2.4 Dependence on foreign savings taken as a whole continued to be at a lower level compared to most of the developing countries with low per capita income. However, current account deficit as a proportion of GDP turned out to be much higher than what was originally envisaged. Besides, there was increased dependence on non-concessional foreign inflows and substantial draw-down on the country's foreign exchange reserves.

## **Centre and Central Public Sector Enterprises**

5.3.1 The approved plan outlay for the Centre (including the UTs) for the Seventh Plan was Rs.99,302 crores and as per the latest estimates, their expenditure is placed at Rs.1,31,236 crores. But, expenditure at 1984-85 prices amounted to about Rs.1,08,746 crores which was 9.5 percent more than planned.

### **Centre's Balance from Current Revenues (BCR)**

5.3.2 The total revenue receipts of the Centre increased by 17 per cent per annum, during 1984-85 to 1989-90, whereas the revenue expenditure has been rising by 20 per cent per annum. Hence the Centre's BCR at 1984-85 prices shows a deterioration of Rs. 5338 crores as the non-plan revenue expenditure exceeded the original estimates by Rs. 9274 crores, though the revenue receipts (including ARM) were higher by Rs. 3936 crores. Excluding ARM also the revenue receipts exceeded the original estimates by Rs. 6483 crores. However, total additional resources mobilization was lower by Rs. 2,545 crores. The full realisation of ARM improved the BCR considerably. On expenditure side, subsidies and interest payments and other NPRES increased by 24 per cent and 20 per cent per annum in nominal terms; defence expenditure increased on an average 15 per cent annually during 1984-85 to 1989-90.

5.3.3 The public sector enterprises also could not achieve the targetted ARM. They raised Rs. 8506 crores through fresh measures against the target of Rs. 14,240 crores. Thus, the estimated ARM (net of States' share) during 1985-90 by the Central Government including PSEs amounted to Rs. 14,211 crores, at the base year prices compared to the plan projection of Rs. 22,490 crores.

### **Public Sector Enterprises**

5.3.4 The total resources of Central Public Enterprises (CPEs), both departmental and non-departmental, (at 1984-85 prices) during the Seventh Plan was originally estimated at Rs.51,694 crores, including ARM, but the latest estimates (Rs.39,649 crores) even after including bonds were less by nearly Rs. 12,045 crores. The estimated ARM by these enterprises was considerable but there was a shortfall of Rs.5734 crores as compared to projections. Altogether,

total internal resources (retained profits, depreciation, etc.) fell considerably short of target and dependence on borrowings increased. Extra budgetary resources (EBRs) were higher, as also were the inter-corporate transfers. The budgetary support (equity and loans) by the Central Government amounted to Rs.38,515 crores (at current prices) during the Plan period.

5.3.5 The CPEs' extra budgetary resources (EBRs) besides external commercial borrowings/suppliers credit and deposits (as also inter-corporate transfer of funds) included public loans through the issue of bonds/debentures, on a selective basis, allowed to supplement resources for outlays and to tap the private savings. They totalled Rs.10,796 crores (at current prices) during the five years.

5.3.6 The CPEs in selected sectors were also allowed to issue tax-free bonds from 1987-88. Out of the total issue of bonds during 1987-90, about two-thirds were tax-free bonds, at the interest rate of 9 percent, and the rest were at the rate of 13 per cent. As much as 85 percent of bonds were picked up by the financial institutions, banks and corporate bodies against the original target group of rural savers.

### **Centre's Borrowings and Deficit Financing**

5.3.7 Reliance on domestic borrowings in the form of market borrowings, small savings and provident fund and net capital receipts for financing the Plan was higher than the original estimates. These items of domestic borrowings financed 67 percent of the Centre's Plan as against about 50 percent envisaged in the original Plan estimates. Deficit financing has totalled Rs.35,626 crores (at current prices). At base year prices, this is more than twice the level projected in the original Plan at Rs.14,000 crores.

### **Central Assistance**

5.4.1 Total Central assistance including advance (adjusted) plan assistance, normal as well as for relief and special plan loans for Punjab added to total Rs.38,921 crores at current prices, which works out to Rs.30,941 crores at 1984-85 prices (Statement 5.1) compared to Rs.29,737 crores in the Plan that is higher by 8.3 per cent. The total of releases of Central assistance for the States' Plans and special assistance for area programmes during the Plan amounted to Rs.36,554 crores as per details given below (Rs. crores):-

	Plan Estimates (at 1984-85 prices)	Present Estimates (at current prices)
<b>I.State Plans</b>	<b>27,278</b>	<b>33,594</b>
1.Normal Central Assistance (net)* including Plan loan to Punjab, etc.	23,478	30,435
i) Special Category States**	7,098	9,384
ii) Non-Special Category States***	16,380	21,051
2.Additional Assistance for Externally-aided Projects	3,800	3,159
<b>II Area Programmes</b>	<b>2,459</b>	<b>2,960</b>
1.Hill areas & Western Ghat Areas	870	1,043
2.Tribal Sub-Plan	756	861
3.North-Eastern Council (NEC) Plan	575	714
4.Border Area Programmes	200	219
5.Other Special Area Programmes	58	123
<b>III. Total (I &amp; II)</b>	<b>29,737</b>	<b>36,554</b>

\* Adjusted for Advance Plan Assistance of Rs.149 crores provided during the Sixth Plan.

\*\* Arunachal Pradesh(added from Feb.1987), Assam, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Mizoram(added from Feb., 1987), Nagaland, Sikkim and Tripura

\*\*\* Andhra Pradesh, Bihar, Goa (added from May,1987) Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh and West Bengal.

The total of releases above differ from the budgetary reports totalling to Rs. 41,851 crores on account of time lag in accounting in two respects, i.e., budgetary actuals and releases received by the State Governments.

5.4.2 Allocations of Central assistance for State Plans of non- Special Category States were made following Gadgil formula as modified at the beginning of the Sixth Plan.

#### States and State-level Public Enterprises (SLPEs)

5.5.1 The approved Plan outlay for all States for 1985-90 was Rs.80,698 crores. As per the latest estimates made jointly with the States and the Ministry of Finance, the resources actually available for their plans are placed at Rs.87,464 crores. But adjusting for price changes, the actual resources work out to be lower by 11.9 percent and expenditure lower by 16.9 percent compared to the approved outlay. The latest estimates of resources indicate a deterioration in the States' BCR including ARM. The BCR shows deterioration due to lower turn out of their own tax revenues, as also from non-tax sources; and increase in interest

payments and other non-plan non-development expenditure. Market borrowings for State Plans, at 1984-85 prices were realised at a level lower than projected in the Plan. Share of small savings, net accrual of State Provident Funds and negotiated loans were larger than projected. Together, these capital receipts (excluding bonds of CPEs), exceeded the Plan estimates, at comparable prices, by about 25 percent. The review shows that the share of Central assistance in financing of the States' Plan actually turned out to be 48 percent compared to the projected share of 36.8 percent. The Central assistance, at comparable prices, worked out to be higher (by 4.0 %) at Rs.30,941 crores compared to the projected level of Rs.29,737 crores. Despite increased Central support, the share of the States in total public sector resources turned out to be less than 39.1 percent compared to 44.8 percent projected.

5.5.2 Among Special Category States, the BCR as also the opening balance was negative in all cases. In view of this, ARM through tax and non-tax measures as also contribution of Departmental Undertakings, (including their ARM), was left to cover their deficits under BCR and opening balance. Central assistance exceeded their Plan expenditure as it covered their BCR gap until 1988-89.

5.5.3 The latest estimates (at 1984-85 prices) of the BCR of the States, including ARM show a surplus of Rs.12,746 crores which is significantly less than the projected surplus of Rs.19,762 crores. This deterioration was mainly due to shortfall in the projected buoyancy of revenue (in real terms) and increasing NPRE, especially non-development expenditure.

5.5.4 Prior to 1989-90, in the case of Special Category States, the gap in BCR was covered through Central assistance. However, from 1989-90, States were expected not to show any negative BCR as the Ninth Finance Commission (NFC) provided revenue gap grants based on their assessment. In view of this, the gap in BCR, if any, of the Special Category States was left to be covered by these States through ARM and reduction in the NPRE. But, all the Special category States had gaps in their BCR which they maintained was due to the NFC having over-assessed their revenues and underestimated their non-Plan revenue expenditure.

#### **State-Level Public Enterprises**

5.5.5 State Electricity Boards/Undertakings (SEB) and State Road Transport Corporations/Undertakings (RTC) have shown an estimated level of deficit (negative contribution) of Rs.2,194 crores, compared to their estimated contribution at Rs.7,243 crores in the Seventh Plan. By the terminal year of the Plan, only the SEBs of Andhra Pradesh, Madhya Pradesh and Maharashtra contributed positively, in terms of commercial surpluses, (i.e. adjusted for depreciation) to Plan resources in revised estimates. Only RTCs of Andhra Pradesh, Tamil Nadu and marginally of Goa contributed positively in the revised estimates. Departmental transport undertakings in the concerned States showed negative contributions, except for Haryana Roadways.

## **Review of Annual Plans 1990-91 and 1991-92**

### **Annual Plan 1990-91**

5.6.1 The Annual Plan 1990-91 was formulated initially as part of the Eighth Plan envisaged for the period 1990-95. While the tempo of economic development through larger investment and outlay in the public sector was proposed to be maintained, due emphasis was placed on containing deficit financing within limits in view of the inflationary trends. The need for ARM by the Centre and State Governments and their enterprises in financing their Plan was given due weight. The resource requirements of the States for larger State Plans and for more financial autonomy in the developmental activities of States was fully recognised and Central Plan assistance to the States was substantially stepped-up.

5.6.2 As Statement 5.2 shows, the approved Plan outlay for the Centre and the UTs for 1990-91 was Rs.40,400 crores and the outlay for the States' Annual Plan 1990-91 was at Rs.24,317 crores. Thus, the total outlay of Rs.64,717 crores (against initially estimated resources of Rs. 65,002 crores) for the Annual Plan 1990-91 was nominally higher by 12 per cent (14% at the Centre including UTs and 9% in the case of the States) over the outlay of 1989-90 Plan.

5.6.3 According to the details available now, as indicated in Statement 5.2, Plan expenditure for 1990-91 was Rs. 39,066 crores in the case of Centre (including the UTs) and Rs. 22,360 crores in the case of States. The resources for financing the Plan is now placed at Rs. 39,486 crores in the case of Centre (including UTs) and Rs. 21,651 crores in the case of States, indicating overall deterioration of Rs. 3,865 crores compared to the Annual Plan estimates. Deterioration in Balance from Current Revenues compared to the Annual Plan estimates has occurred in the case of Centre due to slower growth in revenue receipts and increase in non-plan revenue expenditure including subsidy and interest payments. Substantial shortfall compared to the Annual Plan estimates also occurred in the internal resources of public enterprises and in the realisation of Miscellaneous (net) Capital Receipts and Provident Funds.

5.6.4 Net inflow from abroad in the form of grants and loans to the Centre is now estimated at Rs. 3767 crores (against the total of Rs. 6320 crores, including borrowings by public enterprises) compared to the Annual Plan/Budget Estimates of Rs. 4327 crores (against the total of Rs.5793 crores). The budget deficit/deficit financing in 1990-91 was of the order of Rs. 11,347 crores which is higher by Rs. 4141 crores over the Annual Plan estimates.

5.6.5 The shortfall in the resources of States has been mainly due to deterioration in ARM, increase in NPRE and erosion in the contribution of the State Public Enterprises.

