THE SEVENTH FIVE YEAR PLAN
1985—90

THE SEVENTH FIVE YEAR PLAN
1985—90

VOLUME I

PERSPECTIVE, OBJECTIVES, STRATEGY, MACRO-DIMENSIONS AND RESOURCES

GOVERNMENT OF INDIA
PLANNING COMMISSION
NEW DELHI
OCTOBER 1985

PPC. 260—I.
15,000-1985 (DSK.I

Price : Inland ... 8.75 P.
For... 1.01 or $ 3.15

PRINTED BY THE MANAGER, GOVT. OF INDIA PRESS, RING ROAD, NEW DELHI-110064
AND PUBLISHED BY THE CONTROLLER OF PUBLICATIONS, DELHI-110054.

FOREWORD

It is now almost four decades since we first embarked on the path of planned economic development. Over these years the planning process has grown in depth and sophistication and today it is an integral part of our national polity. It has helped to evolve a national consensus on how to pursue our basic objectives of removing poverty, building a strong and self-reliant economy and creating a social system based on equity and justice. The plan outlines our objectives and priorities for the next five years, within a longer term perspective of economic and social development. It embodies the collective aspirations of our people, as well as the commitment of Government to achieve specific goals and targets.

The economy enters the Seventh Plan period in a strong position because of the success of the Sixth Plan. The rate of growth of GDP has accelerated over the past decade or so, and the Sixth Plan growth target of about 5 per cent has been achieved. Agricultural performance has been particularly impressive, specially in foodgrains. Steady growth in agriculture, reinforced by special schemes to help the weaker sections, has brought about a significant reduction in the percentage of the population below the poverty line. The rate of inflation has been kept under control and the balance of payments has been successfully managed despite an unfavourable external environment. These were years in which the world economy experienced the worst recession since the thirties and most developing countries, and even industrialised countries, faced severe economic difficulties. The Indian economy has emerged stronger, with an acceleration in growth.

The Seventh Plan will build on these strong foundations. It seeks to maintain the momentum of growth in the economy while redoubling our efforts to remove poverty. Economic growth must be accompanied by social justice and by the removal of age-old social barriers that oppress the weak. This is the essence of our concept of socialism. The Plan reaffirms our commitment to this ideal. The Plan also seeks to push the process of economic and technological modernisation of the economy further forward. This is essential if we are to build true self-reliance. Self-reliance does not mean autarchy. It means the development of a strong, independent national economy, dealing extensively with the world, but dealing with it on equal terms.

Agriculture remains the core of our economy. It supports the largest number of our people and it is here that the largest volume of productive employment can be generated.

Faster agricultural growth is necessary to provide the raw materials and expanding markets needed for successful industrialisation. Our agricultural strategy has achieved remarkable success over the past decade and we must pursue it with greater vigour in the Seventh Plan. The Plan represents a comprehensive strategy for agricultural development aimed at achieving a growth rate of 4 per cent per year in agricultural production. We must bring about institutional changes, including land reforms, in our rural economy. A key feature of the strategy is the extension of the Green Revolution to the eastern region and to dryland areas. This will reduce regional imbalances in our development, and will contribute directly to eliminating poverty.

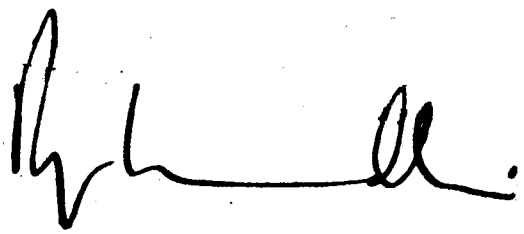
Anti-poverty programmes are an important element of our strategy. They will be expanded and strengthened in the Seventh Plan. The experience gained in the Sixth Plan will be used to restructure the programmes to improve their effectiveness and to ensure that the benefits flow to those for whom they are intended.

Planning has given us a strong base for building a modern, self-reliant industrial economy. Indian industry today is highly diversified, producing a wide range of products, many embodying a high level of technology. The public sector has a commanding presence and has played a pioneering role in many areas. We have a broad entrepreneurial base and ample technological and managerial manpower. But some weaknesses have also become evident. Much of our industry suffers from high cost. There is inadequate attention to quality. In many areas, we are working with technology that is obsolete. We have reached a watershed in our industrial development, and in the next phase we must focus on overcoming these problems. Our emphasis must be on greater efficiency, reduction of cost and improvement of quality. This calls for absorption of new technology, greater attention to economies of scale and greater competition.

In the final analysis, development is not just about factories, dams and roads. Development is basically about people. The goal is the people's material, cultural and spiritual fulfilment. The human factor, the human context, is of supreme value. We must pay much greater attention to these questions in future. The Seventh Plan proposes bold initiatives in these areas. Outlays for human resource development have been substantially increased. Policies and programmes in education, health and welfare must also be restructured to provide a fuller life for our people.

These objectives call for a sustained effort on our part. The success of the Plan depends upon the extent to which Governments, both at the Centre and the States, fulfil their commitments about mobilising and utilising resources. Above all it depends upon the enthusiasm with which the people participate in it, transcending all differences.

The public sector outlay of Rs. 180,000 crores represents a massive volume of public investment. It will place a severe strain on our capacity for resource mobilisation. But there are no short cuts to development, no alternative to hard work. From the beginning our people have demonstrated their capacity to meet challenges. The task before us is to put an end to backwardness and to build the India of the future. This plan will take us significantly forward towards this goal.



New Delhi

(RAJIV GANDHI)

PREFACE

The planning process is the precious gift of Pandit Jawaharlal Nehru to the people of India. Indiraji nursed this tender plant with great and loving care. As she once put it, planning in our country is a charter of orderly progress. It provides a framework of time and space that binds sectors, regions and States together and relates each year's effort to the succeeding years. By strengthening the social and economic fabric of the country as a whole and of the different regions and States, it makes a powerful contribution to the goal of national integration. The planning process has contributed a great deal to evolving a broad national consensus regarding the basic objectives, strategies and design of our development policies. This has helped to generate broad mass support for national economic policies which has added greatly to the cohesion and stability enjoyed by our polity.

2. Removal of poverty, the building of a modern society making maximum possible use of science and technology, and attainment of self-reliance are the basic objectives of planning in India. The previous Plans have made valuable contribution to the achievement of these national goals. I venture to think that the Seventh Plan constitutes yet another important milestone in the nation's quest to rid this country of the ancient scourges of poverty, ignorance and disease.

3. Effective planning must be based on a vision of the future. We need a long-term perspective to translate the vision into reality and to make it operational. The Seventh Plan is, therefore, set within a 15-year perspective. The aim is to create by the year 2000 the conditions necessary for self-sustaining growth and to provide the basic material requisites of well-being for all our people. This means that we have to sustain and accelerate the momentum of economic growth. Agriculture, industry, the infrastructure and social services have to function at progressively higher levels of efficiency and productivity. Full advantage must be taken of advances in science and technology to bring about the needed structural transformation of our economy. Simultaneously, measures designed to raise the productivity and incomes of the poorer sections of society and poorer regions must be pursued with greater vigour. The objectives and thrusts of the Seventh Plan have, therefore, been formulated as part of the longer term strategy which seeks, by the year 2000, to virtually eliminate poverty and illiteracy, achieve near full employment, secure satisfaction of the basic needs of food, clothing and shelter and provide health for all. The Plan thus seeks to assist in the establishment of an economy and polity which is modern, efficient, progressive, humane and is informed by equity and social justice.

4. India's growth performance has improved considerably in the last decade. The Seventh Plan seeks to take advantage of this favourable trend by aiming to stabilise the growth rate of the economy at an average annual rate of 5 per cent. The targeted growth

rates for the economy as a whole, as well as for outputs of both agriculture (4 per cent) and industry (8 per cent), imply a significant improvement over past trends. As such, major efforts will be needed to achieve the growth targets of the Seventh Plan.

5. In formulating the Plan, the Planning Commission has kept in view the mandate given to it by the National Development Council when it approved the Approach Paper last year. Food, work and productivity have been the three basic priorities which guided the preparation of the Plan. Furthermore, because of their critical importance in sustaining the growth process, particular attention has been paid to raising the capability of the infrastructure and human resource development with substantial increases in the proportions of outlays for these two sectors as compared to the Sixth Plan..

6. The proposed pattern of resource allocation is designed to ensure that the country will remain self-sufficient in food and that significant progress will be made in increasing the production of vegetable oils, pulses, vegetables and horticulture. The objective is to build an expanded system of food security, at rising levels of per capita consumption. As part of the strategy of a more regionally balanced agricultural development and production, special emphasis has been laid on increasing the productivity of rice in the Eastern States and on the development of dryland agriculture. The Plan also lays considerable stress on enhancing the productivity and incomes of small and marginal farmers. The agricultural programmes of the plan would greatly benefit from the creation of an additional irrigation potential of about 13 million hectares. Since variations in the rate of growth of agriculture are a major factor accounting for regional differences in the pace of development, the agricultural strategy of the plan, with its emphasis on more even and balanced distribution of agricultural growth, will also help to reduce regional disparities.

7. In the field of employment, the major objective of the Plan is to ensure that the growth of employment opportunities is faster than the growth of the labour force. Rapid agricultural development (especially in areas agriculturally backward), expansion of irrigation facilities, more intensive cropping and continuation of the employment-oriented programmes, such as the National Rural Employment Programme and the Rural Landless Employment Guarantee Programme, would contribute significantly to the generation of additional employment opportunities in rural areas. The faster rate of growth of industry and a considerably expanded housing programme in the private sector for which attempts would be made to provide finance through institutional sources would together generate a larger volume of employment in the non-agricultural sector than in the past. The Seventh Plan is thus an employment-oriented Plan. Over the Plan period, employment potential is expected to increase by 40 million standard person years against an addition to the labour force of 39 million persons. The employment potential will go up by 4 per cent per year, well above the expected growth rate of labour force of about 2.5 to 2.6 per cent over the Seventh Plan.

8. Removal of poverty remains a central concern of planning in India. Consistent with this objective, the Seventh Plan's development strategy and the pattern of growth emerging from it are expected to lead to reduction in poverty at a faster rate than in the past. The Plan envisages an expanded coverage under the various anti-poverty programmes. Taking into account the highly comfortable position of food stocks with the public sector, it may be possible to expand the employment-oriented anti-poverty programmes at a still faster rate than envisaged in the Plan document. Every effort will be made to plug various loopholes in the operation of anti-poverty programmes and to integrate these and various sectoral and area development programmes into a comprehensive design of integrated development of each area. The Plan pays special attention to the problems faced by the more vulnerable sections of our society such as scheduled castes, scheduled tribes, women and children. The Plan recognises that in a situation where poverty is pervasive, the perception of needs and priorities must not be a merely male perception but must take into account explicitly the special needs and problems of women. As a result of these measures, the poverty ratio will decline from 37 per cent in 1984-85 to less than 26 per cent in 1989-90. In absolute terms, the number of poor persons is expected to fall from 273 million in 1984-85 to 211 million in 1989-90.

9. Promotion of efficiency and higher productivity have been another major concern in the preparation of this Plan. Increased and more efficient utilisation of existing assets both in agriculture and industry will contribute to increasing the efficiency of resource use and also help in containing the rise in the capital output ratio. A coordinated approach to irrigation, drainage and land use management will be adopted to realise the multiple cropping potential of the new agricultural technology. In industry, emphasis is being placed on modernisation, investment in balancing equipment and technology upgradation to a much greater degree than ever before. The policy framework for industrial growth in the Seventh Five Year Plan lays special emphasis on setting up of plans of economic size and on the creation of an environment where business firms have an adequate incentive to modernise, reduce cost, improve the quality of their products and upgrade their technology. New developments in micro-electronics, informatics, telematics, biotechnologies, material sciences, oceanography, instrumentation and space technology offer exciting opportunities. A well conceived and coordinated approach to the introduction of these emerging technologies in our production process will further accelerate the pace of technical progress, structural change and growth of productivity, efficiency and quality consciousness.

10. In order that agriculture and industry may grow faster, increased emphasis has been placed on investments in infrastructure so that shortages in power, transport and coal would not arise for the scale of activities envisaged in the Plan. The Plan envisages a significant increase in the share of energy in the public sector outlay. Nearly 31 per cent of the total public sector outlay is meant for energy. The generation of power is expected to grow at an average annual rate of 12.2 per cent over the Plan period. The Plan pays considerable

attention to meeting the energy needs of rural areas. It seeks to extend the benefit of electricity to 1.18 lakh villages and to energise 23.9 lakh pumpsets for irrigation. The supply of fuelwood has been included as an additional component of the Minimum Needs Programme. The programme for the development and utilisation of biogas and for the installation of new smokeless 'chulas' will be expanded very substantially.

11. Another major thrust area in the Seventh Plan is human resource development. Public sector outlays for social services show a significant increase as compared to the Sixth Plan. The Plan seeks to facilitate development of the human potential in terms of self-respect, self-reliance and a life of dignity. Apart from expansion of the existing programmes in education, health, provision of clean drinking water and sanitation, new initiatives and innovative measures are contemplated in these areas. The Plan seeks to provide adequate drinking water facilities for the entire population both in urban and rural areas. By the end of the Plan period, the infrastructure for primary health care will be fully operational with regard to village health guides, sub-centres, primary health centres and multi-purpose health workers. Thus, we would have a country-wide system of health care, with a balanced mix of preventive, promotive and curative services. Increased emphasis on protection and preservation of the ecological balance and environment is another distinctive feature of the Seventh Plan.

12. As regards the financing of the Plan, in broad macro terms, the Plan is eminently bankable and credible, as it projects only a modest increase in the rate of investment and domestic savings during the Plan period. The rate of investment is projected to go up from 24.5 per cent of GDP in 1984-85 to 25.9 per cent by 1989-90 and the rate of domestic savings is projected to go up from 23.3 per cent to 24.5 per cent over the same period. The financing pattern of the Plan seeks to limit recourse to deficit financing within limits of safety and prudence. In the same manner, the external financing of the Plan is expected to involve a deficit of not more than 1.6 per cent of GDP in the balance of payments on current account. The debt service ratio will not exeeed 20 per cent of current receipts during the Plan period. Thus care has been taken to ensure that internal and external financing of the Plan does not involve assumption of unacceptable risks.

13. It is, however, to be recognised that financing of the Seventh Plan would require determined and more intense efforts for resource mobilisation. The ratio of taxation to GDP will have to increase by two percentage points over the Plan period. The success of the Plan is crucially dependent on the achievement of this target. Subsidies and other non-Plan expenditure will have to be firmly contained if excessive recourse to deficit financing is to be avoided. In the same manner, the public sector enterprises will have to generate larger resources if the requirements of additional investments are to be financed in a non-inflationary manner. To maintain the viability of external payments, it will be necessary to pay greater attention to export promotion and to containing the growth of imports. Our

export performance still displays major structural weaknesses and in the interest of an orderly management of our balance of payment, there will have to be a substantial improvement in the competitiveness and quality of our exports. Simultaneously, we must adopt effective measures to curb the growth of imports of petroleum, vegetable oils and sugar.

14. In a truly moving preface to the Sixth Five Year Plan, Indiraji reminded us that the measure of a Plan is not intention but achievement, not allocation but benefit. It is a statement of universal validity and it applies as much to the Seventh Plan as to the earlier Plans. Thus the impact of the Seventh Plan will depend on the earnestness and determination with which it is implemented. The Seventh Plan document lists several areas where we must improve upon past performance if we are to realise the objectives and goals of the Plan. This is not the place to discuss these problem areas at length. However, since devising effective solutions for some of these problems is crucial to the success of the Plan, a brief reference to some major problem areas is justified.

15. First of all, the rehabilitation and revitalisation of the agricultural credit system is essential for achieving the agricultural targets of the Plan. The mounting phenomenon of overdues must be firmly controlled if the agricultural credit system is to finance adequately the input requirements of agriculture.

16. Secondly, there must be a substantial improvement in the quality of agricultural and rural development administration. The technical knowledge and skills of the official grass-roots level administration need to be greatly improved if we are to impart a scientific temper to our agriculture. District and block level planning has yet to take firm roots. Without the introduction of effective block level/district level planning, the impact of large flows of money through the various anti-poverty programmes will remain limited.

17. Thirdly, we must take a fresh look at not only the basic strategy but also the programme content of the family welfare programme, so as to bring about a faster reduction in the rate of population growth.

18. Fourthly, there must be a major improvement in productivity, efficiency and internal resource generation of the public sector enterprises both of the Centre and of the States. Internal resource generation is particularly weak in capital-intensive enterprises in sectors such as power, coal, steel, transport and fertilisers. We need new administrative structures and new concepts of management so as to enable the public sector to perform its dynamic role in the process of capital accumulation.

19. Finally, we must adopt effective measures to bring about meaningful participation of the people in all phases of national development. We need to tap fully the latent potential of the Panchayati Raj institutions for harnessing the people's energies for nation building

activities. Simultaneously, we must also fully exploit the creative potential offered by voluntary organisations engaged in development work.