5.6.6 The Central Assistance for the State Plans and special assistance for Area Programmes during 1990-91 as per States' estimates was only lower at Rs.10,261 crores compared to the budgetary provision of Rs.10,526 crores. Plan revenue deficit grants and contribution towards Calamity Relief Funds provided to the States by the Centre were to the tune of Rs.991.53 crores and Rs.603 crores respectively, both in pursuance of the recommendations of the NFC.

#### **Annual Plan 1991-92**

5.6.7 The approved outlay in the Annual Plan 1991-92 for Centre and States together, as Statement 5.3 brings out, was at Rs.72,317 crores, with a nominal increase of Rs.7,600 crores i.e. 11.7 percent increase, over the Plan Outlay of Rs.64,717 crores for 1990-91. Improvement in the BCR of the Centre and the States and a higher draft on private savings through market loans, small savings and provident funds were expected to finance the increase in the Plan outlay for 1991- 92.

5.6.8 The financing strategy during 1991-92 focussed on fiscal deficit which is broadly defined as Centre's total revenue receipts, loan recoveries and other capital receipts (excluding borrowings) minus total revenue and capital expenditure (including loans and advances to the States). The budgetary deficit of Rs.10,722 crores in the revised estimates for 1990-91 was proposed to be brought down to Rs.7,719 crores in 1991-92. Several measures to prune NPRE including subsidies and expenditure on defence and establishment were initiated. The ARM measures were expected to yield Rs.2,005 crores of tax revenue (net of States' share). The

administered prices of the Central Public Enterprises were raised to help additional resource mobilisation for Plan financing. The Central Public Undertakings were allocated market borrowings through issue of public bonds/debentures for financing a part of their Plan outlays.

5.6.9 Total provision for Central assistance for the State Plans and Special assistance for Area Programmes during 1991- 92 amounted to Rs.11,835 crores. In addition, the States were given Plan revenue deficit grants of about Rs.1,333 crores as per recommendation of the NFC. The States were expected to reduce NPRE, step-up the efforts for mobilisation of additional resources and improve the performance of their undertakings to meet the financing of approved outlays.

5.6.10 The latest estimates of finances for the Annual Plan 1991-92 may also be seen in the Statement 5.3. These show that the BCR of the Centre deteriorated compared to the Plan estimate. Contribution of Public Enterprises also showed shortfall. The States' resources fell considerably short of the Plan estimates, with the BCR turning out to be negative at a significant level. Central support was lower only to the extent of national economy measure selectively exercised in Central assistance amounting to around 10 per cent. As a result, revised estimates of outlays of the Centre and the States are at significantly lower levels compared to the approved outlays.

5.6.11 In pursuance of the recommendations of the National Development Council which met in October 1990, it has, inter alia, been decided that:

- a) the entire external aid (compared to 70% earlier) meant for externally aided projects implemented by the States would be passed on to them and
- b) the grant-loan pattern of assistance to Assam and Jammu & Kashmir States would be 90:10, from 1st April, 1991, as prevalent for other Special Category States.

Besides, a Committee of Experts has been appointed to suggest durable solutions for the financial problems of the Special Category States.

## Annual Plan 1992-93

5.7.1 The Annual Plan 1992-93 has been formulated in the context of the Eighth Plan, 1992-97. The measures initiated by the Government in 1991-92 for fiscal correction and consolidation will be continued in 1992-93. Thus, efforts for mobilising resources and restraining expenditure taken during 1991-92 will be continued during 1992-93. The objective is to reduce the fiscal deficit to 5 percent of GDP during 1992-93.

5.7.2 The Annual Plan 1992-93 recognises the importance of maintaining fiscal discipline at all levels. The basic premise is that Plan expenditure should not depend on ever increasing budgetary support. In future, the ability to finance Plan expenditure will depend critically upon the internal resources generated by the public sector. Thus, the Plan draws attention to the importance of efficiency in the public sector.

5.7.3 The Annual Plan outlay (Centre, UTs and States) for 1992-93, as shown in Statement 5.4, will be of the order of Rs.80,771 crores; implying an increase of 11.7 percent over the Plan outlay of 1991-92. The proposed Plan outlay for the Centre including UTs at Rs.49,698 crores (at current prices) will be 61.5 percent of total outlay. The details of financing of public sector outlay in the Annual Plan 1992-93 are given in Statement 5.4.

5.7.4 Prior to the Fourth Plan, the allocation of Central assistance was based on schematic pattern and there was no formula for allocation. In view of the general demand for an objective basis for allocation of Central assistance for State Plans, a formula known as Gadgil Formula was evolved, which in its original form was adopted for distribution of Central Plan assistance during Fourth and Fifth Plans. According to this formula, allocation for States (other than special category States) was based on population (60%), per capita income (10%), tax effort (10%), on-going irrigation and power projects (10%), special problems (10%). Since the criteria in respect of on-going programmes were weighted in favour of rich States, Gadgil formula was modified in the beginning of Sixth Plan, and the weightage for on-going schemes was added with per capita income, making its weight 20%. This modified formula became the basis of allocation of Central Plan assistance to

States in Sixth and Seventh Plans and Annual Plan 1990-91. Keeping in view suggestions made by some of the States for revising the modified Gadgil formula, various alternatives were considered by the NDC in October, 1990 and the formula was revised and it laid down criteria with weightage of population (55%) per capita income (20% - deviation method; 5% - distance method), fiscal management (5%), special development problems (15%). This formula was followed for distribution of Central assistance for 1991-92 only. Most of the State Governments expressed reservation on this formula and keeping in view their concerns, a Committee under the chairmanship of Shri Pranab Mukherjee, Deputy Chairman, Planning Commission was constituted to evolve a suitable formula for distribution of Central assistance. The suggestions made by the Pranab Mukherjee Committee were discussed by the NDC on 23-24, December, 1991 wherein a consensus emerged and a revised formula evolved which was equitable and acceptable and was made the basis of allocation of Central Plan assistance to the States for the Eighth Plan. Mukherjee formula containing criteria for allocation of Central assistance for the non-special category States is given below:

Criteria	Weight
i) Population (1971 Census)	60%
ii) Per capita income -	
(a) 'Deviation' method - Covering States with per capita SDP below the national average	20%
(b) 'Distance' method - Covering all States	5%
iii) Performance -	
(a) Tax effort;	7.5%
(b) Fiscal Management; and	
(c) Progress in respect of national objectives	
iv) Special problems	7.5%

Under the criterion of the progress in respect of national objectives, the approved formula covers four objectives viz., (a) population control and maternal and child health; (b) universalisation of primary education and adult education; (c) on-time completion of externally aided projects; and (d) land reforms. Distribution of Central assis-

tance for the Special Category States' Plans would be as in the modified Gadgil formula, on the basis of the lump sum amount (about 30 per cent taken out of total allocable among the States; aside from the pre-assigned including NEC, additional Central assistance for externally aided projects and REC).

5.7.5. In case of Special Category States, out of the total Central Assistance after providing funds for externally aided schemes and Special Area Programmes, a part (nearly 30%) was earmarked separately for these States right from the days when the Gadgil Formula was adopted for the distribution of Central Plan assistance. This formula was slightly modified in October, 1990 when the share allocated to these States also included the allocation for North Eastern Council (NEC). This, however, was modified under the Mukherjee formula (1991) by which the share allocated to Special Category States excluded the allocation of NEC and thus restoring the position as it existed before 1990.

### **Plan Financing During the Eighth Plan, 1992-97**

#### **Approach to overall financing**

5.8.1 Financing investment of Rs.798,000 crores during the Eighth Plan would call for massive domestic effort particularly when net inflow from abroad is to be kept at moderate level amounting to 1.6 percent of GDP. Inter-sectoral flow of funds in respect of the projected level of investment shows that financing of public sector investments at the rate of 10 percent of GDP constituting 45.2 percent of total, is projected to come from borrowings out of savings of households to the extent of 71.6 percent, from the rest of the world to the extent of 9.34 percent, and the balance from its own savings. The projected investments would still call for significant mobilisation effort in the Government sector, where the budgetary savings need to improve significantly which will depend on higher revenue (net) realisation and economy in NPRE.

5.8.2 The resource constraint is expected to continue at both the Centre and the States, particularly due to the drain by loss-making Central public enterprises and the States' electricity and transport undertakings and the moderate increases in surpluses of profit-making

enterprises. But, RBI support (deficit financing) is projected at a lower level so as to move in the direction of non-inflationary financing. Substantial economies in NPRE and increasing ARM would, therefore, be needed to finance the projected outlays of the Centre and the States almost fully from domestic sources. As the Sarkaria Commission has observed, the agriculture sector has lagged in contributing to resource generation compared to its contribution to GDP. The per cent share of direct tax revenue from agriculture has gone down to about 0.7 percent of GDP (1989-90) compared to about 1.2 percent in 1950-51, while the share of all direct tax revenues in aggregate GDP has gone up to 2.8 percent compared to 2.6 percent in 1950-51. Even if 1.2 percent share observed in 1950-51 is again achieved there would be additional revenue from agriculture sector to the tune of Rs.600 to 700 crores, over the present level of Rs.750 crores. This can be achieved through widening the base of the taxation in agriculture requiring certain legislative changes by the States for which consensus needs to be developed in the National Development Council. All in all, there is need to raise the ratio of direct tax revenues to GDP. Attention in this regard needs to be paid to eliminating or reducing the numerous concessions and exemptions. The level of tax arrears in the case of the Centre as well as the States is considerably large. The level of arrears in regard to Central direct taxes is quite high. Total arrears are estimated to be over Rs.5,000 crores of which a large amount may be recoverable. Among States, the level of tax arrears, for example, was over Rs.1,250 crores in Uttar Pradesh at the end of March 1990. Other States having significant tax arrears include Andhra Pradesh (Rs.461 crores); Orissa (Rs.385 crores); Karnataka (Rs.272 crores); Tamilnadu (Rs.253 crores); Gujarat (Rs.233 crores); Madhya Pradesh (Rs.147 crores); Rajasthan (Rs.108 crores); Punjab (Rs.106 crores); Kerala (Rs.105 crores) and Haryana (Rs.90 crores). The tax arrears are also significant in case of Kerala but largely due to electricity duty to be also recovered from State departments/undertakings. States must strive to get about three-fourth of the recoverable arrears in the exchequers even if legal cases are pending. In case of loans and advances also there are substantial arrears. Their recovery is within the States' efforts. There is also large amount of revenue foregone through exemptions in regard

to taxes, notably excise. Definite measures would be needed to stop the leakages in the revenue system.

5.8.3 The performance of Central public enterprises has improved in recent years but it is still much below the expectations and will have to be considerably improved during the Eighth Plan. Internal resource generation has to be the main source of financing their outlays, particularly as the budgetary resources from Government and external commercial borrowings will have to be contained. There is ample room for improving the capacity utilisation, rationalising tariffs, increasing efficiency and exercising economy in staff expenditure. This would help the CPEs to mobilise resources from the capital market.

5.8.4 Realisation of the projected financing pattern of the Eighth Plan would call for rise in revenues faster than growth in GDP and restriction on NPPE to keep it much below the growth of GDP. In the Eighth Plan, special attention needs to be given to the containment of growth in staff and expenditure on them and further reduction on other non-development expenditure such as subsidies. The scale, the content and the rationale of subsidies will have to be critically reviewed. Through peoples' participation in development programmes, not only the outlay requirements corresponding to the growth targets and programmes can be reduced, but their effectiveness can also be increased. Furthermore, the assets created during the previous Plans can be maintained better and the maintenance expenditure can be reduced which would help contain the revenue deficit of the Government at the Centre and the States. Experience of certain States suggests that the efficiency and economy in expenditure on social services can indeed be brought in through people's involvement. Hard decisions will also be needed to make economic and social services yield their due. National consensus on measures is emerging for making higher education self-financing to some extent; making the direct taxes yield their due and indirect taxes responsive to their base and prevailing prices; and in the case of the States, reducing the differentials in the rate of sales tax among States within a narrow range, raising the irrigation tariff to cover at least

operating expenses and charging a minimum power tariff.

### **Financing the Private Sector Investment**

5.9.1 To finance the projected investment of Rs.149,000 crores during the Plan period, the private corporate sector is expected to mobilise resources of the order of Rs.68,930 crores out of its own savings and Rs.58,770 crores as transfers from the household sector. The rest, Rs.21,300 crores, may be net inflow from rest of the world. The household sector's investment of Rs. 2,88,000 crore would be met out of its savings of Rs.605,170 crores. The balance of savings over investment is to be transferred to the public and the private corporate sector. Until the eighties, the net increase in household savings consisted mainly of bank deposits and loans to Government. In recent years, investment in corporate stocks has been increasing due to their higher returns compared to even tax-rebate-adjusted deposits and loans to Government. This effect is likely to be stronger in future as access to capital market increases and new instruments are brought in. The chunk of small investors is indeed growing fast. The capital market has been able to offer a good hedge for inflation, particularly if investment is made in equities. The share prices have appreciated much faster than that of the conventional hedges like gold and even real estate. The institutions responsible for capital market would need strengthening to promote a competitive atmosphere and improved efficiency in the use and deployment of funds. The level of resources mobilised by Non-Government Public and Private Limited Companies through capital market during the Seventh Plan period can at least be doubled during the Eighth Plan period and increased further with certain institutional developments which may help to tap the rural sector.

5.9.2 According to macro balances, the private corporate sector has been allocated Rs.21,300 crores as inflow (net) from abroad. While a major part will come in the form of suppliers' credit and market borrowings, recent policy changes should result in increased investment by Non-resident Indians and foreign companies and portfolio investment from abroad. If the present expectations about larger foreign investment materialises, the position will improve.

## **Financing of Public Sector Outlay in the Eighth Plan**

5.10.1 Public sector outlay for the Eighth Plan is placed at Rs.434,100 crores, at 1991-92 prices. Of this, investment would be Rs.361,100 crores, the rest Rs.73,100 being current outlays. Public sector investment would amount to 45.2 percent of aggregate compared to 47.8 percent as originally envisaged and 45.7 percent as realised in the Seventh Plan. This outlay in public sector during the Eighth Plan would amount to 141 percent increase and at comparable prices to about 32 percent increase over the Seventh Plan Outlay in public sector.

5.10.2 Such an increase is based on the expectation of (i) additional tax and non-tax revenues and miscellaneous receipts; (ii) containing growth of Government current expenditure especially net consumption expenditure and (iii) increased contribution of public sector enterprises, including Railways, amounting to 4.3 percent of GDP compared to 3.7 percent in the Seventh Plan.

5.10.3 The public sector plan outlay is to be financed, given the BCR of Rs.35,005 crores, and contribution of public enterprises at Rs.148,140 crores, both including ARM, and net MCR of Rs.202,255 crores and deficit financing of Rs.20,000 crores and external resources of Rs.28,700 crores. Thus, financing is to come from domestic sources to the extent of 92.2 percent. Deficit financing would be contained at 4.6 percent of total public sector resources and at 0.58 percent of GDP. This depends crucially upon achieving the target of BCR of Rs.35,005 crores which involves a massive improvement in fiscal performance from recent trends involving both better revenue collection and very tight control over growth of current expenditure. This calls for hard decisions on several fronts and unless these are taken, the viability of financing the Plan will be jeopardised.

5.10.4 Detailed estimates of financing of public sector including the Centre and UTs, Central PSEs and the States during the Eighth Plan, provided in Statement 5.5 are based on the macro-level balances, and updated estimates of the finances of the Centre and States.

## **Centre and Central Public Sector Enterprises (PSEs)**

5.10.5 The total resources, excluding transfer of Rs.78,500 crores as assistance for the State Plans, have been estimated at Rs.254,115 crores for the Centre (including the Union Territories) and Central PSEs which is 156 percent higher compared to the Seventh Plan projection at respective base-level prices and about 40 percent higher at comparable prices.

### **Centre's Balance from Current Revenues (BCR)**

5.10.6 The BCR of the Centre is estimated at Rs.22,020 crores including the expected ARM by the Government and providing for transfer to the States' of their share in Central taxes. The NPRE of the Centre is estimated to be contained especially the consumption expenditure. Increased commitments of the Government have meant higher budgeted subsidy expenditure under several heads, as also higher revenue expenditure by way of debt relief to farmers in 1990-91. Many reliefs and concessions are reflected in 'Other' subsidies. Increased establishment expenditure would be mainly on account of the increased pay and allowances including dearness allowances and travel.

### **Central Public Enterprises (CPEs)**

5.10.7 The resources including borrowings of central public enterprises (CPEs), both departmental and non-departmental, are estimated at Rs.144,140 crores including ARM. However, for this the estimated rise in operating expenses/cost escalations, has to be contained within limits. The estimated resources of the CPEs imply a shift from increasing budgetary resources to the capital market.

5.10.8 In view of the tax revenue which has to be foregone and distortions in interest rates which are created by tax-free 9 percent interest bonds, recourse to them is to be reduced to a pre-determined limit. Their placement is to be watched closely. The periodical review should enable their containment and moving in the direction of original objective of tapping peoples' savings especially rural savings.

5.10.9 With estimated borrowings and miscellaneous (net) Capital receipts at Rs. 117,755 crores, the overall deficit in the Central Budget or RBI support, over the Plan period, is expected

to be contained at Rs.20,000 crores, which is much lower than the observed estimates for the Seventh Plan. This is in line with the approach to the Eighth Plan regarding non-inflationary financing of the Plan and reducing the monetisation of public debt through Reserve Bank of India. Therefore, adherence to annual budgetary deficit, financed by the RBI support, within this limit, would be necessary to ensure price stability. The States are more or less adhering to the policy of not resorting to overdrafts beyond the specified short time limit following the guidelines issued by the Central Government.

### **Central Assistance for State Plans**

5.10.10 The total Central assistance for State Plans (including Plan revenue deficit grants) is projected at Rs.78,500 crores which finance 43.6 percent of the projected Plan outlay of the States' which would be much higher than the Seventh Plan projection at 37 percent. The Central support would also include allocation of market borrowings and loans from financial institutions. While the State-wise allocations of Plan grants would be as per recommendations of the Ninth Finance Commission, (up to 1994-95) allocation of Central assistance for State Plans would be made in accordance with the formula agreed upon in the National Development Council meeting held in December, 1991. All Special Category States will be allowed assistance in the grant:loan pattern of 90:10. Allocations for externally-aided projects are based on approved projects and aid utilisation possibilities. These will be made on cent percent basis. Central assistance against externally-aided projects should not replace the existing budgetary allocations to the specified sectors as this is aimed to result in additionality. The Central allocations are likely to be distorted when in place of additionalities, there is replacement.

5.10.11 In pursuance of the decision taken at the time of the revision of modified Gadgil Formula, a Committee of Experts has already been set up to suggest durable solutions for the financial problems of the Special Category States.

### **States and State-Level Public Enterprises**

5.10.12 The total outlay of the States has been kept at Rs.179,985 crores which would be about 41.5 percent of the total public sector outlay. The estimates of resources under various heads

for financing the above outlay are given in Statement 5.5.

### **States' Balance from Current Revenues (BCR)**

5.10.13 The overall BCR including ARM by the States (covering the non-special category States) is estimated at Rs.12,985 crores as per the macro-level dimensions of the Plan. Much higher levels of BCR is expected as per States' commitments of resource mobilisation.

5.10.14 The resources/contribution of State Electricity Boards and State Road Transport Corporations and Power/Transport Departments/Undertakings; including ARM (net), are estimated at Rs.4,000 crores only. But, this would also call for substantial reforms so that ARM (net) is realised to correspond to cost escalations in net terms.

5.10.15 A study of finances of the State-level enterprises, other than SEBs and RTCs, promoted by the Planning Commission, shows their overall negative contribution presently which entails budgetary support by the respective State Governments. Necessary reform measures need to be taken, to lead to a turn around and positive contribution to resources.

5.10.16 The outlay levels for the States are determined keeping in view their development requirements to be financed by States own resources; and Central support which include Plan assistance; market borrowings; negotiated loans from financial institutions namely LIC, GIC, RBI, NABARD, IDBI, REC and others; and Plan revenue deficit grants recommended by the NFC. Among State's resources, aside from BCR management and increased contribution of public enterprises, net MCR of the States projected to be negative, the projected increase in share in small savings would call for substantial effort for collection while that of Provident funds would require prudent management. The present commitments by the States in these regards have been conservative and would have to be raised to realise the projections given in the Statement 5.5 which may reduce the ARM requirements on budgetary account envisaged by the States.

5.10.17 Several States have maintained that their future tax revenue have been over-estimated and revenue expenditure under-estimated by the NFC. While this may be true, NFC has taken a normative approach with the objective of phasing-out revenue deficits and making the States' as well as Centre's finances viable over

the period so as to generate their own resources for their increasing developmental requirements. This, as well as other observations made by the NFC for ARM, are to be achieved during the Eighth Plan.

## Statement - 5.1

## Financing Pattern of the Public Sector Outlay during the Seventh Plan

(Rupees Crores at 1984-85 prices)

Items	Actuals/Latest Estimates			Original Estimates		
	Centre (including UTs)	States	Total	Centre (including UTs)	States	Total
1.	2.	3.	4.	5.	6.	7.
<b>I Domestic Resources at current rates of taxes, tariffs and fares</b>						
1.a) Balance from Current Revenues	-9099	12746	3647	-3761	19762	16001
of which ARM	5705	10444	16149	8250	13000	21250
b) B.C.R. excl. ARM	-14804	+2302	-12502	-12011	6762	-5249
2. Contribution from Public Sector Enterprises (PSEs)	31519**	-2194	29325	51694	7243	58937
of which ARM	8506	6736	15242	14240	9212	23452
3. Other Capital Receipts *	72887	30339	103226	49106	23956	73062
of which bonds of Public enterprises	8130	0	8130	0	0	0
4. Opening surplus/deficit	0	-2008	-2008	0	0	0
<b>Total - I (1+2+3+4)</b>	<b>95307</b>	<b>38883</b>	<b>134190</b>	<b>97039</b>	<b>50961</b>	<b>148000</b>
II Net Inflow from Abroad	16124	0	16124	18000	0	18000
III Budgetary Deficit	28256	0	28256	14000	0	14000
IV Aggregate Resources (I+II+III)	139687	38883	178570	129039	50961	180000
V Central Assistance to States	-30941	30941@	0	-29737	29737	0
VI Resources Available for the Plan (IV + V)	108746	69824	178570	99302	80698	180000
VII Plan Outlay / Expenditure	108746@@ (103416)	69631\$	178377	99302	80698	180000

\* In case of States, covering market borrowings, share in small savings, misc. Capital receipts, provident funds, negotiated loans, upgradation grants and others. In case of Centre covering market borrowings, bonds/ debentures by Public Sector Enterprises, small savings, provident funds and misc. capital receipts.

\*\* Based on RE figures of Central Budget.

@ The total of releases above differs from the budgetary reports of actuals totalling to Rs. 41851 crores on account of time lag in accounting in two respects i.e. budgetary actuals and releases received by the State Governments; Include Rs. 2930 crores for area programmes.

@@ The difference in actual total expenditure figures as given in the budget documents shown above against centre and as reported by the Departments given in parenthesis, may be due to reporting time lag.

\$ In case of States, total of resources and total expenditure differ due to reporting time lag, difference in coverage and certain adjustments.