20. Planning in our country is an instrument of achieving the nation's basic goals and objectives. It was the dream of Mahatma Gandhi to wipe out the tears from the eyes of each and every individual in our country. We can be legitimately proud of the phenomenal progress made by the country since we embarked on the path of planned development. However, there are still too many people with tears in their eyes. Our task is thus clear. We have to wage a still more intensive campaign against poverty. Recent experience suggests that by harnessing the forces of modern science and technology, it is possible, as never before, to ensure that chronic poverty need not be the inevitable lot of a majority of humankind. Poverty eradication is an attainable goal. However, it must not be assumed that development is like going to a free dinner party. The standard of living is a matter of high productivity, and there are no short cuts to it. Hard decisions will be necessary to mobilise the needed resources and to sustain the tempo of modernisation and social development. Simultaneously, we must evolve new structures, new attitudes, a new moral code, a new work ethic, a sort of cultural revolution, if you wish, which lays emphasis on dedication, commitment to national goals and pursuit of excellence so that we can make the best possible use of scarce national resources.

21. The task ahead is not easy. We face many challenges and uncertainties. But our country has a tremendous built-in resilience and strength. It has weathered many a storm in the past. The nation is firm in its resolve to work out an autonomous path of development suited to the genius and needs of our people.

22. The Seventh Plan represents a massive national endeavour to build a new India free from the fear of want and exploitation. Its objectives, strategies and programmes are designed to assist in the realisation of the nation's cherished goals. The Plan is an expression of the collective will of the Indian people to move forward at a still faster pace on the road to progress, prosperity, social justice and self-reliance. I am confident that, guided by the spirit of national unity and discipline, all our people will work earnestly for the successful implementation of this Plan.

Manmohan Singh

(Manmohan Singh)
Deputy Chairman
Planning Commission

New Delhi

PLANNING COMMISSION

Rajiv Gandhi	Chairman
Manmohan Singh	Deputy Chairman
P. V. Narasimha Rao	Member
Vishwanath Pratap Singh	Member
Buta Singh	Member
C. H. Hanumantha Rao	Member
M. G. K. Menon	Member
Raja J. Chelliah	Member
Hiten Bhaya	Member
Abid Hussain	Member
C. G. Somiah	Secretary

CONTENTS

CHAPTER 1

PLANNED DEVELOPMENT : RETROSPECT AND PROSPECT

1.1 There is now fairly convincing evidence that since 1974-75 (which coincided with the launching of the Fifth Five Year Plan), the Indian economy has moved to a higher growth path. The successful implementation of the Sixth Five Year Plan has been a major contributory factor to this welcome shift in the growth curve. On the whole, the Sixth Plan has been fairly successful in sustaining and further strengthening the impulses for growth, modernisation and social justice. The satisfactory implementation of the Plan has enhanced our ability to deal with chronic problems of poverty and under development. The progress made by the country in the recent years suggests that, given clarity of objectives and disciplined management of development programmes, poverty eradication is an attainable goal.

1.2 The Sixth Plan began at a time when the economy was severely disrupted by the drought of 1979 and a sharp deterioration in our terms of trade brought about by a further steep increase in the price of imported oil in 1979 and 1980. The deterioration in the balance of payments and the high rate of inflation threatened the stability of the economic system and the possibility of sustained growth. However, during the Sixth Plan period, successful efforts were made to restore economic stability and to sustain the process of growth and development. The Plan was based on a set of objectives, and the actual performance of the economy in terms of growth, modernisation, self-reliance and social justice is assessed in what follows.

Growth

1.3 The Sixth Plan had set an aggregate growth target of 5.2 per cent. This target has been achieved. The achievement of the aggregate growth target has to be seen in the context of performance at the sectoral level which is summarised in the table below:—

TABLE 1.1

Sixth Plan Growth Rates : Targets and Actuals (Value Added)

(Percent per annum)

	Sixth Plan targets	Anticipated actuals 1979-80 to 1984-85
Agriculture	3.8	4.3
Mining and manufacturing	6.9	3.7
Other sectors	5.5	6.6
TOTAL	5.2	5.2

1.4 The aggregate growth target set for the Sixth Plan could be achieved mainly because of good agricultural performance and a rapid growth in the services sector. The rate of growth of income generated in mining and manufacturing was well below target, and this is one of the weak points in the growth record in the Sixth Plan.

1.5 Agricultural growth during the Sixth Plan was broadly as anticipated and production targets were by and large achieved for foodgrains and oilseeds. Sugarcane output in the terminal year was well short of the target, though it was much higher in the middle years of the Plan. A notable feature of agricultural production during the Sixth Plan was the limited impact of adverse weather in 1982-83 which, if it presages a longer term trend, implies a substantial imporvement in food security. However, the imbalance in production between rice and wheat and between cereals and pulses continues. There is a serious regional imbalance in the impact of the green revolution in that less than 15 per cent of the area under foodgrains accounts for 50 per cent of the increase in foodgrains production in the postgreen revolution period. Greater efforts are required for improving rice yields, particularly in the eastern regions, and for enhancing the productivity of rainfed and dryland agriculture.

1.6 In Industry, Sixth Plan performance fell short of target in basic industries like steel, fertiliser and cement, and in textiles. The overall growth rate of industrial production was also below target and was unstable from year to year. The economy is not yet on an industrial growth path in which production increases steadily from year to year. One hopeful sign is the sustained increase of 16 per cent per year in the real investment in fixed assets by the private corporate sector during the first four years of the Sixth Plan, a buoyancy which is also evident in the rapid growth of the private capital market. One major problem for basic industries in the Sixth Plan was the shortage of power. There are some industries, mostly involved in the manufacture of simple consumer goods, where expansion has been constrained by an inadequate growth in domestic demand, a deficiency which could not be made good through export sales since most of these industries are not internationally competitive. Scarcity and high prices of inputs, the type of technology in use, the small scale of operations, obsolescence of product designs

and high costs have constrained growth in some machine-building and chemical industries. These problems must be tackled and public sector performance improved; other conditions are propitious for sustained growth in industrial production and employment.

1.7 The output of commercial energy, measured in terms of coal replacement, increased at an annual rate of 12 per cent over the Sixth Plan. An outstanding feature of this growth was the increase in crude oil production from 11.8 million tonnes in 1979-80 to 29 million tonnes in 1984-85. The pattern of commercial energy consumption moved away from coal towards oil and electricity. Commercial energy is a virtually universal intermediate and any shortage could restrict growth in all sectors. The production of commercial energy is almost entirely in the public sector and investments in this sector absorb about 30 per cent of plan outlays. A stage has now been reached where this share cannot be increased without jeopardising the prospects for growth in the energy-using sectors. Hence greater attention has to be paid to efficiency and productivity in the energy sector and conservation in energy-using activities.

1.8 The level of investment is a major determinant of growth and, in this, Sixth Plan expectations were by and large fulfilled. Gross investment during this period amounted to about Rs. 143,000 crores (in 1979-80 prices) against the Sixth Plan expectation of Rs. 159,000 crores. As for domestic savings, the Sixth Plan had anticipated a gross savings rate of 24.5 per cent in 1984-85, against which the actual rate is likely to be 23.3 per cent.

1.9 The shortfall in aggregate savings during the Sixth Plan is largely because the public sector's savings rate has been well below target. In fact the mobilisation of resources of public investment has run into serious difficulties in the Sixth Plan and the actual level of Plan expenditure in real terms has been 21 per cent below target. These difficulties arose mainly due to the rapid growth in non-development expenditures, which rose more rapidly than current revenues over the Plan period, and the low level of profitability or losses in public enterprises, power boards, railways and road transport corporations. Public investment in infrastructure and basic industries is an important catalyst of wide-ranging developments in the whole economy. Any shortfall in the public investment programme affects its long-term growth potential. A reversal of the downward trend in revenue surpluses and greater discipline in the financial system should receive high priority.

Modernisation

1·10 Technological advances and creation of needed infrastructural facilities are necessary features of the development process; these have been included as important elements in the development strategy. The Sixth Plan marked some important advances on this front.

1.11 In agriculture, the area under high-yielding varieties of foodgrains increased from 35.2 millon hectares in 1979-80 to about 56.0 million hectares in 1984-85, which was the Sixth Plan target. Chemical fertiliser consumption rose from 5.3 million tonnes in 1979-80 to 8.4 million tonnes in 1984-85 which however, fell short of the Sixth Plan target of 9.6 million tonnes. The rapid growth in fertiliser consumption in some of the States which were considered agriculturally backward, the spread of soyabean cultivation in Madhya Pradesh and wheat in eastern U.P., and several other signs suggest that the green revolution is spreading to new areas. In the sphere of irrigation and water management, there were important gains in the Sixth Plan period : irrigation potential went up by 11 million hectares. However in the major tasks of modernisation of canal systems, provision of drainage and improvements in water management, much remains to be done. In animal husbandry, the number of crossbred cows increased from 3 million in 1979-80 to nearly 4.5 million in 1984-85. A major programme for the modernisation of inland fisheries through the supply of fingerlings and improvements in feeding practices was implemented during the Plan period.

1.12 An improtant component of modernisation in rural areas is the change in the pattern of energy use. By the end of the Plan, 64 per cent of villages were electrified and the consumption of electricity in agriculture rose by 8.9 per cent per annum. The number of tractors in use at present is of the order of 500,000 which, in terms of draught power, is roughly the equivalent of 3.5 million animals. A major change is under way in the energy base of our agriculture. The Sixth Plan also saw the beginning of an effort to enlarge and modernise the traditional energy base of rural society through the spread of bio-gas, social forestry and other renewable forms of energy.

1.13 In industry and infrastructure, several major technological advances were made during the Sixth Plan e.g., the production of Computer Numerically Controlled (CNC) machine tools, the commissioning of 3000 tonnes per day cement plants and of the first 500 MW thermal generating unit, the manufacture of LSI chips, the use of powered support faces in coal mining, the introduction of a new generation of fuel-efficient motor vehicles, a rapid expansion in the use of computers, the commissioning of the first electronic telecom exchange-

and the running of trains with trailing loads of 3000 tonnes. Important improvements were made in petroleum refineries and petro-chemical plants to reduce energy consumption and improve yields.

1.14 The technological achievements of the Sixth Plan period are undoubtedly significant. But their impact on productivity was mainly in new projects and in a few existing establishments. The actual record of productivity improvement at the sectoral level is not as encouraging. Capacity utilisation in basic industries like steel, cement, and aluminium remained at a low level. Continuous technological upgradation, which is a necessary condition for rapid and efficient industrialisation, did not, by and large, take place. The plant load factor in thermal plants did improve over the Plan period but was still below the levels reached in the mid-seventies. In the railways, the productivity of wagon use rose by 20.9 per cent. With regard to energy efficiency, the unrealised potential for conservation of commercial energy is around 20 per cent in transport, 25 per cent in industry and 30 per cent in agriculture.

1.15 Major changes in industrial technology are taking place in the world today, of which the more important flow from three sources : (a) the application of computers and electronics to production processes; (b) improvements in fuel efficiency of prime movers and other industrial equipment; and (c) the use of new materials. The Sixth Plan saw the beginning of an effort to introduce these changes in the economy. However, there is still a substantial technological gap which needs to be closed. There also remain major tasks in modernisation and productivity improvement in industries like textiles and steel, and product develpment in the capital goods industry.

1.16 With the significant emphasis given to science and technology since independence, a wide-based infrastructure covering a broad spectrum of disciplines and capabilities has been built up. When clear-cut objectives and tasks have been defined, and necessary support provided, Indian scientists and technologists have been able to fulfil national expectations, e.g., in the areas of agriculture, atomic energy and space technology, and certain areas of defence and industrial research. The principal achievements in science and technology during the Sixth Plan period have been consolidation and strengthening of the existing infrastructure, and the growth of new thrust areas. A conscious and largely successful effort was made to implement the various recommendations made in the Sixth Plan document with regard to the science and technology sector. Major new areas given emphasis have been the environment, oceanography, new and renewable sources of energy and biotechnology.

1.17 The Sixth Plan also saw the formulation of a Technoology Policy Statement, which has as its major objective the use of science and technology for development tasks. The public sector has to play a major role in this task, since it employs a very substantial portion of the technical talent in the country. At least two-thirds of the engineers working in India are in the public sector. As for R & D personnel, the share of the public sector is closer to four-fifths. This vast pool of talent must be used more productively, e.g., in specific technology missions oriented towards developmental objectives, as has been done so successfully in the space programme and in atomic energy.

Self Reliance

1.18 The Sixth Plan was formulated at a time when the balance of payments was under severe strain due to the sharp increase in oil prices. During the Sixth Plan, both exports and imports grew more slowly than anticipated and the overall trade deficit (at constant prices) was about 18 per cent larger than anticipated. However, the net earnings from invisibles were much higher, and the current account deficit (at constant prices) was nearly a third less than anticipated. These developments, along with the inflow of borrowings from the International Monetary Fund, halted the decline in exchange reserves which started in 1979-80. In the last three years of the Plan, foreign exchange reserves rose steadily, and covered nearly 5 months' imports by the end of 1984-85.

1.19 A crucial component in the strategy for self-reliance was the accelerated oil production programme. A rapid increase in the production of domestic crude oil decreased the import : consumption ratio of oil and petroleum products from about 66 per cent in 1979-80 to 31 per cent in 1984-85. Had the import ratio for these two commodities remained at the 1979-80 levels, the financing of these imports would have posed a virtually insurmountable problem for the balance of payments in the Sixth Plan period. Restriction on consumption would have been inevitable with consequential disruptions in agriculture, industry, transportation and other sectors.

1.20 The strategy adopted for managing the balance of payments helped avert a cut-back in investment programmes. Fixed investment continue to rise steadily throughout the Sixth Plan, in the aggregate as also in the public sector. This was also facilitated by the fact that a substantial proportion of our machinery requirements is met from domestic production. Hence, maintaining the tempo of the

investment programme does not pose a major balance of payments problem.

1.21 The slow growth in exports emerged as one of the principal weaknesses in the balance of payments during the Sixth Plan period. In terms of volume, exports grew at a rate well below target. Part of the reason for the slow growth is to be found in the recession in the developed economies, which restricted the rate of growth of world trade for most of the Plan period. However, this must also be attributed to inadequate progress in buliding up a viable long-term export base. The pursuit of self-reliance with growth now requires a faster growth in export earnings.

1.22 An important component of the strategy for self-reliance is the containment of the external debt service ratio within a manageable level. In 1979-80, external debt service was 12.5 per cent of exports, and in 1984-85 this ratio declined to 11.2 per cent. However, the Sixth plan also saw a major change in the pattern of foreign borrowings. At the end of the seventies, the bulk of external borrwoings was by way of concessional assistance received by the Government. During the Sixth Plan this has changed in two important ways : (a) non-concessional flows account for a growing proportion of official borrowings, and (b) direct borrowings by financial institutions and the private sector have grown to a substantial figure. These two factors together with the outstanding borrowings from the International Monetary Fund (IMF) and the Non-Resident Indian (NRI) deposits will mean a a substantial increase in the average cost of foreign debt. This has to be taken into account in our strategy for the management of the balance of payments in the Seventh Plan.

1.23 In the Indian development strategy, self-reliance has been conceptualised not merely in terms of reduced dependence on aid, but also in terms of building up domestic capabilities and reducing import dependence in strategic commodities, where the country's requirements are large and hence import demand could affect world prices, or where insecurity of supplies could have wide-ranging repercussions on the economy. In three such commodities, viz., foodgrains, petroleum products and fertilisers, the Sixth Plan saw a substantial reduction in import dependence.

1.24 The case for self-reliance in science and technology rests on the critical role of technological competence in determining the long-term growth prospects for the economy. In this field, our interaction with the world economy has increased both as a supplier and as a buyer. India has emerged as a leading Third World exporter of industrial know-how, technical consultancy and turn-key industria projects. Imports of technology have also increased quite rapidly in recent years, as is evidenced by the growth in approvals for foreign collaboration.

1.25 There has been significant increase in self-reliance in various areas of science and technology, particularly relating to strategic sectors. In the atomic energy programme, a high degree of self-reliance has been attained in terms of design, fabrication and commissioning of nuclear power reactors and all associated elements, including production of heavy water. In the space programme, capabilities relating to design and fabrication of satellites, and of satellite launch vehicles, have been developed which should lead in a few years to the possibility of launching and utilising operational satellite systems on an indigenous basis. Agricultural research has continued to be of vital importance for increasing food production, and is now well set for contributing to a wider and more diversified base of agricultural production. Medical research has been given a significant emphasis in the Sixth Plan, particularly with thrusts relating to leprosy eradication, fertility control and new approaches to communicable diseases, and is now poised for a major impact in the Seventh Plan.