## Statement 5.2

## Financing Pattern of Plan Outlay for 1990-91, Centre (incl. UTs.) and States

(Rs. Crores)

Items	1990-91					
	Annual Plan			Pre-Actuals		
	Centre Incl. UTs	States	Total	Centre Incl. UTs	States	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. Approved Outlay/Expenditure	40400	24317	64717	39066	22360	61426
II. Domestic Resources.						
1. Balance from current revenues (BCR incl. ARM)	-4396	248(a)	-4148	-10401	-596(a)	-10997
2. Resources/Contribution of public sector Enterprises	16577	-264	16313	12973	-2012	10961
3. Issue of Bonds/Debentures by PSEs	3942	0	3942	4933	0	4933
4. Market Loans	8000	3300	11300	8001	3216	11217
5. Small Savings	500	5062*	5562	9104	7016	16120
6. Provident Funds	1580	2987	4567	1221	3296	4517
7. Term Loans from Financial Institutions/Corporations	0	1788	1788	0	2127	2127
8. Misc. capital Receipts(MCR)	12716	-1980	10736	5822	-1283	4539
<b>Total-II : Domestic Resources</b>	<b>38919</b>	<b>11141#</b>	<b>50060</b>	<b>31653</b>	<b>11653#</b>	<b>43306</b>
III. Net inflow from abroad	5793	0	5793	6320	0	6320
IV. Budgetary deficit	7206	0	7206	11347	0	11347
V. Aggregate Resources (II to IV)	51918	11141	63059	49320	11653	60973
VI. Central Assistance to States **	-10526	10526	0	-8842	8842\$	0
VII. Plan grants to States under Article 275(1) (Finance Commission)	-992	992	0	-992	992	0
VIII. Implied further ARM by States/transfers from the Centre	0	1943	1943	0	164	164
IX. Resources for the Plan	40400	24602##	65002	39486	21651	61137

.....contd.

(a) Including upgradation grants and special problem grants, includes BCR of Non-special category States.

\* BE in Central Budget is Rs.4500 crores, excess due to additional savings estimated to be mobilised by the States.

# Among Special Category States only positive sum of capital resources (small savings, state provident funds, misc. capital receipts, market borrowings and negotiated loans) of certain States included in Plan funding while negative sum of capital resources of other States ignored. Negative contribution of State Public Enterprises and negative BCR of all the States ignored.

\*\* Including assistance for externally aided projects, Area programmes and Plan Loans.

## Approved outlay Rs. 24317 crores. Surplus in resources of some of the Non-special Category States due to additionalities in Central transfers (including due to Finance Commission).

\$ The total of releases above differs from preactuals provided by States totalling Rs.10261 crores on account of lag in accounting in two respects i.e. budgetary actuals and releases received by State Governments which included plan loans, special assistance and assistance for Area Programme.

Note :

1. The excess of estimated resources over the actual expenditure in case of the Centre may be due to difference in reporting time; probable over-estimation of ARM and actual savings in non-plan expenditure both determining the BCR; gap in disbursements compared to sanction of budgetary support including assistance for the State Plans; element of target of certain capital receipts; and under-/over-reporting of balance with the RBI.
2. The excess of expenditure over the resources in case of the States may be due to under-receipt of revenue and Central transfers.

## Financing Pattern of Plan Outlay for 1991-92 of the Centre (incl. UTs.) and States

Rs. Crores)

Items	Annual Plan			Latest Estimates		
	Centre Incl. UTs.	States	Total	Centre Incl. UTs.	States	Total
1	2	3	4	5	6	7
I. Approved Outlay/Expenditure	44254 <sup>+</sup>	28063	72317 <sup>++</sup>	41368	23585 <sup>§</sup>	64953
II. Domestic Resources.						
1. Balance from current revenues (BCR incl. ARM)	-2922	1510*	-1412	-6060	-2940*	-9000
2. Resources/Contribution of public sector Enterprises	16084	-1128	14956	14926	-1699	13227
3. Issue of Bonds/Debentures by PSEs	5869	0	5869	5722	0	5722
4. Market Loans	7500	4200	11700	7500	4191	11691
5. Small Savings	8000	6325	14325	6400	5847	12247
6. Provident Funds	1300	2397	3697	1400	3407	4807
7. Term Loans from Financial Institutions/Corporations	0	1498	1498	0	1534	1534
8. Misc. capital Receipts(MCR)	7490	-2633	4857	10462	-3286	7176
9. Opening Balance and other resources	0	0	0	0	-60	-60
Total-II : Domestic Resources	43321	12399#	55720#	40350	7314#	47664#
III. Net inflow from abroad	6379	0	6379	7892	0	7892
IV. Budgetary deficit	7719	0	7719	7032	0	7032
V. Aggregate Resources (II to IV)	57419	12399	69818	55274	7314	62588
VI. Central Assistance to States**	-11835	11835	0	-12573	12573\$\$	0
VII. Plan grants to States under Article 275(1) (Finance Commission)	-1333	1333	0	-1333	1333	0
VIII. Implied further ARM by States/ transfers from the Centre	0	2620	2620	0	2110	2110
IX. Resources for the Plan	44251	28187	72438	41368	23330##	64698

.....contd.

+ As per Central Budget 1991-92, the Plan Outlay of the Centre (incl UTs) is Rs. 44251 crores., the discrepancy is due to the provision of outlays for Ideal villages/ Equity base for Cooperatives in respect of the Union Territories.

+ + The outlay of the States and UTs was subsequently reduced by Rs. 151 crores consequent upon the decision to drop the Schemes viz. Model Villages and equity base for Cooperatives, as part of economy measures.

\$ Revised approved outlay.

\* Including only non-special category States' estimates.

# Among Special Category States only positive sum of capital resources (small savings, State provident funds, miscellaneous capital receipts, market borrowings and negotiated loans) of certain States included in Plan funding while negative sum of capital resources of other States ignored. Negative contribution of State Public Enterprises and negative BCR of all these States ignored.

\*\* Including assistance for externally aided projects , Area programmes and Plan Loans.

## Difference with revised outlay due to different points of time of exercises.

\$\$ The total releases above differs from latest estimates provided by the State Governments totalling Rs.11387 crores on account of lag in accounting in two respects i.e. budgetary actuals and releases received by the States which included plan loans, special assistance and Rs.824 crores for Area Programmes.

## Financing Pattern of the Plan Outlay for 1992-93

(Rs. crores)

Items	Annual Plan Estimates			Total
	Centre Incl. UTs	States		
(1)	(2)	(3)	(4)	
I. Approved Outlay/Expenditure	49698	31073*	80771	
II. Domestic Resources.				
1. Balance from current revenues (BCR incl. ARM)	-1815	1696@	-119	
2. Resources/Contribution of public sector Enterprises	17926	-1957	15969	
3. Issue of Bonds/Debentures by PSEs	6058	0	6058	
4. Market Loans	5000	4180	9180	
5. Small Savings	7200	7083	14283	
6. Provident Funds	1500	2736	4236	
7. Term Loans from Financial Institutions/ Corporations	0	2077	2077	
8. Misc. capital Receipts(MCR)	11704	-3670	8034	
9. Opening Balance & Other resources	0	470	470	
<b>Total-II : Domestic Resources</b>	<b>47573</b>	<b>13397@@</b>	<b>60970</b>	
III. Net inflow from abroad	11296	0	11296	
IV. Budgetary deficit	5389	0	5389	
V. Aggregate Resources (II to IV)	64258	13397	77655	
VI. Central Assistance to States**	-12780	14055	#	
VII. Plan grants to States under Article 275(1) (Finance Commission)	-1780	1780	0	
VIII. Implied further ARM by States/transfers from the Centre	0	1811	1811	
IX. Resources for the Plan	49698	31043	80741#	

\* Including Rs.30 crores of additional resources allocated to N.E.C.

@ Relate to Non-special category States only.

@@ Contribution from Public Enterprises, Provident Funds and Misc. Capital receipts for all Special category States and resources from Market loans,, Small Savings and Term loans for selected special category States were not taken into account.

\*\* Including assistance for Externally Aided Projects, Area Programmes and Plan Loans.

# Difference is due to the higher levels of assistance for projected external aid utilisation by States.

Statement - 5.5

**Projected Financing Pattern of the Public Sector Outlay in the Eighth Plan : 1992-97**  
(Rs. crores at 1991-92 prices)

Resources	Centre (incl. UTs)	States	Total (2+3)
1.	2.	3.	4.
I.Domestic Resources			
1.Balance from current revenues (BCR)*	22020	12985**	35005
2.Contribution of public enterprises	144140	4000	148140
3.Borrowings @ and Miscellaneous (net) Capital Receipts(MCR)	117755	84500	202255
Total- I ( 1 to 3 )	283915	101485	385400
II.Net capital inflow from abroad	28700	0	28700
III.Deficit financing	20000	0	20000
IV.Aggregate Resources, (I+II+III)	332615	101485	434100
V.Assistance for State Plans @@	-78500	78500	0
VI.Resources for the Public Sector (IV + V)	254115	179985	434100

\*Including Additional Resource Mobilisation.

\*\*Including only non-special category States' estimates.

@vering market borrowings, small savings, provident funds and loans from financial institutions.

@@Including plan revenue deficit grant under Article 275(1)

## CHAPTER 6

### EMPLOYMENT PERSPECTIVE

#### I. The Approach

6.1.1 Expansion of employment opportunities has been an important objective of development planning in India. There has been a significant growth in employment over the years. However, a relatively higher growth of population and labour force has led to an increase in the volume of unemployment from one plan period to another. The Eighth Plan aims at bringing employment into a sharper focus in a medium-term perspective with the goal of reducing unemployment to negligible level within the next ten years. Such an approach is now considered necessary also because it is realised that larger and efficient use of available human resources is the most effective way of poverty alleviation, reduction in inequalities and sustenance of a reasonably high pace of economic growth.

6.1.2 While approaching employment as an objective of the Plan, employment generation and economic growth are to be treated as mutually complementary rather than conflicting processes. Employment has, therefore, to be generated in the process of, and contribute to the acceleration of, economic growth. Employment, to be gainful and sustainable, has, therefore, to be productive in character; it should be able to yield a reasonable level of income to the worker and also generate surplus for further growth and employment generation.

6.1.3 Improvement in the productivity of work-force assumes particular significance in our economy where low productivity and low incomes of a large mass of employed persons constitute a problem of much higher dimension than unemployment, measured conventionally in terms of involuntary idleness. Incidence of poverty is much higher than that of unemployment. An overwhelming majority of the poor are thus not apparently unemployed, but are engaged for a major part of their time in some activity, albeit, at very low levels of productivity and earnings. The Plan strategy would, therefore, focus not only on the creation of new 'jobs', but also on the augmentation of the existing employment in terms of productivity and incomes through suit-

able technological, market and institutional interventions.

6.1.4 It must be recognised that the demand for labour cannot always be created to suit the characteristics of labour supply. Shortages and surpluses are found to coexist in the labour market due to the mismatch between skill and other requirements of new employment opportunities and the attributes of available workers. This phenomenon is likely to be more marked in a situation of rapidly changing technologies and work organisation. It would also, therefore, be necessary to intervene on the supply side of the labour market with a view to improving the employability of workers in general, and promoting such institutional structures and arrangements for training and skill upgradation which could speedily respond to rapidly changing requirements of productive activities, in particular. In order that the training and skill formation systems are closely aligned with the trends in labour demand, it would be essential that the users, that is, the employers, have a major role and involvement in planning and running them.

6.1.5 An important aspect that would need careful scrutiny in the Eighth Plan, particularly in the context of economic reforms, is the impact of macro-economic, sectoral and labour policies on employment. It has been pointed out that certain policies, such as credit and labour policies, are not always employment-friendly. Policy of concessional credit for several sectors tends to distort the factor price relativities against labour use; and the labour policy, as manifest in certain labour laws, and labour market rigidities rendering wage mechanism ineffective, it is contended, have introduced a degree of inflexibility in labour use, thus discouraging employment expansion, particularly in the large scale industries. On the other hand, in the unorganised sector, which absorbs an overwhelmingly large majority of workers, employment is not only completely insecure, but is also devoid of any social security provisions. To the extent this sharp dichotomy in the labour market, characterised by a high degree of pro-

tection for a miniscule proportion of the workforce and complete lack of protection for the majority of workers, is coming in the way of a larger and more efficient use of labour, ways would have to be devised to reduce this gap. Similarly, other policies - credit, fiscal and sectoral, would need to be reviewed with a view to making them more employment-friendly.

## II. Employment : Growth and Structure

6.2.1 For an assessment of growth and structural changes in employment, the quinquennial surveys of the National Sample Survey Organisation (NSSO) provide the most comprehensive source. Using that source, changes in employment situation have been described here for the 10-year period ending with 1987-88, the year in which the last NSSO survey on employment and unemployment was conducted. The main features of employment growth during the decade 1977-78 to 1987-88 are summarised as follows:

- (i) Employment has grown at about 2 per cent per annum during the 10 year period. [Table 6.1]. (This growth, which has been about the same as the rate of growth of labour force, has not been able to absorb the backlog of unemployment of about 10.8 million that existed in 1977-78.)
- (ii) Growth rates of employment has been relatively high in urban areas, but low in rural areas.
- (iii) Employment of males and females has grown more or less at the same rate, with the rate for males slightly above that for females.
- (iv) All major sectors except agriculture, experienced over 3.0 per cent growth of employment per annum over the period 1978-88 [Table 6.2]. Agriculture registered an annual growth of only 0.92 per cent. (and this rate has been just about the same in the two quinquennia)
- (v) A deceleration in growth has been observed during 1983- 1987-88 over 1977-78 - 1983; this trend is seen in all sectors, except, agriculture, trade and construction. [Table 6.2]. In manufacturing, the rate of growth

has declined sharply from 3.76 per cent to 2.18 per cent; and in services from 4.49 per cent to 2.06 per cent.

- (vi) Deceleration in the rate of employment growth has been particularly sharp in the organised sector; it has declined from 2.48 per cent during 1977-78 -- 1983, to 1.38 per cent during 1983 -- 1987-88 [Table 6.3]. Employment in the organised manufacturing sector has virtually stagnated during 1983 -- 1987-88; and thus, an increasingly larger contribution to employment growth in manufacturing has been made by the unorganised sector in recent years.
- (vii) Growth in employment in the organised sector, has primarily been contributed by the public sector.
- (viii) Despite a slow and declining rate of employment growth in the aggregate, employment of the educated has shown a relatively high and accelerating growth, particularly among women [Table 6.4].

6.2.2 Differential rates of employment growth in different sectors and of different kinds have led to certain notable changes in the structure of employment over time. First, there have been some sectoral shifts away from agriculture in the last decade. In 1977-78, 71 per cent of the workers were engaged in agriculture and allied occupations, but by 1987-88, the proportion had declined to 64 per cent [Table 6.5]. Corresponding figure revealed by the 1991 census, though not strictly comparable with NSS estimates, is 64.9 per cent, showing a marginal decline from 66.5 per cent in 1981. Second, there is a change in the structure of the workforce by employment status. The proportion of casual labour increased while that of the self-employed declined over the period 1977-78 to 1987-88 [Table 6.6] - a change which is largely a reflection of the occupational shifts from agriculture to non-agriculture, in rural areas. Third, the share of the unorganised sector in non-agricultural employment has increased from 72 per cent in 1977-78 to 77 per cent in 1987-88, although the share of unorganised sector in overall employment has remained more or less stationary at 90 per cent.

### III. Unemployment : Trends and Structure

6.3.1 Unemployment, according to the conventional and most commonly used concept, measures involuntary idleness, that is, the time for which individuals are available for and willing to, but are not able to find work. It does not include 'invisible' unemployment or underemployment, that is, a situation of work with very low levels of productivity and income. The latter, as noted earlier, is a problem of much larger magnitude in India than conventionally measured unemployment. Persons belonging to low income households can hardly afford to remain unemployed, and, therefore, may engage themselves in any work that is available, even if it yields a very low income. For that reason, the rates of unemployment in India are observed to be relatively low.

6.3.2 The structure of workforce with dominance of self-employment and primary sector, where work sharing is common, also tends to depress unemployment rates, in general, and chronic, long period unemployment rates, in particular. Inadequacy of the measure of unemployment in terms of open unemployment has, therefore, been well recognised in the measurement and analysis of unemployment in India. The National Sample Survey Organisation (NSSO) which provides estimates of the rates of unemployment on the basis of its quinquennial surveys, therefore, uses three different concepts. A person is considered unemployed on Usual Status (US) basis, if he/she was not working, but was either seeking or was available for work for a relatively longer time during the reference year. On the basis of a week as the reference period, a person is considered unemployed by Current Weekly Status (CWS), if he/she had not worked even for one hour during the week, but was seeking or available for work. Then, there is an estimate of Current Daily Status (CDS) unemployment, in terms of the total persondays of unemployment, that is, the aggregate of all the unemployment days of all persons in the labour force during the week.

6.3.3 The "Usual status" unemployment rates could be regarded as a measure of chronic unemployment during the reference year; the CWS unemployment rates also measure chronic unemployment but with the reduced reference period of a week. The CDS is a comprehensive

measure of unemployment including both chronic unemployment as well as underemployment on weekly basis. Unemployment rates are found to be the lowest on UPS basis and the highest on CDS basis. For example, unemployment as percentage of labour force worked out to be 3.77, 4.80 and 6.09 percent according to usual, weekly and daily status respectively, in 1987-88. In absolute terms, the unemployment in that year was estimated to be 11.53 million persons, 14.35 million persons and 6508 million persondays, according to the three concepts, respectively.

6.3.4 A few salient features of the unemployment situation in India may be noted. First, the incidence of unemployment is much higher in urban than in rural areas. Second, unemployment rates for women are higher than those for men. Third, a larger difference between the "usual" and "weekly" status unemployment rates, on the one hand, and "daily status" unemployment rates, on the other, in the case of women than of men suggests that underemployment is of much higher proportion among the former than the latter. Fourth, the incidence of unemployment among the educated is much higher at about 12 percent than the overall usual status unemployment of 3.77 percent. In fact, unemployment rates rise with every successive higher level of education.

6.3.5 The unemployment rates by the three alternative concepts of the "usual status", the "weekly status" and the "daily status" as revealed in the various rounds of NSSO surveys during 1972-73 to 1987-88 are presented in Table 6.7. No clear and consistent trends are discernible in the rates of unemployment over the 15 year period. Considering the short period in the recent past, namely, 1983 -- 1987-88, however, certain changes in the structure of unemployment are observed. Open unemployment as measured by UPS has increased from 2.77 in 1983 to 3.77 in 1987-88 and according to weekly status from 4.51 to 4.80 per cent. However, unemployment rate by daily status has declined from 8.28 to 6.09 per cent over this period. These trends suggest that there has been a shift from the state of widespread underemployment towards greater open unemployment.

6.3.6 Within the broad trend towards an increasingly open and chronic character of un-

employment, the following features may be considered of special significance. One, this trend is seen to be particularly strong in rural areas, where the usual status unemployment has increased from 1.91 per cent of labour force in 1983 to 3.07 per cent in 1987-88 and the "daily status" unemployment has declined from 7.94 per cent to 5.25 per cent. In the urban areas, only a small change of a similar pattern was observed. Second, the open unemployment rates increased much faster in the case of women than of men. The "usual status" rate of unemployment increased from 2.14 in 1983 to 4.19 per cent in 1987-88 among women workers but the increase in the case of male workers was from 3.02 to 3.60 per cent.

6.3.7 There are wide variations in the unemployment rates among different States [Table 6.8]. In terms of usual status, the unemployment rates vary between 1.51 percent in Madhya Pradesh and 17.07 percent in Kerala amongst the major States. Other major States with higher than all-India average of 3.77 per cent are West Bengal (6.06 per cent), Haryana (5.86 per cent), Assam (5.62 per cent), Tamil Nadu (5.25 per cent), Orissa (4.66 per cent), Punjab (4.04 per cent) and Andhra Pradesh (3.90 per cent). Poorer States like Bihar, U.P., Madhya Pradesh and Rajasthan have relatively lower rates of open unemployment. With some exceptions like Orissa at the one end, and Maharashtra on the other, there appears to be a positive relationship emerging between the level of literacy and education and/or of economic development and incidence of open unemployment, across the States.

6.3.8 Even the aggregate of open unemployment and under-employment, in terms of person-days of unemployment, shows a similar pattern across the States. Incidence of unemployment measured in these terms was again highest (21 per cent) in Kerala followed by Tamil Nadu, West Bengal, Haryana, Andhra Pradesh and Orissa, each with higher than average figure. On the other hand, Madhya Pradesh with 2.86 per cent, Uttar Pradesh with 3.44 per cent and Bihar with 4.04 per cent were the States with the lowest "daily status" unemployment rates. These low unemployment rates present a rather intriguing picture when juxtaposed with the incidence of poverty, which is found to be amongst the highest in these States. To a certain

extent, this phenomenon may be attributed to the limitations of the concepts and measures used in gauging unemployment. But, at a substantive level, it only suggests that the nature of the problem in these States is different. Low income work, rather than involuntary idleness, is the main form of the affliction from which the poor suffer. It obviously calls for a strategy with 'augmentation of employment' as its main element.

6.3.9 The above brief review of the trends in the structure of unemployment suggests that over the years, the problem of open unemployment is gaining and that of under-employment is declining in importance. In 1977-78, underemployment as reflected in the difference between unemployment by the "usual status" (4.23 per cent) and the "weekly status" (4.48 per cent) on the one hand, and the "daily status" unemployment (8.18) was much larger than in 1987-88, when the two open unemployment rates were 3.77 per cent (UPS) and 4.80 per cent (CWS) and the daily status rate only 6.09. These features suggest that the strategy of employment generation would have to lay greater emphasis on augmentation of productivity and income levels of the working poor and the creation of new full time employment opportunities on wage or self employment basis, rather than on schemes for short-term employment generation.

#### **IV. Towards the Goal of Full Employment**

##### **Requirements of Employment Generation**

6.4.1 For the purpose of estimating additional employment needed to achieve the goal of "employment for all" over a period, an assessment of the backlog of unemployment in the base year and the likely additions to the labour force during the reference period is needed. For this exercise, the backlog is estimated in terms of open unemployment with some adjustments for those who are severely underemployed and therefore, are very likely to be looking for alternative new full time employment opportunities. In other words, unemployment measured in "usual" or "weekly" status terms would be relevant. "Weekly status" is preferable because the unemployed, according to this concept, were clearly without work for the entire period under reference (i.e. did not have work even for one

hour during the week). Use of this concept also enables an assessment of the magnitude of severely underemployed as those having work for half or less than half the time during the reference week.

6.4.2 The latest survey based estimates available for this purpose, are for 1987-88 only, when the last quinquennial survey was conducted by NSSO. In order to arrive at a figure of unemployment in the beginning of the Eighth Plan, that is on April 1, 1992, independent estimates of labour force and employment on that date have been made, the difference between the two yielding the magnitude of unemployment. Total employment at the beginning of 1992-93 is estimated to be 301.7 million on "weekly status" basis. The Labour force is estimated to be 319 million. Thus backlog of open unemployment according to "weekly status" is estimated to be 17 million on April 1, 1992. According to the NSS, about 2 per cent of those recorded employed by "weekly status" had work for half or less than half the time. Taking them as 'severely underemployed', they are included in the estimates for backlog for purpose of employment planning. Thus the number of persons in the labour force on April 1, 1992, who will be looking for full time new employment opportunities is estimated to be around 23 million.