Social Justice

1.26 Removal of poverty and unemployment are the crucial components of the strategy for growth with equity and they were explicitly stated objectives of the Sixth Plan. Information on the incidence of poverty is available from quinquennial surveys conducted by the National Sample Survey Organisation and the relevant estimates base on the last two surveys are summarised below :—

TABLE 1.2

Trends in Percentage of People Below Poverty Line

Percentage of population below the poverty line	1977-78	1983-84 (Provisional data)
Rural	51.2	40.4
Urban	38.2	28.1
TOTAL	48.3	37.4

1.27 Thus, there has been a decline in the incidence of poverty in this period. The main reasons for this welcome trend are the higher rate of economic growth and the increases in agricultural production. The Sixth Plan also witnessed a massive expansion in the Integrated Rural Development Programme which was extended to cover all development blocks in the country, and a substantial effort at providing employment on rural works through the National

Rural Employment Programme (NREP) and, in the last two years of the Plan, the Rural Landless Labour Employment Guarantee Programme (RLEGP). The targets set for the coverage of poor families under IRDP and for employment generation under NREP and RLEGP were met. Various evaluation studies of the IRDP programme including the one undertaken by the Programme Evaluation Organisation (PEO) of the Planning Commission have analysed the process of implementation of the programme, identified several weaknesses and suggested corrective measures which would help reduce leakages, enhance the impact of the programme and improve the viability of the individual schemes.

1.28 The objectives of social justice is also served by the minimum needs programme which aims at an improvement in living conditions of the poor and their access to education and health. During the Sixth Plan, targets for elementary education enrolment and for the provision of primary and subsidiary health centres were exceeded. Family planning measures were extended to raise the percentage of couples protected from 22.5 per cent in 1979-80 to 32.0 per cent in 1984-85. Living conditions of the poor in rural areas were improved through the provision of protected and assured water supply to 192,000 out of the 231,000 villages with a drinking water problem, house sites to 5.4 million poor rural families and assistance for house construction to 1.9 million of them. Environmental conditions in urban slums were improved to benefit 9.1 million slum dwellers.

1.29 One major problem in education and health is that of improving the quality. Enrolment targets have been exceeded, but a high rate of dropouts means that the actual rate of attendance is very much lower. Thus, according to certain preliminary results from the 1981 census, the number of children in the relevant age groups attending school was significantly below the enrolment figure for Classes I-VIII for 1980-81. In health, morbidity data are not available, but the very slow decline in the overall death rate and in the infant mortality rate suggests that the extension of health services, has not, as yet, had an adequate impact on health status. In family welfare, the couples protected tend to be those who have already had three or more children and a substantial decline in the crude birth rate is not as yet in sight. At present, the total annual expenditure of the Central and State Governments on education and health is estimated to exceed Rs. 9,000 crores, and this large amount must be used effectively. An improvement in the educational and health status of the poor will have a wide-ranging impact on the whole development process. Therefore, systematic attention to the quality and usefulness of the service provided at so large a cost to the public exchequer is necessary.

1.30 Environmental protection is also an important component of the pursuit of social justice. The cost of environmental degradation are generally borne by those who do not benefit from the activities which cause the degradation. In this process it is the poor, who are least able to protect themselves, who suffer most. In rural areas deforestation, soil erosion, flooding and waterlogging affect farmers more severely. Even in urban areas, it is the poor who tends to live in the most vulnerable localities, as the Bhopal gas tragedy demonstrated. In the Sixth Plan, environmental protection was emphasised in all areas of development activity. A Department of Environment was set up and the Constitution was amended to introduce environmental protection and improvement in the Directive Principles of State Policy and the list of Fundamental Duties. Monitoring arrangements were strengthened, new legislation on forests and water pollution was enacted, and environmental impact assessment undertaken for all major projects.

The Tasks Ahead

1.31 The most striking feature of the Sixth Plan is the fact that the tempo of economic growth was maintained despite adverse weather conditions in 1982-83, the balance of payments problems arising from the oil crisis of 1979 and an unfavourable international economic environment. Agricultural growth and the rapid expansion of anti-poverty programmes could make a significant dent on the problem of poverty and unemployment. In this broad sense, the Sixth Plan has helped the country make further progress towards the objectives of growth, self-reliance and social justice. There are, however, certain crucial weaknesses in the development effort which need to be corrected.

1.32 The Government has to play a major role in the development process in order to promote the interests of the poor, reduce disparities in income and wealth, curb regional inequalities in the level of development, protect the environment, strengthen the scientific-technological base for long-term growth and safeguard the interests of future generations. These are matters which cannot be left to the free play of market forces. Purposive Government intervention in these crucial areas is central to our growth strategy.

1.33 It is clear that mobilisation of adequate resources for public investment is a major problem in the Seventh Plan. Without such mobilisation, balanced growth of agriculture and industry will

be seriously hampered. Hence a more determined effort has to be made to raise additional resources for development in the public sector. A major component of this effort has to be promotion of efficiency in the administration of public sector enterprises and better resource generation by these enterprises. The savings performance of general Government must also show a substantial improvement.

1.34 The public sector has initiated and sustained the industrial transformation of India. It shall continue to play its pivotal role in modernising Indian industry and in reducing the concentration of economic power. To perform its historic task, the public sector has to undergo basic structural changes to conform to the Plan priorities of efficiency and productivity. Only in the measure that the public sector generates investible surpluses can it play its indispensable social role of providing an adequate infrastructural base for the economy, being a vehicle for the introduction and absorption of new technology in critical sectors of the economy, and for achieving balanced regional growth.

1.35 A narrow view of resource mobilisation, limiting it to the financial sphere, fails to do justice to the complexity of the development process in which the human factor plays the most significant part. Without adequate development of human resources in its widest sense, we cannot avoid setbacks to the process of development itself. The productive forces of the economy can be strengthened only by releasing the creative energies of all strata of society. Education, in all its aspects, and people's participation in development programmes through their own organisations hold the key to rapid and sustained social and economic advance. These should receive special attention in the Seventh Plan.

1.36 Another important weakness in the development effort is the poor performance in productivity growth. Asmuch attention should be paid to productivity and efficiency as to capacity expansion and production increases. The replacement of overaged assets and maintenance must be given priority. Improved utilisation of capital assets, reduction in energy and raw material, use and cost reduction are required in all sectors. Without these improvements it will be difficult to sustain the tempo of development since a substantial increase in the rate of saving, which is already high, is difficult to attain. Cost reduction is also vital for improving the international competitiveness of Indian products and for expanding the scale of the domestic market.

1.37 The balance of payments prospect now confronting the country is very different from the situation in the past. The climate for concessional assistance is none too favourable. Resource to large-scale commercial borrowings may lead the country into a debt burden that cannot be sustained. Thus a significant improvement in the trade balance is essential for maintaining the viability of external payments. Increased domestic production of vegetable oils, fertilisers, steel and petroleum products will no doubt help to moderate the growth of imports. However, it has to be recognised that the scope for managing our international payments through large scale import substitution is considerably reduced. Thus in addition to sustained emphasis on efficient import substitution, pursuit of self-reliance demands a much more vigorous export promotion effort than has been forthcoming in the past. A rapid growth of exports will require changes not merely in trade policy but also in fiscal, monetary and industrial policies.

1.38 In agriculture and rural development, a large number of new programmes have been started. Along with these programmes, a diversity of organisational and administrative structures has been established, but often the organisational arrangements and the staff for a new programme are put in place with little attention to existing structures and personnel. There is now an elaborate "development bureaucracy" operating at field level and at higher levels in the administration. There are also local self-government bodies and cooperatives. There is need to re-examine this whole structure, simplify and rationalise it, to reduce duplication and to ensure adequate horizontal coordination at local levels. This is necessary not merely to reduce the burden of expenditure but to improve performance, ensure accountability and make the system more comprehensible to the common man.

1.39 In education, health care and family welfare, past efforts have been concentrated on target-oriented expansion in facilities or on enrolment and coverage. The stage has come where special attention must be paid to the quality of service provided in these sectors, and the performance measured in terms of ultimate effects on literacy, educational status, incidence of diseases, mortality rates, nutritional status and fertility rates.

1.40 For achieving self-reliant growth and for making the economy immune to external shocks, domestic technological capabilities are of strategic importance. To strengthen the country's scientific and technological base, a two-pronged strategy has to be pursued, namely, (i) to enhance domestic technological capabilities in the strategic sectors of the economy, such as energy, space, communications,

agriculture, population planning and national security; and (ii) to initiate research and development effort in frontier areas of science and technology to enable the country to play a significant role in the world technology market. This strategy is imperative to improve productivity and to build an internationally competitive industrial structure. In short, the Seventh Plan marks a systematic beginning for raising the scientific and technological infrastructure to a qualitatively higher level as a major component of our strategy for self-reliance.

1.41 The Seventh Plan must build on the strengths inherited from the past—the high rate of savings, the large pool of scientific, technical and managerial manpower, the resilience against drought and international disturbances and the orientation of development efforts to benefit the poor. It is now possible to move faster towards the objective of self-sustaining growth with social justice. In order to succeed, it is necessary to bring about important changes in policies and performances; there must be significant changes and improvement in the pattern of resource mobilisation for the public sector; the requisite policy-changes in the fields of industry, agriculture and technology should be brought about to raise productivity and efficiency and for promoting exports; basic structural reforms should be effected in rural administration; and there must be shift in emphasis towards improvement in quality and greater effectiveness in education, health care and family welfare programmes.

CHAPTER 2

DEVELOPMENT PERSPECTIVE : TOWARDS THE YEAR 2000

2.1 The programme of development during the Seventh Plan must be set against the perspective of the next 15 years : 1985—2000. The investment programmes and the policy initiatives for the Seventh and subsequent Plans must be related to the goals that the nation has for the year 2000, as it emerges into the 21st century. In more concrete terms this means the elimination of poverty and creating conditions of near full employment, the satisfaction of the basic needs of the people in terms of food, clothing and shelter, attainment of universal elementary education, and access to health facilities for all. It should be the aim to create, by the year 2000, the conditions for self-sustaining growth in terms of both the capacity to finance growth internally and the development of technology. In the sphere of industry, efficiency must be progressively improved so as to attain international competitiveness in major products. The aim should be to make India a modern, technologically progressive economy with expanding capacity to provide the basic material and cultural requisites of well-being for all people.

2.2 The attainment of these goals requires :

(i) action to sustain and enhance the momentum of economic expansion and technological development;

(ii) adoption of effective promotional measures to raise the productivity and incomes of the poorer sections of the population, poorer regions and poorer States;

(iii) expansion and qualitative improvement in facilities for health, education and other basic civic amenities;

(iv) measures for bringing about a sharp reduction in the rate of population growth.

Long-term Development Strategy

2.3 The long-term strategy should take into account the objective conditions in the economy and the likely developments over the planning horizon. The major aspects relevant to the formulation of the strategy and the associated policy thrusts are spelt out in what follows.

2.4 The demographic perspective provides the starting point for determining a long-term development strategy. The persons who will join the labour force in the next 15 years have already been born. In absolute terms, around 120 million persons will be added to the labour force over the next 15 years. Thus, creation of opportunities for productive employment of a growing labour force assumes top priority. Given the present distribution of population and labour force and the substantial investments in social and economic overhead capital required for the absorption of labour in urban areas, it is necessary to create productive and satisfying job opportunities in rural areas through development of agriculture, irrigation, rural infrastructure and promotion of village and cottage industries. This would both reduce the disparities between the urban and rural areas and moderate rural-urban migration.

2.5 The importance of agriculture in the Indian economy, the increasing demand for food in the process of growth, the favourable income and employment implication of more intensive agricultural development and the severity of the balance of payments constraint require that continued fast agricultural growth and self-sufficiency in food must remain a top priority concern of planning in India. In planning for food self-sufficiency, adequate and balanced attention must be paid to cereals, oilseeds, pulses, fruits and vegetables and protective foods like milk, eggs, meat and fish.

2.6 The demographic perspective also implies a progressive decline in the size of holdings. Hence the challenge on the agricultural front can be met only if obstacles to increased productivity of small farms are removed. Experience shows that small farmers when given the necessary inputs and facilities are able to achieve substantial increases in production. Therefore, every effort has to be made to enable small farmers to realise their growth potential. Properly organised extension services can play a majo role in this matter. However, given the small size and fragmented nature of holdings, individual initiative will need to be supplemented by appropriate group action so as to enable small farmers to make effective and economical use of facilities like irrigation, credit, marketing and storage. The cooperative movement offers considerable potential for the organisation of these activities but the realisation of this potential depends vitally on the successful implementation of reforms designed to overcome the many weaknesses of the movement. (The issues relating to the cooperative movement are further discussed in Vol II, Chapter 1)

2.7 The fairly high rate of growth of population neutralises to a significant extent the fruits of economic growth and uses up part of the potential savings which could otherwise be used to raise capital per head and the productivity of the labour force at a faster pace. Effective measures to reduce the rate of growth of population are imperative and must command priority of action. Apart from the expansion of family welfare services, sustained improvement in education (particularly of girls), and health care facilities (designed particularly to reduce the rate of infant mortality) and improved status of women in social and economic life are essential for the success of the family welfare programme and voluntary acceptance of the small family norm.

2.8 A sustained improvement in the quality of life will involve increased public expenditure on health, education and culture. The requirements for housing and urban infrastructure are as pressing since nearly 60 per cent of the addition to population between now and the year 2000 will be in urban areas. There is already a growing dissatisfaction regarding the availability and quality of basic civic amenities in urban areas. The growth in population will further aggravate this .and new and innovative strategies will be needed to raise resources for meeting the requirements of urban development and infrastructure.

2.9 The demographic perspective implies a substantial increase in the requirements of capital for the provision of social infrastructure and for maintaining the tempo of economic growth. Notwithstanding the considerable scope that undoubtedly exists for improving the utilisation and producvitity of capital, it must be recognised that India is passing through a fairly capital-intensive phase of development. This is valid both for agriculture and industry, particularly when one takes into account the capital-intensity of supporting investments in infrastructure. To sustain the growth momentum, it is therefore necessary to raise the domestic saving rate, and public policies should be supportive of increased savings effort.

2.10. Effective energy planning must form an important constituent of long-term strategy. The demand for commercial energy is bound to increase in the course of development because of both increase in output and substitution of non-commercial energy by commercial energy. Effective measures to moderate the growth of demand for commercial energy and energy saving technologies for conservation will be needed. Dependence on imported energy will have to be contained within safe limits. Coal should remain the king-pin of India's energy policy and it should replace oil wherever possible. A long-term policy in regard to higher production of soft coke, its transportation and pricing relative to other forms of fuel needs to be pursued for greater use of coke in the household sector. Likewise, higher production of hard coke and better design of boilers would be necessary for higher usage of coal in industry. The presently known and prognosticated reserves of natural gas can help in the task of restraining the demand for petroleum. Energy planning must also pay attention to finding cost-effective solutions to meeting the energy requirements of rural areas.

2.11 In spite of all the measures suggested above, it is likely that India's imports of crude oil and petroleum products will increase over time. The dependence on imported oil implies that orderly management of India's balance of payments will require vigorous export promotion measures as well as efficient import substitution policies (designed, for example, to reduce dependence on imported vegetable oils).

2.12 The most important structural change to be brought about in the perspective period will be the accelerated rate of growth of industry and its much greater relative contribution to national output and employment. Indian industry would have to grow at 8-9 per cent per annum during this period. An efficient and flexible industrial structure is needed to sustain the country's export drive as well as to meet the input requirements of agriculture and the increasing demand for articles of mass consumption. Through a reform of management system as well as the generation of pressure for increased domestic competition, a climate must be created which is more conducive to growth, reduction of cost and improvement in quality. The modernisation of industry and its technological upgradation will call for strong linkages with the existing large infrastructure for science and technology.

2.13 During the past four decades, rapid advances in electronics have brought about great changes in several fields such as development in solid state electronics, lasers, integral optics and tele-communication systems based on digital electronics. These developments are expected to continue. Other new frontier technologies are emerging such as bio-technology, robotics and new materials. India, as it enters the 21st century, will have to keep abreast of these developments.

2.14. The future development of both agriculture and industry will require increasing application of science and technology so as to increase factor productivity. The management of science and technology development will need to be reviewed on a continuing basis for ensuring that the pace of technical progress is enhanced. Arrangements for access to technology need to be improved. Adaptation and

absorption of foreign technologies will have to be interlinked with facilities for research and development so as to promote technological self-relieance to the maximum extent possible. Simultaneously, the quality of education will need to be upgraded so that the knowledge and skills of the labour force can be improved in order to facilitate faster introduction of new science and technology based processes.

2.15. Planning for accelerated growth in a country of India's size and diversity must have built-in flexibility to cope with the many sources of uncertainity which characterise modern economic life. To add to the effectiveness of the planning process, there must be adequate emphasis on decentralisation to provide the needed element of built-in flexibility as well as greater involvement of people at all levels. This will ensure that our development programmes, particularly those relating to agriculture and rural development, will take adequate account of regional diversities in resource endowment, needs and development potential.

2.16 Development has to be based on the use of resources like land, water, minerals, etc. If it is to be sustainable over the long run, it must be based on a pattern of resource use that shows concern for conservation and the preservation of the environment. Hence a judicious blend of economic and environmental concerns should inform all our development programmes in future.

The Resource Base

2.17 The resource base of the country consists of : (i) human resources; (ii) non-renewable resources which are an endowment of nature and whose total size gets depleted with time; and (iii) renewable resources which can be continuously created and whose base can be expanded through human efforts.