6.4.3 The labour force is projected to increase by about 35 million during 1992-97 and by another 36 million during 1997- 2002. Thus, the total number of persons requiring employment will be 58 million during 1992-97 and 94 million over the ten year period 1992-2002. The employment growth in the aggregate will have to be about 4 per cent per annum if the goal of providing employment to all is to be achieved by the end of the Eighth Plan, and around 3 per cent per annum if it is to be attained by 2000 AD.

6.4.4 Experience in the recent years suggests that the goal of a 4 per cent rate of employment growth will be rather unrealistic. But, an average employment growth of around 2.6 to 2.8 per cent per annum may be within the realm of feasibility, which if achieved over the next ten years will bring the economy to a near full employment situation by 2002 AD. This itself will be contingent upon the attainment of a higher average rate of growth of GDP than

achieved in the past, derived to a larger extent from sectors and areas which are inherently more employment-intensive.

## V. Elements of Employment Strategy

6.5.1 A high rate of output growth is necessary, but not always a sufficient condition for high growth of employment. A structure of growth with larger contribution of sectors having high employment content of output and use of production techniques favouring use of labour greatly enhance the employment generation potential of growth. The scope for varying techniques, without lowering efficiency and productivity levels and reducing the competitiveness of the products, is found limited in most lines of production. On a realistic plane, it must also be admitted that in a large part of the economy, in agriculture, unorganised manufacturing and service sectors, technological upgradation involving some increase in the use of capital per worker may be necessary to raise productivity levels. Improvements in the productivity levels in all lines of production, including organised manufacturing sector, will be necessary for expansion of employment opportunities.

6.5.2 Employment growth has, therefore, to result primarily from the growth of the economy and restructuring of output composition of growth. There is no doubt that a larger and more efficient use of labour will accelerate the rate of growth itself, but the latter would largely depend on the availability of other resources like capital and internal and external demand. The employment potential of growth can be raised by readjusting the sectoral composition of output in favour of sectors and sub-sectors having higher employment elasticity. It is with this perspective that an attempt is made to review the past trends in different sectors and also to assess the potential of each of them for faster employment generation in the process of their growth. This may enable us to indicate the broad directions of strategy and policies that can lead to the realisation of the assessed potential in different sectors.

### A. Agriculture and Allied Sectors

6.5.3 Even after some shifts in the occupational structure during the last two decades, agriculture still occupies a predominant place in employ-

ment structure, employing about two-thirds of the total workers. It is agriculture which has shown the lowest and rapidly declining employment-potential in the recent past. A major reason for this lies in the sharply declining employment potential in the regions with high output growth. Employment growth accompanying a one per cent growth of output was found to be as low as 0.00, 0.07 and 0.19 in Punjab, Haryana and UP respectively. In these areas, the sources of growth are now turning to be labour substituting.

6.5.4 Despite an overall declining trend in employment elasticity, there appears to be considerable scope for raising employment in agriculture in those regions of the country which have so far generally lagged behind in agricultural development. A strategy of agricultural growth aimed at deriving a larger part of the additional output from these regions should help arrest and even reverse the overall decline in labour absorption in agriculture. A faster growth of employment in these areas, where the incidence of poverty is often relatively high, at the same time, will lead to a positive effect on wage rates and incomes of the rural workers. It may be noted that eight States, viz., Andhra Pradesh, Bihar, Madhya Pradesh, Maharashtra, Orissa, Tamil Nadu, U.P and West Bengal account for 80 per cent of the people below poverty line and 70 per cent of the unemployed. A strategy focussed on stimulating agricultural growth in these States will thus be able to meet three important objectives simultaneously, namely, employment, poverty alleviation and reduction in regional disparities, besides acceleration and greater stability in the growth of agricultural output.

6.5.5 An acceleration in the rate of growth of agricultural output in the regions lagging behind others should come primarily from an increase in the yield levels of individual crops and an increase in cropping intensity and, to some extent, from changes in cropping pattern in favour of high value crops. The most important factor contributing to such changes would be the availability of assured irrigation, followed by provision of modern inputs and appropriate price policies. Irrigation, besides leading to increase in yield and cropping intensity, also facilitates changes in cropping pattern in favour of high value crops, most of which also happen to be more labour using. Such shifts in the cropping

pattern are important from the view point of employment, particularly in the long run, in so far as yield increases in staple crops beyond a stage involve technologies using less labour.

6.5.6 An activity naturally allied to agriculture and crucial for rural income and employment generation is animal husbandry. The potential of this sector for income and employment generation can hardly be over-emphasised. Based on some recent studies by the National Dairy Development Board (NDDB) and the earlier estimates by the National Commission on Agriculture, it is estimated that the animal husbandry sector, even with the existing stock, can generate employment equivalent to 86 million person years inclusive of employment in processing and marketing of milk and milk products. It is claimed by experts that a much higher growth than in the past can be attained in this sector, raising productivity and income levels of those engaged in it as well as creating new employment opportunities. Fishery, it is maintained, can grow as fast as 7 per cent per annum because about two-thirds of the existing marine and inland potential is unexploited. In fact, a high growth of value-added agri-business, including animal husbandry, fishery, horticulture and aquaculture, offers scope for employment expansion in the immediate future.

6.5.7 Another area with large scope for employment generation, that has only been marginally recognised so far, relates to regeneration of natural resources such as land and forests. Programmes of afforestation, regeneration and restoration of degraded land are not only likely to generate large volumes of employment in general, but also benefit, in particular, such disadvantaged sections of the society as tribals and women who are most adversely affected by the degradation of eco systems. The extent of culturable wastelands is estimated to be around 130 million hectares. It is estimated that development of one hectare of wasteland will generate 128 mandays of employment with a wage component as high as 70 per cent of the outlay. Importance of wasteland development from the point of view of employment generation arises not only from the employment intensity of the development phase involving earth work, etc., but also from the sustained employment opportunities likely to be generated in the utilisation of the reclaimed land for afforestation and water

shed development. A study by the National Council of Applied Economic Research (NCAER), for instance, shows that one hectare of planted area provides employment of the order of 600-700 mandays per year. However, if wasteland development has to achieve these objectives beyond the stage of asset formation, due attention should be given to (a) securing the active participation of the rural poor in wasteland development and (b) allocation of the developed land to the rural poor with legal titles.

## **B. Rural Non-Agricultural Employment**

6.5.8 In the long run, however, it must be recognised that agriculture and other land-based activities, even with a reasonably high rate and possible diversification of growth, will not be able to provide employment to all the rural workers at adequate levels of incomes. Further, technological and organisational changes accompanying agricultural growth are likely to lead to, first, a declining employment potential of further growth, and second, conversion of a substantial number of those underemployed in agriculture into openly unemployed seeking work elsewhere. Even allowing that some of them will be able to find adequately remunerative jobs on migration to urban areas, it is not only desirable but necessary that the rural economy gets diversified into non-agricultural activities to provide productive employment to the growing rural labour force and also to reduce the wide economic differences between rural and urban areas.

6.5.9 Over one-fifth of the rural workers are engaged in non-agricultural activities. This proportion has shown a remarkably rapid increase in recent years. Available evidence suggests that this shift is attributable to the growth of productive employment opportunities in the non-farm sector in rural areas, and is not a result merely of the overcrowding in agriculture. Appropriate strategies and policies need to be evolved to strengthen this trend towards diversification of the rural economy. Practically all non-agricultural activities have shown a steady increase in employment. Manufacturing and services respectively accounted for 32 and 24 per cent of rural non-agricultural employment; trade accounted for 18 per cent and construction 15 per cent in 1987-88. Manufacturing has shown a reasonably high (about 3 per cent per

annum) growth in employment during 1978-88. But construction, transport and trade have shown an annual growth in employment of 11, 7 and 4 per cent per annum respectively during this period.

6.5.10 It must be recognised that an increasingly larger component of rural industrial activities now consist of non-traditional activities with forward and backward linkages with agriculture as well as those with little relation to agriculture. Unlike many traditional village industries which constituted only secondary or supplementary occupations, these activities are pursued as main occupations. Most of them are also producing commodities with reasonably high income elasticity of demand and thus are not likely to face any serious demand constraint. These include textile-based and agro-based industries, and those producing construction materials like bricks, tiles, pipes and cement. Some of these activities are now getting located, for economic reasons, in smaller towns in the rural hinterland, providing employment to the rural workers. With suitable promotional policies, including those relating to location and infrastructural development in rural towns, considerable expansion of such activities with a high employment potential for rural workers is feasible. Such policies should include measures for orientation of credit and lending practices of banks to suit small business and manufacturing enterprises, strengthening of producers' cooperatives and assistance in marketing and technology.

## **C. Industrial Sector**

6.5.11 A decline in employment elasticity of the industrial sector has primarily been caused by the declining employment potential of output growth in the organised sector. Employment elasticity is estimated to be as low as 0.15 per cent for the organised manufacturing sector, but it is between 0.5 to 0.6 for the unorganised sector. A larger contribution of the small and unorganised sector is, therefore, likely to raise the employment elasticity and employment growth in the manufacturing sector significantly. The small industry sector currently contributes about one-half of value added and four-fifths of the total employment in manufacturing. If this segment of manufacturing can be made to grow at 10 per cent per annum, with the organised sector growing at about 5 per cent,

the overall employment growth in the manufacturing sector will be about 4 per cent as against 2 per cent in the recent past. It needs to be recognised that the small and unorganised manufacturing sector consists of different highly variegated segments. Employment in the cottage and household industry has experienced a relative decline, due to shrinking markets on account of competition from modern products and often due to lack of technological upgradation to meet the new demands. Non-household, tiny sector has shown potential for growth, but suffers from the lack of financial and marketing facilities. The modern small scale sector has shown significant growth in output, employment and also exports. It is this sector which has also received the major part of the benefits of the promotional policy towards the small sector.

6.5.12 It has, however, been observed that the policy for the promotion of small scale industry has not been very effective in serving the employment objective. It is not directly related to employment in so far as the eligibility for preferential treatment in terms of incentives and other assistance is related to fixed capital investment. The assumption that small capital necessarily implies high employment per unit of capital has not always been found valid. Thus, while the criterion of capital size may be necessary for other socio-economic objectives, it is felt that employment criterion should be superimposed on it. In fact, some studies point out that in the absence of such a criterion, many small industries have tended to become unnecessarily capital intensive. To the extent such a tendency is observed, it suggests the need to examine the relative factor prices and changes in them over time, so as to check the tendency towards avoidable capital intensification.

6.5.13 The other problem of the small scale industry policy is that it has not benefitted the really small units. Due to the cumbersome procedures and non-existence of the promotional and service network in smaller towns and villages, the concessions and assistance have only reached the not-so-small sector. It is realised that the existing administrative and service agencies are not well suited to meet the requirements of the decentralised sector, which has substantial growth and employment potential. Therefore, it is desirable that the tiny or the micro-enterprise sector is recognised as a separate segment for

evolving and implementing promotional policies.

#### **D. Other Sectors**

6.5.14 Among the major sectors of economic activity, construction recorded the highest growth in employment of over 10 per cent per annum during the period 1977-78 to 1987-88. Both road construction and housing are a part of the basic needs of the people and, therefore, deserve to be given priority, as they will create the necessary assets and generate large-scale employment in the short run. It is estimated that connecting the 31 per cent of the villages in the population group 1000-1500 and 10 per cent of those with larger size still unconnected by road will mean construction of 8 lakh kms. of road with an employment potential of 22.8 million person years. It is also observed that there is a concentration of these unconnected villages in the States with a high incidence of rural poverty and unemployment and hence it will be appropriate to give priority to construction of roads in these areas. Similarly, a high priority to housing and development of appropriate legal, institutional and financial mechanisms to encourage larger investment in this sector would meet the objectives of employment and provision of shelter simultaneously.

6.5.15 The growth of the services sector in recent years has been relatively fast but employment growth in this sector has been rather sluggish. It experienced a GDP growth of about 6 per cent during 1980-81 to 1986-87 (as against around 4 per cent during the 1970s) but employment growth during this period has been of the order of around 2.5 per cent only. This trend suggests that productivity has shown an increase and the service sector has not grown merely as a residual low productivity sector. Still, this sector has significant potential for employment generation both in rural and urban areas. Tourism, rural transport and repair services are sub-sectors identified as having relatively high growth as well as employment potential. In the rural areas, employment in the services sector can be expected to grow with the faster development of agri-business resulting in increasingly larger volume of goods to process, trade and transport.

6.5.16 In general, one may not expect any significant increase in public sector employment

as there is already a high degree of overmanning both in the public enterprises and the Government Departments. But, in line with the aim of meeting certain basic objectives in areas like education and health, it would only be logical that more manpower is utilised for strengthening educational and health institutions, particularly in rural areas. Strengthening of teaching staff in rural areas, particularly single-teacher schools, and adequate manning of the health system, particularly in technical and para-medical occupations are likely to generate considerable job opportunities for the educated.

6.5.17 The urban informal sector has exhibited a high rate of growth of employment of around 6 per cent per annum. Manufacturing and services sector activities, including trade and transport constitute important segments of the urban informal sector with large employment potential. Recent studies indicate that there is a large unsatisfied demand for a number of services; that the quality of existing services needs to be improved; and that the major constraints on fuller development of this sector are the lack of inputs like credit and raw materials, facilities for skill development and space for carrying on such activities. Steps and policies including streamlining of existing municipal and other laws and regulations would be necessary to overcome these constraints. In general, a policy environment favourable for the growth of entrepreneurship and self-employment in medium and large towns and cities requires to be created. Besides streamlining existing schemes like Self-Employment Programme for Urban Poor (SEPUP), Self-Employment for Educated Unemployed Youth (SEEU) and Nehru Rozgar Yojana (NRY) (Micro-entreprises scheme), it would also be useful to adopt the approach of the Society for Employment Promotion and Training in the Twin Cities of Hyderabad-Secundrabad (SETWIN) on the basis of the experience gained.

6.5.18 As observed earlier, employment generation needs to be seen not merely in terms of creation of new opportunities for wage employment; an equally important thrust will need to be laid on creation of necessary conditions for an increasingly larger number of people to undertake activities on a self-employment basis, as well as raise the productivity and income levels of those already self-employed so as to see that

they are not compelled to leave them and join the ranks of the openly unemployed. Infrastructure, access to credit and market linkages are found to be the most crucial factors in the development of a vibrant self-employment sector. Institutional arrangements for supply of these services along with suitable programmes for the development of technical skills and entrepreneurship would need to be evolved.

6.5.19 Given the variegated nature of work requirements of different workers, particularly the underemployed, and also the varied nature and structure of work in different activities, the goal of providing work to all can only be achieved on the basis of detailed local level planning. Since a major part of unemployment and underemployment is to be found in rural areas where variations of these kinds are particularly marked across regions and areas and among activities, employment planning on a decentralised basis assumes special significance. While a certain degree of mobility, particularly among the openly unemployed and the educated, should be expected and even be encouraged, for a large mass of underemployed and unemployed, particularly, women, marginal farmers and those engaged in seasonal activities, work needs to be generated locally, in the villages or nearby small towns. An exercise to assess and plan for work opportunities within an area to match the labour supply characteristics of the unemployed and the underemployed workers can only be effectively undertaken on an area-specific basis.

## VI. Skills, Training and Employment

6.6.1 A part of the unemployment problem emanates from the mismatch between the skill requirements of employment opportunities and the skill base of the job-seekers. The mismatch is likely to become more acute in the process of rapid structural changes in the economy. It is, therefore, necessary to orient the educational and training system towards improving its capability to supply the requisite skills in the medium and long terms, and introduce greater flexibility in the training system so as to enable it to quickly respond to labour market changes in the short run. Besides, the system should also be in a position to impart suitable training to the large mass of workers engaged as self-employed and wage earners in the unorganised sector for upgradation of their skills, as an effective means for raising their productivity and income levels.

6.6.2 The existing training institutions like the ITIs have, no doubt, been meeting a significant part of the requirements of the skilled manpower of the organised industry. It, however, seems necessary that the processes of restructuring and reorientation of their courses are made more expeditious with a view to quickly responding to the labour market. A greater involvement of industry in planning and running the training system would also be necessary for this purpose. For skill upgradation of the workers in the unorganised sector, flexibility in the duration, timing and location of training courses would need to be introduced. To the extent a sizeable proportion of employment would have to be self-employment in tiny and small units in various sectors, the training system should also gear up not only for providing 'hard' skills in suitable trades, but also the 'soft' skills of entrepreneurship, management and marketing, as part of training courses.

6.6.3 It is widely recognised that the rapid expansion of education, particularly of higher education, has also contributed to the mismatch in the labour market. While shortages of middle level technical and supervisory skills are often experienced, graduates and post-graduates in arts, commerce and science constitute a large proportion of job-seekers. High private rates of return on higher education, to a large extent resulting from low private cost, is an important reason for the rush for higher education despite high incidence of educated unemployment. At the same time, efforts to divert the school leavers to vocational stream have so far been too little in relation to the size of the problem. While these efforts need to be strengthened, appropriate mechanisms also need to be evolved in the training and employment system to ensure that those graduating out of the vocational and middle level technical training courses, have the route to higher ladders open to them, through upgradation of their qualifications and skills by undergoing training in higher level courses during their employment career.

## VII. Labour Policy and Employment

6.7.1 A few important aspects of labour policy also need to be addressed from the viewpoint of employment expansion. First, excessive regulation of conditions of employment making labour adjustment highly difficult, has often been cited as a factor restricting employment expansion.

To the extent it is so, it also seems to reduce the overall degree of protection to labour as only a small number are engaged in the highly protected segments leaving an overwhelming majority of workers to work in completely insecure and unprotected conditions in the unorganised sector. It would, therefore, be desirable to rationalise the regulatory framework with a view to providing reasonable flexibility for workforce adjustment for effecting technological upgradation and improvement in efficiency.

6.7.2 On the other hand, it would be necessary to ensure that the quality of employment in the unorganised sector units improves in terms of earnings, conditions of work and social security. Technological upgradation and development of markets for products would lead to an increase in their productivity and wage paying capacity. But, suitable organisational arrangements would need to be developed to provide a minimum measure of social security for workers in the unorganised sector. The Welfare Boards for mine workers, *beedi* and cigar workers etc. set up by the Government of India and financed out of the cess levied on the production of the commodity concerned and the Welfare Boards for cashew workers, coir workers set up by the Government of Kerala are one set of examples of such arrangements. Other models are the Mutthadi Workers Board in Maharashtra, similar Boards in Kerala for unorganised workers and the Mutta and Jattu Hamal Boards being set up in Andhra Pradesh. Another model is the set of insurance schemes launched by the Government of India and State Governments of Gujarat, Kerala, Karnataka and Madhya Pradesh for landless agricultural labourers. All these need to be reviewed and a suitable model adopted. Alternatively, feasibility of a Central Fund, with tripartite contribution (or bipartite in the case of the self-employed) should also be examined.

6.7.3 A rational and equitable wage policy has been conspicuous by its absence for quite some time. Statutory provision of minimum wages for workers in the scheduled employments exists, but its coverage and implementation has been inadequate, so that a large part of the workforce is still outside the purview of wages fixed under the Minimum Wages Act, and the actual wages on the ground are often much lower than those fixed by the appropriate Governments

under the Act. While the tendency to fix minimum wages at unrealistically high level should be checked, implementation of wages once fixed must be ensured. The implementation machinery which consists of the labour administration machinery in the States has been far from effective. It is desirable that a greater role is played by the workers' organisations, non-governmental voluntary organisations and organised trade unions, in ensuring implementation of minimum wages, instead of enlarging the army of 'inspectors' for this purpose.

6.7.4 It is necessary to evolve a wage policy which guides the changes in wage and salary levels and wage structure. Wide differences in wages prevail between the organised and the unorganised sectors even in similar activities and occupations and among different regions. Even minimum wages fixed statutorily vary widely among States and regions. Further, changes in wage rates and wage levels over time vary significantly, mostly in the direction of increasing wage disparities. The levels of and changes in wages and salaries often have no relation with productivity and wages thus do not function as instruments that induce efficiency. It is, therefore, necessary that a national wage policy is evolved to guide steps in the direction of removing irrational and inequitous disparities in wage and salary levels and inducing efficiency; and also to streamline institutional mechanisms for wage fixation. In the past, besides the minimum wage fixation machinery, tripartite Wage Boards and collective bargaining at industry and unit level have been the major mechanisms for wage fixation and revision. It is desirable that tripartite bodies at all levels, starting from the Indian Labour Conference at the national level to region-cum- industry level, are constituted and utilised for consultations and agreements on wages and other matters of labour policy. In the past, such bodies either at the national and regional level or at the industry level have been confined to the organised sector only. Besides developing mechanisms to relate wage levels and wage increases to some measure of efficiency in the high wage sectors of the economy, efforts also need to be made to see that the unorganised sector is also brought under the purview of tripartite machinery.

## VIII. Special Employment Programmes (SEPs)

6.8.1 It is recognised that the adoption of an employment-oriented strategy will enable attainment of the goal of near full employment, but only over a period of time. According to the present estimates, such a goal could be realistically fixed for 2002 AD. Provision of short-term employment for those still unemployed and underemployed, particularly among the poor and the vulnerable, would be necessary in the interim period. Special Employment Programmes as in the past would, therefore, have to be continued. It may, in fact, be necessary to suitably extend such programmes with a view to providing a measure of guarantee of work, particularly as a safety net to the poor. It would, therefore, be all the more necessary that these programmes are recast with a view to making them more effective in meeting not only the short-term objective of providing temporary work to the unemployed, but also in contributing to the productivity of local resources and productive capacity of individuals to lead to generation of larger employment opportunities on a sustained basis.

6.8.2 It is important, in any case, to recognise that the Special Employment Programmes could be only an interim measure, to provide supplementary employment and assistance to build capabilities for sustained employment, to the underemployed and the unemployed, particularly among the poor, till they are able to secure stable employment generated in the development process. Therefore, the main thrust should be on the acceleration of the rate of employment growth over the years so that the need for special programmes declines in successive years and tapers off by the end of the decade. Continuing necessity of such programmes on a large scale would, in fact, imply failure of the employment oriented development strategy that is envisaged as the main plank of the Eighth Plan.