Human Resources

2.18 Later in this chapter, human resources in terms of demographic trends upto 2000 AD and beyond are dealt with, as also the development of human resources through programmes in education, health, social welfare and science and technology. In the long run, the improvement in the standard of living of a country depends largely on the nature of technology which it adopts. It is advanced technology which can create sufficient surplus to generate resources for accelerated growth. However, the avoidance of a mismatch between the technology adopted and the institutional structure, including the organisation and distribution system of a country, is very important. Thus, the technology revolution in India and the associated necessary changes in the social strata and the growth of human capital and communication have to keep pace with each other over this long term horizon.

Land Resources

2.19 The total geographical area of India is 329 million hectares. The net area sown is about 143 million hectares, which is about 43.5 per cent of the total geographical area. The area under forests is 75 million hecatres which is about 23 per cent of the total area. The uncultivable and fallow lands amount to 100.45 million hectares.

2.20. The non-expandable land resources have to accommodate the competing demands for production of food, fodder, fibre and fuel, minerals, urbanisation, non-agricultural land use, etc., for the increasing human and animal population. It is estimated that in the year 2000 the human population will be a little less than the 1 billion mark and the animal population will also have increased considerably. The per capita availability of land which was about 0.94 hectare in 1951 will decline to 0.33 hectare in the year 2000. Thus the decreasing land: man ratio poses a great challenge for optimising the use of land resources for different purposes.

2.21 At present about 17.8 million hectares are reported to be under various urban and rural settlements including space used by roads, railways, water bodies, mines, defence and industrial installations. By the year 2000 it is estimated that an additional 6 million hectares will be required for these non-agricultural purposes.

2.22 The research activities for optimising production from rain-fed farming, irrigated agriculture, and non-farm land put to other uses including fodder and fuel will have to keep pace with the changing requirements of land use. Proper dovetailing of national research programmes and land development strategies will have to be ensured.

2.23. About 105 million hectares of cultivable lands and 8 million hectares of non-forests and non-agricultural lands are subject to widespread soil erosion. In addition, 43 million hectares of area has been degraded through water-logging, alkalinity, ravines and shifting cultivation. An estimated six thousand million tonnes of soil are lost annually through erosion and degradation, along with plant nutrients ranging between 5.37 and 8.4 million tonnes. A primary concern of development will have to be to arrest further degradation by proper land use and soil conservation and to also nurse back to health the degraded soil to stock a highly productive agriculture.

Water Resources

2.24 India is endowed with substantial water re-

sources. The country's average annual rainfall is about 119.4 cm which, when considered over the geographical area of 329 million hectares amounts to 393 million hectare-metres. The total surface flows in India are assessed at 178 million hectare-metres. However, on account of limitation of physiography, topography, geology, dependability, quantity and the present state of technology, only a part of this can be developed for irrigation. It has been assessed that about 67 million hectare-metres of surface water and 26.5 million hectare-metres of ground water can be developed and utilised. The gross cropped area that can utlimately be irrigated has been assessed to be 113 million hectares as against the possible total cropped area of 200 million-hectares on full development of irrigation potential. Available data, however, indicate that the ultimate gross area irrigated can be much higher than 113 million hectares, if a national view is taken on the utilisation of water resources and consequent policy measures are adopted and full use is made of the technological advances such as inter-basin transfers of water, large-scale lifting of water from streams and rivers through pumping, and modernisation of irrigation systems.

2.25 The massive development of irrigation in India after Independence has been recognised as one of the major factors which have contributed to the spectacular rise in the production of food and fibre. The aggregate irrigation potential at the end of 1979-80, the beginning of the Sixth Plan, was 56.6 million hectares. During the Sixth Plan an additional potential of about 11 million hectares was created, thus making a total of about 68 million hectares by the year 1984-85. It is necessary to develop the entire irrigation potential of 113 million hectares by the year 2010.

Demographic Perspective

2.26 The population recorded an annual rate of growth of 2.25 per cent in the decade 1971—1981. This is to be compared with the growth rate of 2.22 per cent between 1961 and 1971. In the two decades between 1951 and 1971, there was an almost constant fertility rate and a perceptible decline in mortality rate; but in the decade 1971—81, there was decline both in fertility and in mortality. On the basis of the projected birth and death rates of 23.7 and 8.4 per thousand, respectively, during 1996—2001 from the level of 33.2 and 12.2 during 1981—86, the population in the year 2000 has been estimated to reach 972 million. The annual growth rate of population would be reduced from 2.10 per cent during 1981-86 to 1.53 per cent during 1996-2001 as shown in Table 2.1. The population in the year 2000 would have been higher by nearly 78 million if the past trend had been simply extrapolated. The projection made here takes into account the effects of a well-organised family planning programme that would be put into operation during the perspective plan period.* On the basis of present reckoning, the net reproduction rate (NRR) will be reduced to 1 only by the period 2006—2011.

Age Structure

2.27 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. However, due to the expected decline in fertility and mortality, the age structure of the population will change in the future, as is shown in Table 2.2. The proportion of persons below 15 years of age would come down from 39.7 per cent of the total population in 1980 to 36 per cent in 1990 and further to 31.6 of the year 2000. This will mean that the dependency ratio **will come down from 0.66 in 1980 to 0.46 by the year 2000

*Consisting of the Seventh Plan period and the projected 10-year period 1990-2000.

**Defined as the ratio of children below 15 years to population above 15 years of age.

TABLE 2.1

Assumptions Underlying Population Projections 1981-2001

Period	Population at the end of the period (million) (as on 1st March)		General fertility rate		Average expectation life at birth (years)		Birth rate	Death rate	Growth rate
	Total	Urban	Decline compared to the previous quinquennium (%)	Absolute level	Males	Females			
1	2	3	4	5	6	7	8	9	10
1981—86	761	192		156	55.6	56.4	33.2	12.2	21.0
1986-91	837	230	13	136	58.1	59.1	29.7	10.7	19.0

1	2	3	4	5	6	7	8	9	10
1991-96	913	274	13	118	60.6	61.7	26.7	9.3	17.4
1996-2001	986	326	14	102	62.8	64.2	23.7	8.4	15.3

Note: The projections relate to the mid-year of the period, except Cols. (2) and (3), which relate to the end of the period (as on first March).

Birth rate, death rate and growth rate are per thousand of population.

A net reproduction rate of 1.00 broadly means that each generation of mothers is having exactly enough daughters to replace itself in the population.

TABLE 2.2

Age Structure of the Population 1980-2000
(as on 1st March)

(Per cent of total population)

Age Group	1980	1985	1990	2000
(0)	(1)	(2)	(3)	(4)
0-4 . . .	14.18	13.91	12.85	10.67
5-14 . . .	25.54	24.34	23.15	20.96
15-59 . .	54.07	55.51	57.50	60.79
60 plus . .	6.21	6.24	6.50	7.58
TOTAL . .	100.00	100.00	100.00	100.00

2.28 It is expected that the number of females in the re-productive age group 15—44 will go up from 141 million in 1980 to 228 million in 2000. The proportion of females in this age group to the total female population would also rise during the period (Table 2.3).

TABLE 2.3

Women in the Reproductive Age Group 1980-2000

(As on 1st March)

(Millions)

Year	Total female population	Women in the age group 15-44	Ratio of women in the reproductive age group to total female population (Per cent)
(0)	(1)	(2)	(3)
1980	323.59	140.72	43.4
1985	360.74	160.25	44.42
1990	398.41	183.03	45.94
2000	472.64	227.67	48.17

Labour Force

2.29 Labour force projections, based on the usual status participation rates, provided by the National Sample Survey Organisation (NSSO), 32nd round (1977-78), by age, sex and place of residence, are given in Table 2.4. Surviving children born in the last fifteen years will be entering the labour force during the period 1985—2000. The labour force would be increasing at the annual rate of 2.56 per cent during 1985—90 and at 2.24 per cent during 1990—2000 as against the annual rate of growth of population of 1.96 per cent and 1.69 per cent, respectively. The absolute magnitude of addition to the labour force works out to 39 million and 81 million during these two periods. Taking into account the estimated backlog of unemployment as of 1985, the overall magnitude of additional employment to be generated by the year 2000 would be around 130 million. In the 15-year perspective, therefore, a major challenge would be to create this volume of additional employment. The projected scenario of a continued GPD growth rate of 5 per cent per annum, a fast rate of growth of agriculture combined with an even faster rate of growth of industry together with specific employment generation programmes would, it is expected, make possible the provision of jobs to all in the labour force by the year 2000.

Urbanisation

2.30 The urban population in the year 2000 is estimated at nearly 315 million, indicating a share of 32 per cent in the total population. This is roughly 54 per cent of the total addition to population in India between 1981 and the year 2000. The historical record of urbanisation since the beginning of the century reveals that whereas the urban population

TABLE 2.4

Labour Force Projections by Age, Sex and Place of Residence [NSS 32 Round (usual status) participation rates] for the years 1980, 1985, 1990 *and* 2000 *(as on 1st March)*

(millions)

Year		5+			15+			15—59		
		Males	Females	Total	Males	Females	Total	Males	Females	Total
1980	Rural	148.86	66.24	215.10	139.74	60.36	200.10	128.53	57.73	186.26
	Urban	44.84	10.81	55.65	43.72	10.12	53.84	41.71	9.71	51.42
	Total	193.70	77.05	270.75	183.46	70.48	253.94	170.24	67.44	237.68
1985	Rural	164.18	73.21	237.39	154.81	67.07	221.88	142.61	64.18	206.79
	Urban	54.69	13.32	68.01	53.42	12.52	65.94	51.00	12.02	63.02
	Total	218.87	86.53	305.40	208.23	79.59	287.82	193.61	76.20	269.81
1990	Rural	180.64	80.69	261.33	171.08	74.42	245.50	157.43	71.18	228.61
	Urban	66.91	16.54	83.45	65.48	15.63	81.11	62.48	14.99	77.47
	Total	247.55	97.23	344.78	236.56	90.05	326.61	219.91	86.17	306.08
2000	Rural	208.52	93.45	301.97	198.94	87.22	286.16	181.32	83.01	264.33
	Urban	101.10	24.91	126.01	97.84	3.73	121.57	92.86	22.66	115.52
	Total	309.62	118.36	427.98	296.78	110.95	407.73	274.18	105.67	379.85

increased by 500 per cent, the number of settlements increased by only 77 per cent (between 1901 and 1981). This brings out the fact that most of the growth occurred through the enlargement of the existing towns at every level, and not because of the addition of new towns.

2.31 The envisaged urbanisation trends will result in an increase in the urban labour force by nearly 3 to 4 million per annum during 1985—2000. This, added to the existing magnitude of unemployed in the urban areas, gives us a broad dimension of the problem of urban employment demand.

2.32 The latest population census reveals that nearly 60 percent of the urban population resided in Class I cities, i.e., in cities with a population of one lakh or more . Another 26 per cent resided in Class II and Class III towns (i.e., 20,000 to one lakh population). The balance of towns accounted for only 14 per cent of the urban population.

2.33 Given the severe over-crowding, the physical limitations to further expansion and the high cost of investment in the metropolitan cities, the policy thrust in the perspective period would have to be to moderate the growth of the cities with million-plus population through a well-defined policy of diversion of the migrant population towards smaller towns and cities. Towards this end, employment promotion policies, policies of urbanisation, urban financing and industrial and transport policies would have to be coordinated. Considering the complexity and magnitude of the problems generated by rapid urbanisation against the background of extreme inadequacies in the existing infrastructure, innovative strategies will have to be evolved to raise resources on the scale needed to finance urban infrastructure. Part of the action programme would be to revitalise the municipal bodies and improve their own finances. This would have to be supplemented by the mobilisation of a larger proportion of resources from the capital market. Considerably more emphasis would also have to be given to development of land and of house construction so that by the end of the perspective Plan, a major dent would have been made in the problem of urban housing shortage.

Development Perspective

2.34 Taking into account the basic goals to be achieved by the year 2000 and the resources base, alternative development scenarios were simulated, using a mathematical model, with a view to optimising the attainment of the mix of objectives. From the alternative development scenarios, a profile of development has been chosen which would enable the economy to reach and maintain a high and steady growth path. The simulation exercise clearly brought out that for fulfilling this objective, modernisation and the adoption of advanced technology would require priority attention so that an optimum use of resources can be brought about.

2.35 The gross domestic product at factor cost is postulated to grow at an average rate of 5 per cent over the 15 year period 1985-2000. Table 2.5 gives

the macro-economic aggregates of the perspective Plan 1990—2000 and for the base year 1984-85. The rate of capital formation has been projected to increase from 24.5 per cent of GDP to 26.4 per cent and that of domestic savings from 23.3 per cent to 25.8 per cent. The contribution of foreign saving (current account balance) has been stipulated to decline from 1.4 per cent of GDP in 1989-90 to 0.6 per cent in 1999-2000.

2.36 Table 2.6 gives the projected growth rates of sectoral value added over the period 1989-90 to 1999-2000. In terms of value added, the highest growth rate will be recorded by manufacturing followed by electricity, gas and water supply.

2.37 Table 2.7 gives the sectoral composition of gross value added at factor cost in the perspective plan period. The figures indicate that a major structural change has been built into the development over the perspective plan period. Because of the fast pace of industralisation, the share of manufacturing is expected to increase from a level below 15 per cent of the total in 1984-85 to around 20 per cent in 1999-2000. It is also significant that the share of infrastructure sectors including electricity, gas, water supply and transport will be increasing.

TABLE 2.5

Macro Economic Aggregates

(Rs. crores at 1984-85 prices)

	1984-85	1989-90	1999-2000
GDP at factor cost	193428	246881	402143
Indirect taxes less subsidies	24334	35064	65939
GDP at market prices	217762	281945	468082
Net factor income from abroad	(—)681	(—)500	(—)100
Other current transfers	2799	3000	3500
Disposable income	219880	284445	471482
Gross domestic savings	50738	68997	120540
Consumption expenditure:			
Total	169142	215448	350942
Private	146308	185285	301810
Public	22834	30163	49132
Gross domestic capital formation	53338	72997	123540
Foreign savings	2600	4000	3000
Rate of domestic savings	23.3	24.5	25.8
Rate of investment	24.5	25.9	26.4
Marginal rate of savings		28.4	27.7

The share of services will increase from around 31 per cent to 35.5 per cent. Correspondingly, the share of agriculture is expected to alter from around 37 per cent to 25.5 per cent. These structural changes are in line with the experience of many of the now industrialised nations.

TABLE 2.6

Projected Sectoral Annual Rates of Growth in Terms of Gross Value Added at Factor Cost

(Per cent per annum compound)

Sl. No.	Sector	1989-90 1984-85	1999-2000 1989-1990
(1)	(2)	(3)	(4)
1.	Agriculture	2.5	2.4
2.	Mining and manufacturing	6.8	6.9
	(a) Mining	11.7	3.5
	(b) Manufacturing	5.5	7.8
3.	Electricity, gas and water supply	7.9	7.7
4.	Construction	4.8	4.9
5.	Transport	7.1	5.3
6.	Services	6.1	5.8
	TOTAL	5.0	5.0

Agricultural Perspective

2.38 While India's agriculture has taken massive strides during three and a half decades of planning, its growth and development has not been uniform all over the country. The differential pattern and pace of agricultural develppment, particularly the growth of foodgrains production, has led to regional disparities. Again, among the principal crops, the production of pulses and oilseeds is not sufficient to meet the needs of the growing population.

2.39 The perspective plan for agricultural development aims at maintaining self-sufficiency in foodgrains and attaining self-sufficiency in respect of pulses, oilseeds, and fibre. Its other objectives are to maximise employment opportunities and to promote conservation and environmental protection measures so as to arrest the degradation of the natural endowments of soil, water and other resources.

TABLE 2.7

Sectoral Composition of Gross Value Added at Factor Cost 1984-85, 1989-90 *and* 1999-2000

(Per cent)

Sl. No.	Sector	1984-1985	1989-1990	1999-2000
(0)	(1)	(2)	(3)	(4)
1.	Agriculture	36.9	32.7	25.5
2.	Mining and manufacturing	18.1	19.8	23.6
	(a) Mining	3.5	4.8	3.8
	(b) Manufacturing	14.6	15.0	19.8
3.	Electricity, gas and water supply	2.0	2.3	2.9
4.	Construction	6.2	6.2	6.1
5.	Transport	5.6	6.2	6.4
6.	Services	31.2	32.9	35.5
	Total	100.00	100.00	100.00

2.40 By the turn of the century, the total population of the country is expected to be 972 million. As stated, the gross domestic product is stipulated to rise at 5 per cent per annum over the period 1985-2000. Given these developments, the foodgrains requirement by the year 2000 has been estimated around 240 million tones (see Table 2.8) The achievement of this target will be made possible by increased use of fertilisers and irrigated area, and by improvement in technology. For achieving the target of foodgrains and other crops, the requirment of fertiliser by 1999—2000 has been estimated at around 20 million tonnes, and that of irrigation around 100 million hectares.

2.41 While the required production of cereals appeard to be attainable, more intractable problems are likely to be encountered in the case of pulses and oilseeds keeping in view the importance of attaining self-

TABLE 2.8

Projection of Output of Principal Commodities and Services : 1989-90 *and* 1999-2000

Sl. No.	Commodities	Unit	1984-1985	1989-1990	1999-2000
1.	Foodgrains	Million tonnes	150	178-183	235-240
2.	Coal	Million tonnes	147.44	226	417
3.	Lignite	Million tonnes	7.8	15.2	30
4.	Iron ore and concentrates	Million tonnes	42.2	58.1	85
5.	Cloth	Millio Metres	11,900	14,500	21,600
6.	Paper and paper board	Thousand tonnes	1361.2	1,800	2,930
7.	L.D. Polyethylene	Thousand tonnes	107.1	186	490
8.	H.D. Polyethylne	Thousand tonnes	38.9	125	235
9.	Polypropylene	Thousand tonnes	27.3	79	180
10.	P. V. C.	Thousand tonnes	84.0	233	455
11.	Nitrogenous fertilisers (N)	Thousand tonnes	3,917	6,560	11,400
12.	Phosphatic fertilisers (P_2O_5)	Thousand tonnes	1,264	2,190	4,180
13.	Cement	Million tonnes	30.1	49	87
14.	Saleable steel (Plain Carbon)	Million tonnes	8.77	12.64	21
15.	Aiuminium	Thousand tonnes	276.5	499	850
16.	Copper refined	Thousand tonnes	33.5	42.7	130
17.	Zinc	Thousand tonnes	57.6	89	150
18.	Lead	Thousand tonnes	14.2	27	60
19.	Electricity generation	Billion kwh.	167	295.4	558-600
20.	Railways originating traffic	Million tonnes	263	340	520

sufficiency in the latter two crops, it would be necessary to undertake special measures to increase their output. New high yielding varieties which at the same time are sufficiently drought resistant, will need to be evolved and brought into production.

2.42 By the close of this century the process of transformation implicit in the perspective plan should take agriculture to a level where it will be far more scienee-based and industry-linked than it is now. Emerging areas like bio-technology, genetic enginering, photosynthesis, tissue culture, bio-insecticides and pheromones would be the new fields of research for aiding the growth of agricultural productivity.

2.43 Besides the extension and intensification of research, the perspective plan envisages the introduction of modern management techniques in relation to irrigation and agricultural extension services. Reform and revitalisation of the cooperative movement would form an important plank in the programme of agricultural development.

2.44 Even after the full exploitation of all the available irrigation potential, about 50 per cent of the cultivated area will remain dependent on rainfall. As of now, the rainfed areas constitute over 70 per cent of crop lands and contribute about 43 per cent of foodgrains production. The improvement of productivity of the rainfed areas has thus a close bearing on the well-being of a large mass of the population. An important strategy for agriculture in the perspective plan period would be to intensify research on dry-land farming, accelerate the transfer of new technologies from the laboratory to the farm and to channelise more credit into, and develop marketing facilities in, dry-farming areas so as to assist in the speedy application of new technologies.

2.45 Alongside agricultural growth, a high rate of growth has been postulated in the perspective plan for the products of animal husbandry and fisheries. Animal husbandry could become a major source of income for landless labourers and marginal farmers

and also for people living in hilly terrain and dry areas.

2.46 The direct consumption demand for animal husbandry products in the year 2000 is estimated to be : milk 64 million tonnes; eggs 28,500 million; and meat 2 million tonnes. The programme of development envisaged is designed to provide self-sufficiency in regard to milk, eggs, meat and wool by the turn of the century.

2.47 The fishery industry has a considerable potential as an income and employment generator. Besides providing the needed protein food to the population, it also has a potential as a foreign exchange earner. Thus, the growth of this sector could make a sizeable impact on the economy and the life of the people. The target of fish production is expected to reach 6 million tonnes by the year 2000; out of this, about 2 million tonnes are expected to be contributed by the inland sector. This scale of production would benefit 25 lakh active fishermen in the country. Along with increased production, the per-capita consumption of fish is expected to go up from the present level of 3.5 kg. to over 6 kg. by the turn of the century.

2.48 In bringing about the envisaged increase in the output of fishery products, the major thrust during the coming years would have to be the use of sophisticated technology in the capture and culture fish and the development of post-harvest technologies. Adoption of new bio-technologies, algae culture in oxidation ponds, production of bio-gas, recycling of water for land and water management would lead to high productivity.

Forestry

2.49 The National Forest Policy of 1952 stipulated that the country should have a coverage of at least one-third of its total geographical areas under forest-60 per cent in the hilly tracts and 20 per cent in the plains. Against this, there are varying figures given of the forest cover of the country. The estimates of State Forest departments add up to a forest cover of 75 million hectares which is equal to 23 per cent of the total geographical area. However, according to estimates of the National Remote Sensing Agency, the area under forests was 55 million hectares in 1972-75 and it came down to 46 million hectares in 1980-82. According to the latter estimate one and a half million hectares of forest cover seem to have been lost annually. Equally alarming is the fact that nearly half of the forest area is either degraded or under-stocked. This rapid decrease in forest cover and deterioration in its quality is due to the growth of human and animal population, the increasing demand for fuel wood for meeting domestic energy needs and the rising industrial demand for forest products e.g., for paper, pulp and construction. The reduction in forest cover has resulted in serious soil erosion and ecological damage on a scale leading to desertification, with serious repercussions on society, particularly in vulnerable regions such as the hill areas. The task of bringing one-third of the geographical area under tree cover, therefore, becomes a vital objective for 2000.

Industrial Perspective

2.50 Since the inception of planning at the beginning of the fifties, the country has established a well-diversified industrial structure replacing a wide range of manufacured imports and undertaken massive investments to bulid up a sizeable capacity in basic and heavy industry. With the changing economic and industrial scene in India and abroad a new phase of industrialistation has now commenced, a phase which is marked by greater emphasis on technical progress and productive efficiency. The protection from international competition of the earlier semi-insular phase has given rise to high-cost manufacturing, which is inhibiting both the expansion of the domestic market and more rapid development of exports. Manifestly, an appropriate environment has to be created so as to encourage and promote greater efficiency, higher productivity and faster industrial growth in desired directions through a well co-ordinated system of incentives and in consonance with the objective of self-reliance. Accelerated growth of manufacturing, accompanied by radical restructuring and induction of 'sunrise' industries within a suitably modified policy frame would bring about a significant transformation of India's industrial economy.

2.51 This transformation in response to appropriate stimuli would enable Indian industry not just to readjust, re-equip and retool for accelerated growth, but also to fan out into new areas. To facilitate this process, industry will have to upgrade technology and management, attain economies of scale, pursue greater value-adding activities and selectively launch an export drive. Small-scale industry will remain an integral segment of manufacturing; and policy reorientation combined with development programmes will ensure steady growth of small-scale and village industries. The programme of industrialisation initiated in the Seventh Plan will continue and gain momentum in the Eighth and Ninth Plans. State intervention will undergo a qualitative change that will emphasise its developmental role, greater interaction with industry and forge closer links between industry, trade and finance. Annual industrial growth during the period 1985—2000 can be expected to average 8-9 per cent.

2.52 The manufacturing scene in the year 2000 would

be qualitatively quite different from what it is today. This sector, besides, will make up a much larger proportion of GDP. The contribution of manufacturing to the gross value added would go up from about 15 per cent in 1984-85 to around 20 per cent by 1999-2000. This growth will be attributable largely to a rapid increase in the output of petrochemicals and plastics, fertilisers, aluminium, electronics, telecommunication equipment and computers. The output of plastics will grow five-fold, followed by a near trebling of fertiliser and aluminium production. The gross output of electronics is expected to reach Rs. 50,000 crores or, say, nearly 25 times the level attained in 1984-85.

2.53 Apart from basic industries, the major thrust in the programme of accelerated industrialisation would be towards mass consumption goods and export-oriented industries. The programme itself is intended to provide by the year 2000 plentiful mass consumption goods at reasonable prices, create a substantial employment potential and increase foreign exchange earnings. These industries would also steadily strengthen linkages with agriculture and bring about better integration of rural and urban economies.

2.54 For India to keep pace with developments abroad, as the country enters the 21st century, attempts will have to be made during the perspective plan period to start and develop a number of high technology industries, such as advanced machine tools, electronics fibre optics and lasers, and bio-technology. This will open up new vistas and opportunities for our large pool of skilled manpower.

2.55 The public sector will continue to play an important role in the core sector of the economy. It will also be a pace-setter and encourage emerging new high technology industries. Besides contributing in no small measure to industrial growth, it will generate sizeable resources for investment. A major employer of the country's engineering manpower, the public sector will play a leading role in stimulating development of efficient ancillary manufacturing; and will strengthen the sinews of industry.

Energy Perspective

2.56 The commercial and non-commercial energy requirements in the year 1999-2000 have been estimated for major categories of consumption, and are given in Table 2.9.

2.57 The crucial issues in the management of energy sector are the containment of the consumption of oil and the management of energy transition in rural areas. The levels of oil demand projected for the year 2000 may mean a rise in import dependence of an order that could pose balance of payments problems. Hence measures to replace oil by other domestically available energy sources need to be pursued with vigour.

TABLE 2.9

Estimates of Commercial and Non-Commercial Energy Requirements in 1999-2000

Energy	Sector of Consumption					Total
	Household	Industry	Transport	Agriculture	Other	
Eletccity (Billion KWH)	81.4—83.5	249.0-282.8	8.28-8.9	40.9-41.5	44.42-48.0	424.0-465.0
Coal (Million tonnes)	14.0	161.0	7.81	..	5.19	188.0*
Oil (Million tonnes)	17.73	12.0	29.86	8.1	5.0	72.7
Fuelwood (Million tonnes)	191.6	..	..	..	..	191.6
Dungcake (Million tonnes)	105.0	..	..	..	..	105.0
Vegetable waste (Million tonnes)	59.0	..	..	..	..	59.0

*Net of coal consumed in the power sector.

Energy supply options

2.58 A total consumption requirement of 424—465 billion kwh of electricity has been estimated for the year 2000. After providing for auxiliary consumption and transmission and distribution losses, the total generation requirements works out to 558—600 billion kwh. The generation of electricity from captive power plants is estimated to be about 25 billion kwh in 1999-2000. The total generation requirement from utilities thus becomes 533-575 billion kwh. As to the mode of generation, hydel and nuclear power units would have to have increased shares in the total generation which is at present predominantly thermal. However, both these modes have a very long gestation period at present. These have to be shortened. It is expected that nuclear power generation should reach upto 10,000 MWs within the next two decades. Hydel potential has been estimated at 89530 MW excluding 5000 MW for small hydels, very little of which has been exploited so far. Environmental considerations will, however, be a constraint. The potential offered by international cooperation for implementation of hydro-projects of mutual benefit with neighbouring countries would need to be harnessed.

Coal

2.59 Coal will continue to be the key source of energy. The production requirement of coal in the year 1999–2000 works out to 417 million tonnes keeping in view the anticipated increase in demand.The long-term strategy in the coal sector should include special efforts to increase the proportion of proven reserves of non-coking coal. Exploration activity will need to be concentrated in regions closer to consumption centres. Other aspects of strategy to be continued in the long-term are upgradation of technologies for de-pillaring of coal, modernisation of coal exploration, improvements in flow sheets and equipment designs of washeries. Also, underground gasification and slurry transport of coal need to be experimented and developed.

Hydrocarbons

2.60 A requirement of 72.7 million tonnes of oil products has been worked out for direct energy use in the year 1999-2000. Another 15 million tonnes of oil products like naphtha, fuel oil, LSHS, bitumen, petroleum coke, etc. would be required for non-energy purposes. Thus, the total requirement of oil products is placed at 87.7 million tonnes. Assuming 7 per cent refinery losses, the requirement of crude oil works out to 94.3 million tonnes.

2.61 The domestic production of crude oil in 1984-85 was a little more than 29 million tonnes. It is expected to go upto around 35 million tonnes in 1989-90. The 'Revised 20-year Perspective Plan' of ONGC indicates that the total domestic production of crude oil may be around 50 million tonnes in 2004-05. This means that in the year 1999-2000, the indigenous production of crude oil will be between 40 to 50 million tonnes, thereby implying an import requirement of 44.3—54.3 million tonnes of crude oil. This will place a great burden on the economy, particularly on the balance of payments. Therefore, conscious and vigorous efforts would need to be made towards economising on oil consumption and for maximising domestic production of crude oil.

Renewable energy sources

2.62 A major challenge ahead is to meet more adequately the growing requirements of energy in the rural areas. Rural electrification is of great importance in securing a more balanced structure of energy supplies in the rural areas and this programme will need to be pursued vigorously so as to provide electricity to all villages before the end of the present century. However, it will also be necessary to make an increasing use of new renewable sources of energy. At present, a large part of the energy used in rural India is non-commercial e.g., fuel wood, agricultural wastes and animal residues. While the percentage of non-commercial energy in terms of total energy used in the country has gone down, its actual magnitude has been increasing with the growing population. This has led to large-scale deforestation. Besides, the growing pressure of demand has resulted in increasing scarcity and rise in prices of fuel wood, thereby causing considerable hardship to poorer households in meeting their requirements of energy for cooking purposes. The long-term objective over the next fifteen years, therefore, would be to achieve a transition to an economy in which an intensified programme of rural electrification and a viable renewable energy programme together make a significant contribution to meeting energy needs in rural areas.

2.63 The principal sources of renewable energy are solar (thermal and photovoltaic), wind and bio-energy (including bio-gas and biomass). Decentralised micro and mini-hydel plants also have a vast untapped potential. Utilisation of urban waste through cost effective processes holds promise not only for reducing environmental pollution, but also of producing energy for domestic and other productive uses. Ocean energy and geothermal energy could also be developed in selected regions of the country. In the longer range horizon, there are possibilities for use of hydrogen as a mobile energy source.

2.64 In the case of renewable energy sources, ensuring adequate supply of fuel-wood to rural areas seems to be the most important. A massive energy plantation programme based on the selection of fast-growing species and using modern silvicultural practices in waste lands would greatly help in improving the fuel-wood availability. The programmes for the development and utilisation of bio-gas and bio-mass for generation of energy would also make a significant contribution to meeting the energy requirements of rural areas.

Mineral resources

2.65 The estimates of recoverable reserves of sixteen minerals and their life expectancy are given in Table 2.10. It may be noted that the life of copper, gold, high grade iron ore, presently useable magnetite, kyanite, lead, presently mineable chromite, magnesite, manganese ore, high grade rock phosphate, massive sillimanite and zinc is less than 50 years and that for presently useable rock phosphate, SMS grade lime stone and coking coal more than 50 years but below 100 years. The prospective demand-supply balance for several minerals is a cause of concern, and it calls for more vigorous and sustained efforts for the discovery and exploration of mineral deposits and

scientifically planned management of mineral resources.

2.66 The strategy for exploration during the perspective plan would include :

(i) speedy completion of geological mapping of the country;

(ii) adoption of modern exploration techniques to discover new deposits and new basins at shallow depths as well as to decipher concealed deposits under the alluvial plains of north and coastal areas, and the great mass of Deccan Traps covering a large chunk of the Peninsular shield:

(iii) intensification of exploration in the known mining fields to delineate extension of ore bodies both laterally and at depth wherever such extensions can be envisaged from the study of geology of the area;

(iv) strengthening of multi-disciplinary approach to mineral exploration using photogeology, satellite imagery, geophysics, geochemistry and drilling; and

(v) improvements in the preparation of geologic models which would lead to a better understanding of the genesis of the mineral deposits.

2.67 The policy in regard to trade in minerals should be formulated keeping in view the mineral inventory position. In regard to minerals in which the situation is more than comfortable, a more liberal policy for exports can be formulated, but in regard to minerals such as high grade manganese and high grade iron ores, kyanite, sillimanite, and chromite, a somewhat restricted policy should be adopted with a review, from time to time, of the reserve situation.

TABLE 2.10

Life Indices of Known Mineral Reserves at the Projected Rates of Depletion

Sl. No.	Mineral	Recoverable reserves as on 1-1-1980 (milion tonnes)[1]	Depletion during 1980-94 (million tonnes)	Recoverable reserves as on 1-1-1995 (million tonnes)	Projected production during 1994-95 (million tonnes)	Balance life at 1994-95 level of production (years)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Bauxite [2]	2,157	51	2,106	7	301
2.	Chromite [3]					
	(i) Total all grades	135	6	129	0.93	139
	(ii) Presently mineable (all grades)	52	6	46	0.93	49
3.	Coal					
	(i) Coking [4]	6,629	563	6,006	65	93
	(ii) Non-coking	32,357	2,168	30,189	260	116
4.	Copper					
	(i) Only producing mines and projects	1.95	0.78	1.17	0.065	18
	(ii) All economic, and marginally economic deposits	3.15	0.78	2.37	0.065	36
5.	Dolomite [5]					
	Useable grade	2,867	51	2,816	5.68	496
6.	Gold	79,300Kg	40,300Kg	39,000Kg	4,000 Kg	10
7.	Iron ore					
	(a) Haematite					
	(i) High grade (+65% Fe)	749	229.66	519	16	32
	(ii) Medium grade (62-65% Fe)	6,090	447.54	5,642	31	182
	(iii) Low grade (—62 % Fe)	2,937	282.91	2,654	27	98
	(b) Useable grade magnetite	771	64	707	24	29
8.	Kyanite	1.43	0.65	0.78	0.054	14

(1) Recoverable reserves under the existing technology and price. The reserves are estimated as on 1-1-80 including subsequent significant estimates. In the case of coal, the total resources of all varieties of coal in India in seams of 0.5 metres and above in thickness and down to a depth of 1200 metres are estimated. The recoverable reserves estimated are as on 1-2-1983 and depletion estimated for the period 1983-94.