## IX Summing-Up

6.9.1 The main elements of the strategy, policies and programmes towards expansion of employment opportunities during the Eighth Plan, as described in the preceding Sections of this Chapter, may be summarised as follows :

- i. A faster and geographically diversified growth of agriculture, so that the hitherto lagging regions have a larger share in agricultural growth; and diversification of agriculture into high value, more labour intensive crops like vegetable and fruits, particularly in the agriculturally better developed regions;
- ii. Development of infrastructure and marketing arrangements for agro-based and allied activities like dairy, poultry, fishery and sericulture to accelerate growth of these sectors;
- iii. An expanded programme of development and utilisation of wasteland for crop-cultivation and forestry;
- iv. Development of an appropriate support and policy framework for the growth of non-agricultural, particularly manufacturing activities, in rural areas, including rural towns;
- v. Greater attention to the needs of the small and decentralised manufacturing sector as a major source of industrial growth, particularly in the production of consumption goods and manufactured exports;
- vi. Large scale programmes of construction of infrastructure and residential accommodation, the latter to be encouraged particularly in the private sector through appropriate land, financial and fiscal policies;
- vii. Strengthening of basic health and education facilities, particularly in the rural areas;
- viii. Facilities for faster growth of the services and informal sector activities through greater ease of entry and suitable support systems;
- ix. Identification and relaxation of legislative and policy measures found to restrict growth of employment;
- x. Greater flexibility in special employment programmes and their integration with sec-

toral development with a view to ensuring their contribution to growth and sustainable employment, and;

- xi. Revamping of training systems to introduce greater flexibility and responsiveness to labour market trends, and larger involvement of users of the system's output, and to provide opportunities for upgradation of skills of the employed workers and also, for the development of entrepreneurship for the actual and potential self-employed.

6.9.2 These measures are expected to contribute to the faster growth of the economy and, at the same time, increase the overall employment content of growth. It is assessed that the relatively faster growth of the sectors identified above can raise employment elasticity close to 0.5, side by side leading to perceptible improvements in labour productivity. The envisaged GDP growth rate of 5.6 per cent during the Eighth Plan, would thus result in an employment growth of around 2.6 to 2.8 per cent per annum, or an average of about 8 to 9 million additional employment opportunities per year. A continuation of employment growth of the Eighth Plan into Ninth Plan, implying an average of 9.5 million employment opportunities per annum, should be able to reduce unemployment to a negligible level by 2002, by and large taking care of the backlog alongwith the addition of 36 million in the labour force during 1997-2002.

6.9.3 It must, however, be admitted that the ongoing structural reforms may entail a slow down in the growth rate of GDP and, therefore, of employment during the initial one or two years of the Eighth Plan. Institutional arrangements for retraining and redeployment and various measures of safety net for the workers affected by contraction in employment and erosion in the real income of those with non-indexed incomes are being considered. But the most effective way to deal with the problem would be to create conditions, particularly in the informal sector, to generate larger productive employment by making entry of individuals and tiny units into processing, repair, transport and other services sectors easier, and access to credit, space and other inputs wider. Such a strategy would not only provide a temporary safety net but will also provide employment on a sustainable basis.

**Table 6.1 Growth of Employment\* 1977-78 to 1987-88**

	Rural			Urban			Total		
	M	F	T	M	F	T	M	F	T
<b>Employment (million)</b>									
1977-78	136.2	59.8	196.0	36.1	7.7	43.8	172.3	67.5	239.8
1983	147.9	65.9	213.8	45.4	9.6	55.0	193.3	75.5	268.8
1987-88	157.7	70.5	228.2	51.7	11.0	62.7	209.4	81.5	290.9
<b>Annual Rates of Growth (%)</b>									
1977-78 to 1983	1.51	1.77	1.59	4.23	4.18	4.22	2.11	2.06	2.10
1983 to 1987-88	1.43	1.52	1.46	2.97	2.95	2.96	1.80	1.71	1.77
1977-78 to 1987-88	1.48	1.66	1.53	3.66	3.62	3.66	1.97	1.90	1.95

\* Usual Principal Status (UPS).

M - Male

F-Female

T-Total

Source :

NSSO (32nd, 38th and 43rd Rounds) and Estimates of Population based on 1971 & 1981 Census population and provisional population totals of 1991 Census.

**Table 6.2 Growth Rates of Employment\* by Major Sectors**

Sl. No.	Sector	1977-78 to 1983	1983 to 1987-88	1977-78 to 1987-88
				( per cent per annum )
1.	Agriculture	0.91	0.94	0.92
2.	Mining	6.32	5.68	6.03
3.	Manufacturing	3.76	2.18	3.05
4.	Construction	7.93	13.03	10.19
5.	Elect. Gas & Water Supply	6.01	3.15	4.71
6.	Trade	3.52	3.83	3.66
7.	Transport, Storage and Communication	6.66	2.35	4.70
8.	Services	4.49	2.06	3.39
Total :		2.10	1.77	1.95

\* UPS

Source: ibid

**Table 6.3 Growth in Organised Sector Employment : 1978-88**

Sl. No.	Sector	1978-83	1983-88	1978-88
				(per cent per annum)
1.	Agriculture	1.30	1.11	1.21
2.	Mining & Quarrying	2.56	0.88	1.71
3.	Manufactureing	2.07	(-) 0.09	0.99
4.	Elec., Gas & Water	3.67	3.26	3.47
5.	Construction	1.92	1.25	1.59
6.	Trade	1.94	1.43	1.69
7.	Trans., Storage & Communication	2.25	1.20	1.72
8.	Services	2.96	2.25	2.60
	Total :	2.48	1.38	1.93
	Public Sector	2.99	2.17	2.58
	Private Sector	1.41	(-)0.43	0.48

\* Based on data from Employment Market Information Programme of the Ministry of Labour.

**Table 6.4 Average Annual Rates of Growth of Employment \* of the Educated: 1977-78 - 1987-88**

Sex/Residence	1977-78 to 1983	1983 to 1987-88	1977-78 to 1987-88
			( per cent )
Rural	6.61	8.35	7.39
Urban	4.88	6.21	5.48
Male	5.51	6.76	6.07
Female	6.58	11.08	8.58
Total	5.59	7.14	6.29

\* Usual Principal Status (age group 15 +)  
Based on NSSO 32nd, 38th and 43rd Rounds.

**Table 6.5 Percentage Distribution of Workers \* by 9 Major Sectors**

Sector	1977-78	1983	1987-88
1. Agriculture	70.70	66.31	63.90
2. Mining & Quarrying	0.52	0.65	0.77
3. Manufacturing	10.00	10.93	11.13
4. Electricity, Gas and Water Supply	0.26	0.32	0.34
5. Construction	1.82	2.47	3.96
6. Trade	6.18	6.67	7.30
7. Transport	2.13	2.71	2.78
8. Financing, Real Estate, Insurance and business services	0.55	0.73	0.83
9. Community, Social & Personal Services	7.82	8.78	8.80
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* UPS

Notes :1. Total includes a negligible group 'industry not recorded'.

2. Based on NSSO 32nd, 38th and 43 Rounds.

**Table 6.6 Percentage Distribution of Workers \* by Category of Employment**

	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Self Employment</b>									
1977-78	62.2	56.3	60.4	39.9	42.2	40.3	57.9	54.8	57.0
1983	59.5	54.1	57.8	40.2	37.3	39.7	55.0	52.0	54.1
1987-88	57.5	55.1	56.7	41.0	38.6	40.5	53.8	53.1	53.6
<b>Regular Salaried Employment</b>									
1977-78	10.9	3.7	8.6	47.2	30.8	44.2	17.9	6.6	14.6
1983	10.6	3.7	8.5	44.5	31.8	42.2	18.5	7.3	15.3
1987-88	10.4	4.7	8.6	44.4	34.7	42.7	18.0	8.3	15.2
<b>Casual Wage Employment</b>									
1977-78	26.9	40.0	31.0	12.9	27.0	15.5	24.2	38.6	28.4
1983	29.9	42.2	33.7	15.3	30.9	18.1	26.5	40.7	30.6
1987-88	32.1	40.2	34.7	14.6	26.7	16.8	28.2	38.6	31.2

\* UPS

Source: ibid

**Table 6.7 Unemployment Rates \* by Sex, Residence and Status**

Sector/ Status	1972-73			1977-78			1983			1987-88		
	M	F	T	M	F	T	M	F	T	M	F	T
<b>Rural</b>												
UPS	-	-	-	2.22	5.52	3.26	2.12	1.41	1.91	2.87	3.52	3.07
UPSS	1.16	0.48	0.92	1.28	2.01	1.54	1.41	0.66	1.13	1.81	2.27	1.98
CWS	3.02	5.51	3.86	3.57	4.13	3.74	3.72	4.26	3.88	4.16	4.27	4.19
CDS	6.83	11.22	8.21	7.12	9.18	7.70	7.52	8.98	7.94	4.58	6.91	5.25
<b>Urban</b>												
UPS	-	-	-	6.48	17.76	8.77	5.86	6.90	6.04	6.07	8.77	6.56
UPSS	4.79	6.05	5.03	5.40	12.40	7.01	5.08	4.85	5.02	5.16	5.93	5.32
CWS	5.96	9.09	6.53	7.12	10.93	7.86	6.69	7.46	6.81	6.71	8.93	7.12
CDS	8.02	13.67	8.99	9.40	14.55	10.34	9.23	10.99	9.52	8.79	12.00	9.36
<b>Total</b>												
UPS	-	-	-	3.07	7.01	4.23	3.02	2.14	2.77	3.60	4.19	3.77
UPSS	1.90	1.02	1.61	2.09	3.19	2.47	2.28	1.16	1.90	2.56	2.72	2.62
CWS	3.61	5.87	4.32	4.29	4.97	4.48	4.44	4.70	4.51	4.75	4.92	4.80
CDS	7.07	11.46	8.35	7.59	9.86	8.18	7.93	9.26	8.28	5.54	7.61	6.09

\* Unemployed as percentage of labour force.

UPS : Usual Principal Status;

UPSS : Usual Principal & Subsidiary Status;

CWS : Current Weekly Status ;

CDS : Current Daily Status

M-Male F-Female T-Total

Source : NSSO: 27th, 32nd, 38th & 43rd Rounds.

Table 6.8 State-wise Unemployment Rates \* 1987-88

	Usual Principal Status	Current Weekly Status	Current Daily Status
1. Andhra Pradesh	3.90	5.10	7.35
2. Assam	5.62	5.02	5.09
3. Bihar	2.84	3.77	4.04
4. Gujarat	2.57	4.03	5.79
5. Haryana	5.86	6.57	7.59
6. Himachal Pradesh	3.19	3.05	3.12
7. Jammu & Kashmir	2.67	5.36	5.57
8. Karnataka	2.44	3.28	5.06
9. Kerala	17.07	17.62	21.19
10. Madhya Pradesh	1.51	2.51	2.86
11. Maharashtra	2.86	3.63	4.67
12. Manipur	2.20	2.03	2.10
13. Meghalaya	0.31	0.32	0.32
14. Nagaland	4.45	4.41	4.41
15. Orissa	4.66	5.16	6.44
16. Punjab	4.04	4.28	5.07
17. Rajasthan	2.68	4.21	5.74
18. Sikkim	3.83	2.77	2.88
19. Tamil Nadu	5.25	7.61	10.36
20. Tripura	4.41	4.31	4.66
21. Uttar Pradesh	1.83	2.78	3.44
22. West Bengal	6.06	6.69	8.13
23. A & N. Islands	4.01	4.52	5.77
24. Arunachal Pradesh	0.20	0.28	0.28
25. Chandigarh	8.55	8.91	8.80
26. D & N Haveli	0.42	0.68	0.95
27. Delhi	5.01	4.68	4.77
28. Goa, Daman & Diu	8.99	9.72	11.30
29. Lakshadweep	21.36	21.78	22.14
30. Mizoram	0.11	0.11	0.23
31. Pondicherry	6.73	10.70	21.14
All India	3.77	4.80	6.09

\* Unemployed as percentage of labour force.

Source: NSSO - 43rd Round Survey.

Note: The survey did not include figures for rural areas of Nagaland and Ladakh and Kargil districts of Jammu & Kashmir.

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