(2) Although the bauxite reserves are large, the refractory, chemical and abrasive grades are limited and the known reserves will last only for 30 years at the current level of consumption.

(3) Although the reserves of chromite are quite sizeable, the refractory manufacturers are facing difficulties in obtaining supplies of refractory grade ore, the reserves of which have not yet been adequately delineated.

(4) It is to be borne in mind that out of the above mentioned reserves of coking coal, the reserves of prime-coking coal is limited to 1913 million tonnes only, which certainly is not a satisfactory situation.

(5) This is the general picture, the supplies of low silica dolomite continue to be difficult.

(0) (1)	(2)	(3)	(4)	(5)	(6)
9. Lead					
(i) Producing/developing mines	1.687	0.522	1.165	0.059	20
(ii) All deposits	2.746	0.522	2.234	0.059	38
10. Limestone [6] (SMS grade)					
(i) Overall reserve	1,033	23	1,010	1.85	446
(ii) Reserve in present supply base	189	23	166	1.85	90
11. Magnesite	Life index not estimated due to non-availability of definite figures of grade-wise reserves.				
12. Manganese ore					
(i) High grade	20	8	12	0.79	15
(ii) Low grade	54	13	41	1.34	31
13. Pyrites	95	4	91	0.61	149
14. Rock phosphate and apatite					
(i) Useable grade (+20% P_2O_5)	97	16	81	1.4	58
(ii) Only high grade	20	12	8	1.1	7
15. Sillimanite					
(i) Massive	0.213	0.116	0.097	0.013	7
(ii) Beach sand	11.49	0.377	11.116	0.037	300
16. Zinc					
(i) Producing/developing mines	6.845	1.403	5.442	0.152	36
(ii) All deposits	9.043	1.403	7.640	0.152	50

(6) This is the general picture; the supplies of low silica limestone continue to be difficult.

2.68 Whenever the foreign exchange resources are comfortable and import prices and foreign supply position are relatively favourable, larger imports and a lower rate of depletion should be preferred in order to extend the life of scarce mineral reserves.

Ocean Development

2.69 India has an extensive coast line of about 6,000 kilometers, and an exclusive economic zone of more than 2 million square kilometers in area. There is enormous potential for exploration and utilisation of oceanographic resources for economic and social purposes. A large number of estuaries, backwaters, mangroves, islands, and coral reefs are important marine sancturies.

2.70 More than 1,800 species of fish exist in Indian seas. As against the production of 1.7 million tonnes in 1984-85, the production potential is estimated at 5 million tonnes. Other marine resources would also need to be optimally developed and utilised. During the last few years, scientific exploration of living and non-living resources has acquired new thrusts with inputs of modern science and technology. The major areas which would receive increased emphasis include survey, Antarctic research; exploration of poly-metallic nodules from the deep sea-bed; manpower development; prevention and control of marine pollution; development of ocean energy; and development of techniques to optimally utilize the living and non-living resources.

Transport

2.71 With the anticipated increase in population and the long-term development profile that is envisaged, the transport infrastructure would be radically different by 2000. A well-integrated, multi-modal system relying increasingly on emerging technologies will be an essential element of the transport scenario. The magnitude of the demand for other modes of transport would be substantially increased.

2.72 While railways and roads would continue to be the dominant modes of transport, supplementary modes of transport such as civil aviation, coastal shipping, inland waterways and product pipelines would play an increasing role in the country's transport systems in the future. Given the country's size, the variety of terrain and climatic conditions and the vast distances between the major industrial and commercial centres and in order to save time it would be necessary to expand the net work of air transport services. Coastal shipping, being a highly energy efficient and a cheaper mode of transport for carriage of bulk traffic over long hauls along the coastal locations, has also to be assigned an expanded role in the operation of an integrated transport network. Similarly, taking into account the energy efficiency of the inland water transport, greater attention would need to be paid to the utilisation of very considerable potential offered by this mode of transport.

2.73 The accessibility to the villages would be improved and 60 per cent of the villages would become accessible throughout the year as against 34 per cent at present. The road density in the country as a whole would increase from 46 km to 60 km per 100 sq. km.

2.74 Railways would carry around 520 million tonnes of freight traffic, almost doubling the transport output

in the next 15 years. The rail network would increase by about 3,000 km bringing the total length to 65,000 km.

2.75 In large metropolitan towns, grade separated mass transit systems would be set up to improve the mobility of intra-city commuter traffic.

2.76 In view of the huge costs entailed in the construction and maintenance of an efficient transport system, cooperation and coordination between the public and private sectors would be encouraged and improved. Reduction in costs would be effected through improved construction methods and practices.

Communications

2.77 Recent developments in electronics, computers and space technology have brought forth immense new possibilities in the field of telecommunications. From the earlier manual and electro-mechanical systems, telecommunications are moving to electronic systems, and within this from analog to digital format. With the hook-up of telecommunications with computer systems, new modes of communications like telematics and informatics are emerging. These developments, and the advent of satellite communication, which obviates the need to go through extensive long-haul ground-based telecommunication networks (for long distance or emergency communication) should enable the country to leap-frog into a new era of telecommunications. Much of the technology for this exists or can be developed easily.

2.78 While the above longer-range objectives will be worked out during the Seventh Plan so as to be implemented on a significant basis during the 1990s, the programmes over the next 15-year period will be to increase the number of telephone connections from 20 lakh lines at the end of the Sixth Plan to 300 lakh lines by 2000. About 90 per cent of the telecommunication network is proposed to be brought under the Integrated Digital Network (IDN) by 2000. Optical fibres will be progressively used for underground transmission cables.

2.79 The modern media of communication would be used extensively for the education of the masses and for promoting programmes of health, family planning, education and culture.

Environment and Ecology

2.80 The environment, with its component living and non-living resources, represents the most fundamental building block for national development and social well-being. The environment is today under severe threat from the pressure generated by population growth, poverty and the misuse/unplanned use of natural resources. While many of the country's environmental ills could be corrected by rapid economic growth with social justice, utmost care must be exercised to ensure that the developmental activities which bring about such changes are designed so as not to leave adverse environmental effects. Environmental factors and ecological imperatives will have to be incorporated into the design of all developmental projects from the very commencement of their plans.

2.81 By the year 2000, industrialisation of the country will have reached a stage where in the absence of effective remedial measures, severe problems of air, water and land pollution will assume serious proportions. Effluents will have to be disposed of carefully not only at the product level, but also at the intermediate levels. Also storage, preservation and transportation of such materials will have to be carefully planned. Our decision making processes will have to recognise explicitly that the environment is not to be taken as a free resource, and, like other natural resources, it is to be considered as an input which has to be paid for. The modalities for this will have to be worked out carefully. In project planning, besides the availability of raw material, manpower and funds, decisions regarding the use of the environment will have to be taken, and investments built-in for minimising envorionmental damage or degradation. This will apply equally to tne public and the private sectors. A new type of expertise in environmental impact analysis will have to be developed and applied for deciding the optimum location of any project.

2.82 Environmental education and creation of awareness at all the levels would have to be an integral part of the perspecitve plan. Use of modern media, training, dissemination of information and involvement of people in all environmental programmes would form the various components of an integrated approach. Also, environmental and ecological research on all aspects including conservation, ecodevelopment, pollution control etc., would be necessary.

Quality of Life and Social Development

2.83 As stated at the outset, the growth of the economy and development of human resources over the remaining fifteen years of this century should result in the establishment of a modern, self-reliant economy and a substantial improvement in the levels of living of our people. The implications of the development scenario in terms of improving the quality of the life of the people by the year 2000 are brought out in Table 2.11, which shows changes in levels and shares of crucial variables.

TABLE 2.11

Socio-Economic Indicators of Change (1985-2000)

		1984-85	1989-90	1999-2000
(0)	(1)	(2)	(3)	(4)
1. Life expectancy (in terms of years)	Male	56.1	58.6	63.3
	Female	57.0	59.7	64.7

(0) (1)	(2)	(3)	(4)
2. Infant mortality rate (per thousand births) . .	106	90	60
3. Death rate (per thousand)	11.9	10.4	8.2
4 Birth rate (per thousand)	32.6	29.1	23.1
5. Fertility rate (per thousand)	152	132	99
6. Urbanisation (per cent)	24.70	26.85	32.20
7. Per capita GDP (1984-85 prices) (Rs.) . .	2,616	3,027	4,163
8. Per capita consumption of foodgrains (Kg) .	178	193	215
9. Per capita consumption expenditure (1984-85 prices) (Rs.)	1,979	2,271	3,124
10. Per capita consumption of cloth (metres) . .	16.16	17.78	22.36
11. Per capita generation of electricity (Kwh) . .	226	362	578-621
12. Saving—GDP ratio (percent) . . .	23.3	24.5	25.8
13. Investment GDP ratio (percent)	24.5	25.9	26.4
14. Foreign savings-Investment ratio (percent) .	4.9	5.5	2.4
15. Percentage of people below the poverty line .	37	26	5
16. Labour force (million in the age group 15 plus) .	288	327	408
17. Employment (million standard person years). .	187	227	318

2.84 The per capita consumption of foodgrains is expected to increase from 178 kg. in 1984-85 to 215kg. in 1999-2000, giving an average rate of increase of around 1.3 per cent per annum as compared to a stagnant level over the last two decades. The per capita consumption of cloth would increase from 16.16 metres to 22.36 metres, giving an increase of over 2 per cent per annum. The per capita generation of electricity in 1999-2000 will be more than double than that in 1984-85. The most significant impact will be on the extent of poverty : the percentage of people below the poverty line is expected to decline to a level of 5 per cent in the year 2000. As regards the provision of employment, against the estimated addition to labour force of about 39 million, additional employment generation in Seventh Plan has been estimated at 40.36 million standard person years. Thus the absolute number of the unemployed at the end of the plan will be lower than at its beginning. There would be a continuous reduction in the magnitude of unemployment during 1985-2000, at the end of which employment is expected to reach the level of 318 million standard person years. This would represent the attainment of near full employment.

2.85 Increased consumption, better sanitation and health facilities, assured drinking water supply and the provision of other amenities are expected to increase the life expectancy to 63.3 years for males and 64.7 years for females in the year 2000. Similarly, the infant mortality rate is expected to go down below 60 per 1000 births by the turn of the century. While the death rate will fall to 8.2 per thousand from 11.9 at the beginning of the Seventh Plan the birth rate is expected to fall more steeply to 23.1 per thousand from 32.6. However, the population would still be growing at about 1.5 per cent by the turn of the century. This is on the assumption of a fall in the fertility rate to 99 per thousand in the year 2000 as compared to 152 in 1985. It is obvious that much greater efforts at family planning would be required to stabilise the level of population in the early years of the 21st century.

Health and Education

2.86 There is a commitment to attain the goal of Health for All by the year 2000. The main instrument for achieving this goal will be the comprehensive primary health care. The attainment of this goal requires a thorough overhauling of the existing approaches to the education and training of medical and health personnel, the reorganisation of the health services infrastructure and making qualitative improvements in the health care services.

2.87 By the year 2000, illiteracy would be eliminated and universal elementary education would have been provided for all children upto the age of 14. It is expected that drop-outs in the age group 6-14 would be reduced to negligible levels. Extensive provision would be made for continuing and recurrent education and use of modern communication technology. There will be substantial vocationalisation of secondary education by the turn of the century. Non-formal education using a variety of means and methods, including video technology and computers, would play a significant role.

Self-sustaining Growth

2.88 The attainment of a domestic rate of saving around 26 per cent of GDP with a marginal rate of saving above 27 per cent, and the reduction in the degree of dependence on foreign savings to a small magnitude by the year 2000, would imply that the Indian economy could maintain a fast rate of growth on its own in the next century. Also, since the percentage of population below the poverty line would have been reduced to 5 per cent, there would be near full employment and per capita consumption of food and clothing would have registered substantial increases. There would be a discernible improvement in the quality of life for the people as a whole and a great majority of the population would have been enabled to satisfy the basic needs of living.

CHAPTER 3

OBJECTIVES, STRATEGIES AND PATTERN OF GROWTH IN SEVENTH PLAN

Objectives

3.1 The guiding principles of Indian planning are provided by the basic objectives of growth, modernisation, self-reliance and social justice. Within this framework, each five-year plan involves some directional changes to take into account new constraints and new possibilities. The Seventh Plan, as stated in the Approach Paper approved by the National Development Council, seeks to emphasise policies and programmes which will accelerate the growth in foodgrains production, increase employment opportunities and raise productivity. At the present stage of development, these three more immediate objectives are central to the achievement of the long-term goals put forward in the development perspective outlined in the previous chapter.

Strategy

3.2 The central element in the development strategy of the Seventh Plan is the generation of productive employment. This will be achieved through increase in cropping intensity made possible by increased availability of irrigation facilities, extension of new agricultural technologies to low productivity regions and to small farmers, through measures to make the rural development programmes more effective in the creation of productive assets, through the expansion of labour intensive construction activities for providing housing, urban amenities, roads and rural infrastructure, through the expansion of primary education and basic health facilities and through changes in the pattern of industrial growth. With this emphasis on the generation of productive employment, the Seventh Plan aims at a significant reduction in the incidence of poverty and an improvement in the quality of life for the poor in the villages and towns. There is also a need to generate employment opportunities for educated youth in rural areas. The expansion of education and health facilities will open up job opportunities and the spread of credit institutions and other developmental activities will create opportunities for self-employment.

3.3 The increase in the spending power of poor households will lead to a more rapid expansion in the demand for mass consumption goods, most particularly foodgrains, clothing and shelter. The availability of these goods has to increase commensurately if inflation is to be avoided. Hence the Seventh Plan strategy requires that special attention be paid to increasing the production of foodgrains, edible oils, sugar, textiles, cooking fuel and other articles of mass consumption and rapid expansion in housing. In fact, a more rapid increase in the production of these goods would also reinforce the efforts to generate productive employment for the poor.

3.4 An increase in foodgrains production plays a particularly important role in the Seventh Plan. Any shortfall in foodgrains production will tend to reduce rural incomes and generate inflationary pressures that will hurt the poor and erode public resources. These risks are greater with an employment-oriented development strategy. Hence an expanded food security system, based on rapid increases in foodgrains production, especially in the undeveloped regions, public procurement, buffer stocking, and public distribution is a key component of the Seventh Plan.

3.5 One of the major weaknesses that has emerged in the Indian economy is low productivity resulting from several factors which are interrelated. One major cause of low producitvity is the inefficiency in the use of capital : the increases in output in several sectors have not been commensurate with the scale of investment undertaken. The Seventh Plan places particular emphasis on obtaining more output out of assets that have been built up over the years. This emphasis on efficiency in the use of capital is doubly necessary at the present stage when the resources available for public investment are well short of requirements. It would obviously be an unsound policy to undertake investments in new capacity in order to cover shortfalls arising from the poor utilisation of existing investments. The cost of creating assets has often been raised in the past because of delays in implementation and insufficient attention paid to efficient management and to the adoption of cost effective methods. Improvements in capacity utilisation and efficient project implementation in all areas, especially in irrigation, power, transport and industry, are essential for achieving the basic objectives of the Seventh Plan and for putting the Indian economy on a high growth path.

3.6 Improvements in productivity and efficiency will help reduce the costs of capital intensive and resource intensive goods and services, most of which

are intermediates used widely in all sectors of the economy. This reduction is essential for expanding the scale of the domestic market and for improving the international competitiveness of the Indian economy. Hence the Seventh Plan shifts the focus of planning for industry away from massive investments in new facilities to capacity and productivity enhancing improvements in existing facilities.

3.7 The emphasis on productivity and efficiency is also linked to the balance of payments prospects confronting the country at present. The inflow of concessional assistance is shrinking and is already limited in relation to our requirements. Hence, the management of balance of payments in the Seventh Plan is critically dependant on a sizeable improvement in our earnings from exports and from invisibles. If export earnings are increased to a significantly higher level on a sustainable basis, not only will the management of the balance of payments be made easier but the scale of operations in the concerned sectors could be increased, thereby reaping economies of scale and reducing costs and prices which would, in turn, expand the domestic market. But a breakthrough in exports cannot be realised if the exports 'sector' is treated as a separate enclave distinct from the rest of the economic structure. Hence, the Seventh Plan postulates the integration of export policy with all policies and programmes that affect productivity and costs. In this context, special attention needs to be paid to the scale of operations and to the reform of the system of taxation of inputs with a view to reducing costs.

3.8 Efficiency and employment generation are closely linked with measures for human resource development. The attention paid to education and manpower development in the past plans has ensured the availability of a substantial infrastructure for education and technical training. Skill formation has also been provided for in various beneficiary-oriented programmes. The primary task now is qualitative improvements in curricula and teaching methods to ensure relevance and impart to students, workers and artisans the values, knowledge and the skills required for emerging developmental tasks. Besides this, human resource development also includes measures to improve health status and steps to improve the participation of vulnerable groups like scheduled castes, scheduled tribes, women and disabled persons in the development process. The development strategy for the Seventh Plan involves an accelerated effort at human resource development in this wide sense.

3.9 Given the twin emphasis on employment and productivity in the Seventh Plan, the objective is to expand employment opportunities consistent with increases in productivity. The potential of direct employment generation in large scale industries and in much of the infrastructural sectors is not high because these industries are fairly capital-intensive. However, expansion of industries creates a large volume of down stream employment through forward linkages. In particular, the expansion of small scale and medium industries would add significantly to the growth of productive employment opportunities. Promotional measures designed to improve the access of this sector to modern technology, supply of inputs, credit and risk capital would help to enhance its productivity and competitiveness. Taking all these factors into account, the Seventh Plan provides for a faster industrial growth than during the Sixth Plan.

3.10 The implementation of the Seventh Plan will necessarily require the development and introduction of new technologies in several sectors of the economy. The plan envisages the implementation of a set of science and technology missions in which domestic technological capabilities would be fully developed to achieve well-defined goals. At the same time, in other areas, access to relevant foreign technologies will be improved along with emphasis on adequate absorption and development.

3.11 The Seventh Plan aims at extending the green revolution to new areas through its emphasis on raising the productivity of rice in the eastern region and in rainfed and dryland agriculture. This should lead to faster growth in agricultural output in areas which, in the national context, are economically backward. The special role of human resource development in the Seventh Plan strategy will also help correct regional imbalances in social development. These elements in the Seventh Plan strategy alongwith existing programmes and policies on resource transfers, location of industries, area development and provision of minimum needs would reduce regional imbalances in economic and social development.

3.12 The induction of new technologies and the pursuit of economic growth should not be at the expense of the environment. In the long run, environmentally sound policies are also developmentally sound ones. Hence, environmental protection is an important component of the development strategy of the Seventh Plan. This Plan includes several new initiatives in pursuit of this objective. In this context, a special mention ought to be made of a major new inter-disciplinary programme for the control and prevention of pollution of the river Ganga.

3.13 The Seventh Plan can be implemented successfully only with the involvement of the people. The

Plan proposes to do this through effective steps for the decentralisation of planning and development administration as well as by increasing the involvement of voluntary agencies in the implementation of plan programmes, particularly in the rural areas.

3.14 The supplementary contribution which voluntary agencies could make to the overall development of rural areas and the role they can play in the implementation of various anti-poverty and Minimum Needs Programme have not been fully appreciated. By virtue of the type and scope of work they do, voluntary agencies, as a rule, are unorganised. That is their basic strength as well as weakness. It has been generally accepted that Government by itself cannot reach all the families living below the poverty line. Besides, alternative methods and approaches to the problems of rural and urban development and of poverty alleviation as tested in the voluntary sector contain lessons which can be usefully learnt. Voluntary agencies have been traditionally working in the areas of relief and rehabilitation, education, health and social welfare. But they can also play a useful role in supplementing Government's efforts in other areas such as the provision of drinking water, release and rehabilitation of bonded labour, ground water surveys, development of alternative sources of energy and many other activities relating to rural development and poverty alleviation. Several voluntary agencies have acquired, over the years, professionalism and expertise to provide competent technical services and yet the services of voluntary agencies have not been fully exploited by governmental agencies for the implementation of programmes of welfare and poverty alleviation. This is partly because there is no institutional forum where voluntary agencies and Government can come together. Such forums need to be established. They will provide lines of communication between the official sector and the voluntary sector; also they will enable smaller village-based groups to receive funds from the Government and the Government, in its turn, would be able to obtain valuable information on the progress and problems of different development programmes.

3.15 To sum up, the development strategy of the Seventh Plan aims at a direct attack on the problems of poverty, unemployment and regional imbalances. It requires for its success substantial improvements and economy in resource use. These improvements will be achieved through the accelerated development of human resources, greater selectivity in the development and use of domestic technological capabilities, the widespread induction of new technologies in our farms, factories and offices, stronger emphasis on capacity utilisation and better project implementation and the pursuit of policies that would cut down costs of production particularly in the industrial sector.

Macro Dimensions

3.16 The development strategy outlined in the previous section has been spelt out in quantitative terms, taking into account demographic factors, the constraints imposed by the availability of domestic and foreign resources, linkages between different sectors of the economy, the impact of redistributive policies, and the effects of improvements in efficiency and changes in technology.

3.17 The growth rate of gross domestic product (at factor cost) is expected to be 5 per cent over the Seventh Plan period. This rate is in line with the growth rate achieved in the Sixth Plan and a little higher than the average for the past decade. It may also be noted that the Seventh Plan is aiming at 5 per cent growth rate on a base year, 1984-85, which by and large, was normal, unlike the Sixth Plan, for which national income in the base year, 1979-80, was well below normal.

3.18 The sectoral growth pattern expected over the Seventh Plan is presented in Table 3.1 which gives growth rates of the value of output (which includes material input costs) and of value added. The growth rate of agricultural output is expected to be around 4 per cent. This is consistent with the growth in consumption brought about by income growth and by emphasis on the removal of poverty and unemployment. The output of minerals and industrial goods is expected to increase at an annual rate of nearly 8.3 per cent, of electricity, gas and water supply at 12 per cent and of transport services at 8 per cent. Thus the Seventh Plan envisages a significant acceleration in the growth of industry and infrastructure.

3.19 The pattern of sectoral growth envisaged will help maintain the pace of structural transformation. The composition of national income in 1984-85 and 1989-90 is given in Table 3.2. Agriculture and related sectors are expected to contribute 33 per cent of GDP in 1989-90 while the shares of mining, manufacturing, construction, electricity and transport will be 34.4 per cent. Thus, by the end of the Seventh Plan, the contributions of the agricultural

TABLE 3.1

Projected Sectoral Growth Rates of Value of Gross Output and Gross Value Added at Factor Cost 1989-90/1984-85

(Per cent per annum)

Sl. No.	Sector	Gross Value added	Value of gross output
1.	Agriculture	2.5	4.0
2.	Mining and manufacturing	6.8	8.3
	(a) Mining	11.7	13.0
	(b) Manufacturing:	5.5	8.0
	(i) Food products	3.2	6.4
	(ii) Textiles	2.8	5.0
	(iii) Wood and paper products	5.3	8.5
	(iv) Leather and rubber products	2.9	4.3
	(v) Chemical products	6.7	9.5
	(vi) Coal and petroleum products	4.8	6.2
	(vii) Non-metallic minerals products	3.1	5.6
	(viii) Basic metals	5.5	8.1
	(ix) Non-electrical engineering products	8.2	11.8
	(x) Electrical engineering products	9.5	12.5
	(xi) Transport equipment	8.2	10.8
	(xii) Misc. industries	8.7	9.8
3.	Electricity, gas and water supply	7.9	12.0
4.	Construction	4.8	4.8
5.	Transport	7.1	8.0
6.	Services	6.1	6.6
	TOTAL	5.0	6.6

sector, the industrial sector and the services sector will, in terms of income generated, be of roughly equal proportions, i.e., about one third each.

TABLE 3.2

Sectoral Composition of Gross Value Added 1984-85 *and* 1989-90

(Per cent)

Sl. No.	Sector	1984-85	1989-90
1.	Agriculture	36.86	32.68
2.	Mining and manufacturing :	18.13	19.76
	(a) Mining	3.47	4.73
	(b) Manufacturing.	14.66	15.03
	(i) Food products	1.67	1.53
	(ii) Textiles	2.52	2.27
	(iii) Wood and paper products	1.05	1.06
	(iv) Leather and rubber products	0.39	0.36
	(v) Chemical products	1.99	2.16
	(vi) Coal and petroleum products	0.72	0.71
	(vii) Non-metallic mineral products	0.80	0.73
	(viii) Basic metals	2.04	2.09
	(ix) Non-electrical engineering products	0.98	1.15
	(x) Electrical engineering products	0.77	0.95
	(xi) Transport equipment	0.82	0.95
	(xii) Misc. industries	0.91	1.07
3.	Electricity, gas and water supply	2.00	2.29
4.	Construction	6.21	6.16
5.	Transport	5.60	6.19
6.	Services	31.20	32.92
	TOTAL	100.00	100.00

3.20 The rate and pattern of growth envisaged for the Seventh Plan will require a total investment of Rs. 322,366 crores of which 94 per cent will be financed from domestic resources. Macro economic aggregates for the base and terminal years of the Plan are given in Table 3.3. The rate of domestic savings is expected to go up from 23.3 per cent of GDP in 1984-85 to 24.5 per cent in 1989-90 which implies a marginal savings rate of 28.4 per cent. A more detailed analysis of the assumptions underlying the projection is given in the Chapter on Financing the Plan.

TABLE 3.3

Macro-Economic Aggregates

(Rs. crores at 1984-85 prices)

	1984-85	1989-90
GDP at factor cost	1,93,428	2,46,881
Indirect taxes less subsidies	24,334	35,064
GDP at market prices	2,17,762	2,81,945
Net factor income from abroad	(—)681	(—)500
Other current transfers.	2,799	3,000
Disposable income	2,19,880	2,84,445
Gross domestic savings	50,738	68,997
Consumption exp. total	1,69,142	2,15,448
Private	1,46,308	1,85,285
Public	22,834	30,163
Gross domestic capital formation	53,388	72,997
Foreign savings	2,600	4,000
Rate of domestic savings	23.3	24.5
Rate of investment	24.5	25.9
Marginal rate of saving		28.4

3.21 The rate of gross investment would rise from 24.5 per cent of GDP in 1984-85 to 25.9 per cent in 1989-90. The incremental capital output ratio (ICOR), which relates the increase in GDP at market prices to the total investment over the Plan period, is expected to be around 5 in the Seventh Plan. This is a little higher than the ICOR realised in the Sixth Plan but lower than the trend value of 5.5. The lower value is expected to be realised because of the emphasis on efficiency which is a crucial part of the Seventh Plan Strategy.

3.22 The Plan outlay in the public sector will be Rs. 180,000 crores which includes current development outlays of Rs. 25,782 crores and gross investment of Rs. 154,218 crores. The figures show a marked increase in the allocations for infrastructure and human resource development since these are crucial for the growth in productivity. The share of the public sector in total investment over the Plan period will be 48 per cent. The private corporate sector will account for 17 per cent and unincorporated enterprises and households for 35 per cent of the total investment.

Sectoral Allocation of Public Sector Outlay

3.23 Tables 3.4(a), 3.4(b) and 3.4(c) give the sectoral allocation of public sector outlays during the Seventh Plan. It will be seen that the largest shares in allocation go to the energy sector (30.45 per cent), agriculture including rural development, special area programmes and irrigation (22.09 per cent) and social services (16.31 per cent), which together account for over two-thirds (68.85 per cent) of total public sector outlay. Thus the plan is heavily oriented towards power, agricultural and rural development, and social services and human resource development.

3.24 The pattern of public investment taken together with private investment is designed to sustain the rate of growth of 5 per cent per annum. In allocating investible funds in the public sector, in view of the resources constraint, areas where the rates of return are higher or the needs of additional capacity are more immediate have been given preference over new projects which will yield output only after the Seventh Plan. Another major consideration has been to lay stress on increases in productivity of the existing capital stock through investment in replacements, balancing equipment and modernisation. Finally, an attempt has been made to ensure balance among the infrastructure sectors, the rest of the production sectors and the sector of human resources development including poverty alleviation programmes. It is, however, recognised that in order to sustain the growth momentum in the Eighth Plan, it may be necessary to make additional allocations for new projects in sectors such as power, coal and railways. It may also be necessary to make some additional allocations for roads of national importance, civil aviation, agricultural research and storage facilities. Depending on the progress of the economy, decisions in these matters could be taken at the time of annual plan reviews and the mid-term appraisal of the Seventh Plan.

TABLE 3.4(a)

Public Sector Outlays—Seventh Plan

(Rs. crores)

Sl. No.	Heads of Development	Total	Centre	States	UTs
1	2	3	4	5	6
I.	Agriculture	10573.62 (5.87)	4056.71 (4.25)	6248.40 (7.74)	268.51 (7.13)
II.	Rural Development	9074.22 (5.04)	4901.59 (5.13)	4142.84 (5.13)	29.79 (0.79)
III.	Special area programme	3144.69 (1.75)	—	3144.69 (3.90)	—
IV.	Irrigation and flood control.	16978.65 (9.43)	834.93 (0.87)	15949.77 (19.77)	193.95 (5.15)
V.	Energy	54821.26 (30.45)	31492.14 (32.96)	22786.15 (28.24)	542.97 (14.41)
VI.	Industry and minerals	22460.83 (12.48)	18552.97 (19.42)	3785.88 (4.69)	121.98 (3.24)
VII.	Transport	22971.02 (12.76)	16459.37 (17.23)	5772.50 (7.15)	739.15 (19.61)
VIII.	Communication, information and broadcasting	6472.46 (3.60)	6365.82 (6.66)	99.33 (0.12)	7.31 (0.19)
IX.	Science and technology	2466.00 (1.37)	2303.43 (2.41)	157.28 (0.20)	5.29 (0.14)
X.	Social services	29350.46 (16.31)	10350.90 (10.84)	17182.88 (21.29)	1816.68 (48.21)
XI.	Others	1686.79 (0.94)	216.14 (0.23)	1428.28 (1.77)	42.37 (1.13)
	Grand Total	180000.00	95534.00	80698.00	3768.00

(Figures in brackets are percentages of column totals).

TABLE 3.4 (b)

Sector-wise Allocations for the Seventh Plan 1985-90

(Rs. crores)

Sl. No.	Heads of development	Seventh Plan outlay			
		Total	Centre	States	UTs
1	2	3	4	5	6
I.	*Agriculture*	10,573.62	4,056.71	6,248.40	268.51
	Agricultural research and education	704.60	425.00	277.17	2.43
	Crop husbandry	3,311.80	1,305.00	1,948.44	58.36
	Soil and water conservation	740.39	110.00	597.30	33.09
	Animal husbandry and dairying	1,076.68	410.00	622.64	44.04
	Fisheries	499.19	170.00	305.42	23.77
	Forestry and wild life	1,859.10	446.71	1,304.08	72.31
	Management of natural disasters	21.10	10.00	11.10	—
	Agricultural marketing and rural godowns	149.44	60.00	86.44	3.00
	Food, storage and warehousing, food processing	307.08	275.00	31.07	1.01
	Investment in agricultural financial institutions	353.66	195.00	158.56	0.10
	Cooperation	1,400.58	500.00	870.18	30.40
	Plantation	150.00	150.00	—	—

1	2	3	4	5	6
II.	*Rural Development*	**9,074.22**	**4,901.59**	**4,142.84**	**29.79**
	Integrated rural development and related programmes	3,473.99	1,864.38	1,609.61	..
	National rural employment programme	2,487.47	1,250.81	1,236.66	..
	Community development and panchayat institutions	416.15	..	396.30	19.85
	Special employment programmes	509.24	..	509.24	..
	Rural landless employment guarantee scheme	1,743.78	1,743.78	..	..
	Land reforms	395.83	36.71	353.88	5.24
	Integrated rural energy programmes	47.76	5.91	37.15	4.70
III.	*Special Area Programmes*	**3,144.69**	..	**3,144.69**	..
	Hill areas	753.50	..	753.50	..
	Border area dev. programme	200.00	..	200.00	..
	Western Ghat development programme	116.50	..	116.50	..
	Development of backward areas	585.69	..	585.69	..
	Tribal areas	756.00	..	756.00	..
	North Eastern Council	675.00	..	675.00	..
	Other area development programmes	58.00	..	58.00	..
IV.	*Irrigation and Flood Control*	**16,978.65**	**834.93**	**15,949.77**	**193.95**
	Major and medium irrigation	11,555.56	50.00	11,445.96	59.60
	Minor irrigation	2,804.99	135.00	2,615.52	54.47
	Command area development	1,670.71	500.00	1,161.91	8.80
	Flood control including anti-sea erosion	947.39	149.93	726.38	71.08
V.	*Energy*	**54,821.26**	**31,492.14**	**22,786.15**	**542.97**
	Power	34,273.46	11,051.54	22,686.76	535.16
	New and renewable sources of energy	519.55	412.35	99.39	7.81
	Petroleum	12,627.67	12,627.67	..	..
	Coal	7,400.58	7,400.58	..	..
VI.	*Industry and Minerals*	**22,460.83**	**18,552.97**	**3,785.88**	**121.98**
	Village and small scale industry	2,752.74	1,284.84	1,378.52	89.38
	Large and medium industry	19,708.09	17,268.13	2407.36[1]	32.60[2]
VII.	*Transport*	**22,971.02**	**16,459.37**	**5,772.50**	**739.15**
	Railways	12,334.55	12,334.30	0.25[3]	..
	Roads	5,200.04	1,019.75	3,666.98	513.31[4]
	Road transport	1,990.10	230.92	1744.73[5]	41.45[6]
	Ports and light houses	1,260.42	1,134.79	97.31	28.32
	Shipping	826.88	693.42	7.00	126.46
	Inland water transport	225.73	155.00	67.20	3.53
	Civil aviation	757.84	730.21	24.72	2.91
	Tourism	326.16	138.68	164.31	23.17
	Farakka Barrage	49.30	49.30	..	..
VIII.	*Communication, information and broadcasting*	**6,472.46**	**6,365.82**	**99.33**	**7.31**
	Posts	295.00	295.00	..	..
	Telecommunications	4,538.74	4,530.00	8.49[7]	0.25[8]
	Broadcasting	700.00	700.00	..	..
	Doordarshan	700.00	700.00	..	..
	Information and publicity	127.90	30.00	90.84	7.06
	Films	41.51	41.51	..	..
	INSAT—space segment	69.31	69.31	..	

1 Includes Rs. 9.59 crores for weights and measures.

2 Includes Rs. 1.51 crores for weights and measures.

3 For Konkan Railway.

4 Includes Rs. 0.15 crores for ropeway.

5 Includes Rs. 0.75 crores for inter-modal transport studies and Rs. 1.50 crores for City Bus Terminals and Parking.

6 Includes Rs. 0.80 crores for inter-modal transport study and Rs. 0.35 crores for motor vehicle wing.

7 For modernisation of wireless equipments in Gujarat.

8 For Radio-telephone link in Lakshadweep.

1	2	3	4	5	6
IX.	*Science and technology*	**2,466.00**	**2,303.43**	**157.28**	**5.29**
	Atomic energy	315.00	315.00	..	..
	Scientific research including INSAT—space segment	543.09	458.43	81.57	3.09
	Scientific and industrial research	355.00	355.00	..	...
	Environment and ecology/prevention and control of air and water pollution and Ganga action plan	427.91	350.00	75.71	2.20
	Ocean development	100.00	100.00	..	..
	Space	700.00	700.00	—	..
	Forensic science labs. and Police wireless	25.00	25.00	..	..
X.	*Social Services*	**29,350.46**	**10,350.90**	**17,182.88**	**1,816.68**
	Education, culture and sports	6,382.65	2,388.64	3,488.71	505.30
	Health including medical	3,392.89	897.34	2,240.33	255.22
	Family welfare	3,256.26	3,256.26	..	..
	Housing and urban development	4,259.50	457.88	3,281.09[9]	520.53[10]
	Water supply and sanitation	6,522.47	1,236.83	4,848.06	437.58
	Welfare of scheduled castes/scheduled tribes and other backward classes	1,520.43	281.22	1,219.21	20.00
	Special Central additive for scheduled castes component plans	930.00	930.00	..	..
	Social and women's welfare	10,12.36	799.97	191.87	20.52
	Nutrition	1,740.18	7.32	1,693.86	39.00
	Labour and labour welfare	333.72	95.44	219.75	18.53
XI.	*Others*	**1,686.79**	**216.14**	**1,428.28**	**42.37**
	Statistics	93.02	40.78	48.24	4.00
	Rehabilitation of displaced persons	146.13	146.03	..	0.10[11]
	Planning machinery	75.50	8.16	64.54	2.80
	District planning	627.06	..	622.31	4.75
	Stationery and printing	62.08	6.00	50.08	6.00
	Public works	568.82	..	549.92	18.90
	Training for development	16.81	4.93	8.98	2.90
	Public distribution system	46.51	2.50	41.21	2.80
	Official language—Hindi	2.00	2.00	..	..
	Others	1.12	..	1.00[12]	0.12[13]
	Unallocated	47.74	5.74	42.00	..
	Grand Total	1,80,000.00	95,534.00	80,698.00	3,768.00

9 Includes Rs. 231.08 crores for State Capital Projects.

10 Includes Rs. 63.50 crores for State Capital Projects.

11 For rehabilitation in A & N Islands.

12 Includes Rs. 0.80 crores for National Small Savings and Rs. 0.20 crores for Parliamentary Affairs.

13 Includes Rs. 0.05 crores for Small Savings Schemes and Rs. 0.07 crores for strengthening of Accounts and Goa Gazetteers.

TABLE 3.4 (C)

State-wise/Sector-wise allocations for the Seventh Plan 1985-90.

(Rs. crores)

States & Union Territories / Heads of Development	Agriculture	Rural Development	Special Area Programmes	Irrigation & Flood Control	Energy	Industry & Minerals	Transport	Communication, Information & Broadcasting	Science & Technology	Social Services	Others	Totale
1	2	3	4	5	6	7	8	9	10	11	12	13
A. States												
1. Andhra Pradesh	278.80	272.00	..	1488.10	1105.90	312.90	272.70	12.60	10.30	1385.90	60.80	5200.00
2. Assam	305.75	128.50	10.10	334.00	486.50	103.10	166.20	2.50	5.00	498.25	60.10	2100.00
3. Bihar	278.15	458.05	4.50	1724.00	1083.00	216.60	403.10	2.00	4.60	861.85	64.15	5100.00
4. Gujarat	386.40	135.49	..	1676.31	1447.50	259.67	377.40	16.07	8.00	1432.39	260.77	6000.00
5. Haryana	277.34	47.52	15.10	594.61	1012.75	56.55	201.32	4.80	17.34	549.71	122.96	2900.00
6. Himachal Pradesh	231.62	36.54	..	74.50	263.61	26.57	172.50	1.00	1.25	213.64	28.77	1050.00
7. Jammu & Kashmir	156.25	42.12	95.90	120.36	279.32	72.75	160.70	2.03	2.00	449.07	19.50	1400.00
8. Karnataka	300.00	184.00	..	725.00	801.00	247.00	250.00	7.00	4.00	852.00	130.00	3500.00
9. Kerala	316.75	124.50	5.50	384.00	398.80	208.00	182.50	4.50	21.40	406.75	47.30	2100.00
10. Madhya Pradesh	434.43	305.87	..	1976.48	2660.00	165.04	353.38	3.24	23.34	1070.61	7.61	7000.00
11. Maharashtra	655.61	680.49	320.49	1890.61	3053.04	365.00	779.69	7.60	4.00	2656.47	87.00	10500.00
12. Manipur	56.60	19.35	..	78.00	36.42	24.30	72.50	1.00	2.50	120.87	18.46	430.00
13. Meghalaya	74.95	12.08	10.00	11.60	71.50	19.35	83.50	0.60	1.70	122.12	32.60	440.00
14. Nagaland	73.00	19.80	8.00	15.00	33.80	28.20	102.50	3.50	0.85	100.20	15.15	400.00
15. Orissa	239.55	202.65	..	696.00	788.50	140.35	193.50	3.00	4.00	386.80	45.65	2700.00
16. Punjab	325.98	65.99	21.10	370.00	1639.60	123.31	184.20	3.25	5.00	520.56	26.01	3285.00
17. Rajasthan	180.86	146.77	..	797.15	879.72	190.69	139.84	1.60	8.40	630.06	24.91	3000.00
18. Sikkim	48.50	3.97	..	16.05	34.94	8.72	46.68	0.47	0.80	62.96	6.91	230.00
19 Tamil Nadu	422.10	288.20	..	330.00	2010.00	285.00	282.00	3.00	8.70	2072.65	48.35	5750.00
20. Tripura	73.80	29.95	..	48.00	48.00	16.25	53.00	1.27	2.50	161.04	6.19	440.00
21. Uttar Pradesh	786.96	604.25	26.00	2200.00	3403.00	600.53	1077.99	12.50	15.00	1678.33	42.44	10447.00
22 West Bengal	345.00	334.75	69.00	400.00	1249.25	316.00	217.30	5.80	6.60	950.65	230.65	4125.00
23 Special Area Programmes (Centrally/LIC funded)	..	..	2559.00	..	..	..	..	..	..	..	..	2559.00
24. Unallocated	..	..	..	..	..	..	..	..	..	..	42.00	42.00
TOTAL—A. STATES	6248.40	4142.84	3144.69	15949.77	22786.15	3785.88	5772.50	99.33	157.28	17182.88	1428.28	80698.00

B. Union Territories

1. A & N Islands	26.06	0.55	..	2.70	25.02	2.06	176.52	0.65	0.37	45.04	6.03	285.00
2. Arunachal Pradesh	84.10	7.95	..	26.00	36.90	9.75	127.55	0.50	0.20	104.45	2.60	400.00
3. Chandigarh	4.98	1.27	..	0.60	28.58	2.27	10.55	0.40	0.20	154.13	0.02	203.00
4. Dadra & Nagar Haveli	9.71	0.89	..	6.38	3.22	1.49	8.61	0.15	0.24	14.40	1.08	46.17
5. Delhi	25.13	4.66	..	69.27	368.55	63.60	270.75	2,33	1.78	1187.35	6.58	2000.00
6. Goa, Daman & Diu	33.37	3.99	..	70.45	36.25	15.60	54.89	1.10	1.55	134.19	8.61	360.00
7. Lakshadweep	12.00	1.86	..	1.00	4.00	1.52	9.20	0.88	0.25	12.38	0.74	43.83
8. Mizoram	50.40	3.70	..	8.50	28.20	13.35	59.55	0.70	0.20	81.70	13.70	260.00
9. Pondicherry	22.76	4.92	..	9.05	12.25	12.34	21.53	0.60	0.50	83.04	3.01	170.00
TOTAL—B. UNION TERRITORIES	268.51	29.79	..	193.95	542.97	121.98	739.15	7.31	5.29	1816.68	42.37	3768.00

(1) Includes provision for Central funding of Special Area Development Programmes for :

	(Rs. crores)
(a) Hill Areas	753.50
(b) Border Area Dev. Programme	200.00
(c) Western Ghat Dev. Programme	116.50
(d) Tribal Areas	756.00
(e) North Eastern Council	675.00i
(f) Other Area Development Programmes	58.00
Total	2559.00

(i) Includes LIC loan of Rs. 100 crores

State-wise/Sector-wise break-up of schemes under these programmes will be firmed up on receipt of specific proposals from the States.

3.25 The distribution of investments by broad sector of economic activity is given in Table 3.4 (d). The share of agriculture, irrigation and allied sectors in total investment will be 19.1 per cent, of mining and manufacturing 32.5 per cent, of electricity, transport and communication 24.2 per cent and of Services 24.2 per cent. Almost the entire investment in electricity, railways and communication, 45 per cent of the investment in agriculture, irrigation and allied sectors and 41 per cent of the investment in mining and manufacturing will be in the public sector. This investment allocation has been computed by using sectoral capital output ratios estimated on the basis of past data and information on recent trends.

3.26 The balance of payments prospects for the Seventh Plan are discussed in greater detail in a later chapter. A summary of the broad parameters is given in Table 3.5. At 1984-85 prices, imports are expected to grow at 5.8 per cent and exports at 6.8 per cent. Allowing for net earnings from invisibles, the current account deficit is expected to be Rs. 20,000 crores which will have to be financed by the inflow of aid and other borrowing. These projections include a provision for contingency imports and allow for a small increase in reserves.

Impact on Poverty and Unemployment

3.27 There is now evidence to suggest that the process of economic growth and the anti-poverty programmes have made a significant dent in the problem of poverty. Estimates of the incidence of poverty based on the provisional results of the latest National Sample Survey have been presented in the first Chapter. In the light of this information one can conclude that around 36 million people crossed the poverty line between 1977-78 and 1983-84.**

3.28 The development strategy of the Seventh Plan and the pattern of growth emerging from it are expected to lead to a reduction of poverty at an even faster rate. The impact of economic growth and plan programmes on the incidence of poverty is presented in Table 3.6. The percentage of population with a consumption standard below the poverty line is expected to come down from an estimated 36.9 per cent in 1984-85 to 25.8 per cent in 1989-90. In absolute terms, the number of poor persons is expected to fall from 273 million in 1984-85 to 211 million in 1989-90, the bulk of this improvement being in the rural areas. The expected decline in the poverty ratio is the combined result of the contemplated growth pattern and more effective implementation of various poverty alleviation programmes. At present the National Rural Employment Programme (NREP), the Integrated Rural Development Programme (IRDP) and Rural Landless Em-

** The concepts and methods used will be explained in the Technical Note to the Seventh Five Year Plan.

TABLE 3.4 (d)

Gross Investment and Incremental Gross Domestic Product by Public Sector, Private Sector and total Economy (1985—90)

(Rs. crores at 1984-85 prices)

Sl. No.	Sector	Gross Investment			Incremental GDP (Factor Cost)		
		Public	Private	Total	Public	Private	Total
1	2	3	4	5	6	7	8
1.	Agriculture and allied	27,574	34,048	61,622	875	8,512	9,387
2.	Mining, quarrying and manufacturing	42,455	62,172	1,04,627	6,641	7,065	13,706
3.	Electricity	32,149	419	32,568	1,696	91	1,787
4.	Railways	12,334	...	12,334	726	...	726
5.	Other Transport	8,871	18,015	26,886	1,309	2,402	3,711
6.	Communication	6,355	..	6,355	824	..	824
7.	Other services	24,480	53,894	77,974	10,050	13,262	23,312
	TOTAL	1,54,218	1,68,148	3,22,366	22,121	31,332	53,453

TABLE 3.5

Balance of Payments

(Rs. thousand crores)

Sl. No.	Item	Seventh Plan 1985-90 (at 1984-85 prices)
1.	Exports	60.7
2.	Imports	95.4
3.	Balance of trade	—34.7
4.	Invisibles (net)	14.7
5.	Balance on current account	—20.0
6.	Net aid and other borrowing	20.9
7.	Use of foreign exchange reserves	—0.2
8.	Current account deficit as per cent of GDP	1.57

rantee Programme (RLEGP) consti-
elements of the anti-poverty program-
vever, necessary to emphasise that
y programmes cannot by themselves
move poverty on a sustainable basis.
ramework of an expanding economy
icultural sector that we can hope to make a lasting impact on the problems of poverty and under-development. The various anti-poverty programmes are designed to supplement and strengthen the favourable impact of faster agricultural growth on the level of living of the rural poor. A major task ahead is to integrate various beneficiary-oriented programmes, sectoral programmes and area

TABLE 3.6

Impact on Poverty

	Poverty Ratio (Per cent)			No. of poor (million)		
	Rural	Urban	Total	Rural	Urban	Total
	2	3	4	5	6	7
. . . . .	51.2	38.2	48.3	253.1	53.7	306.8
2. 1984-85**	39.9	27.7	36.9	222.2	50.5	272.7
3. 1989-90	28.2	19.3	25.8	168.6	42.2	210.8

NB : * Estimated on the basis of NSS 32nd Round Consumer Expenditure Distribution (1977-78).
** On the basis of NSS Consumer Expenditure Distribution 38th Round (Provisional), 1983.

development schemes into a consistent design of comprehensive development of each district/block taking into account its specific resource endowment, needs and development potential.

3.29 The impact of the proposed pattern of growth on employment is given in Table 3.7. The employment potential generated by the targeted levels of economic activity is calculated in terms of man-days of work and then expressed in terms of standard person years, each of which is equal to 273 man days of work at the rate of 8 hours a day. Over the Seventh Plan, employment potential is expected to increase by 40 million standard person years against an increase in labour force of around 39 million persons. Employment potential will grow at 4 per cent per year, as compared to the expected growth rate of 2.6 per cent per year in the labour force.

3.30 The bulk of the growth in employment potential is in the agricultural sector, and within the sector, in subsidiary activities other than crop production. The annual growth rate of employment potential in this sector is 3.5 per cent which is significantly higher than the growth rate of the rural labour force which is expected to be around 2 per cent. Thus the Seventh Plan would provide fuller employment in rural areas. In the non-agricultural sector employment potential is expected to increase at nearly 4.5 per cent per year which should lead to some shift in labour force out of agriculture into non-agricultural activities.

3.31 The employment strategy underlying these projections is described in a later chapter. In essence the strategy is based on the premise that even with a high rate of industrial growth, the excess rural population cannot be fully absorbed in the organised industrial sector and additional employment has to be generated in rural areas through intensification of agriculture and village and rural industries, diversification of rural economic activity and a large programme of construction and capital formation. The employment projections of the Seventh Plan reflect this orientation of development strategy.

TABLE 3.7

Employment Profile of the Seventh Plan

(Million standard person years)

Sector	Estimated employment in 1984-85	Projected employment in 1989-90	Increase in employment in Seventh Plan
1 Agriculture .	96.108	114.092	17.984
(a) Crop sector .	58.750	65.720	6.970
(b) Non-crop sector	37.358	48.372	11.014
2 Mining and quarrying	1.153	1.494	0.341
3 Manufacturing .	26.790	33.466	6.676
4 Construction .	10.427	12.624	2.197
5 Eelectricity .	1.031	1.498	0.467
6 Railways .	1.544	1.688	0.144
7 Other transport .	9.440	11.810	2.370
8 Communications .	0.951	1.224	0.273
9 Other services .	39.261	49.165	9.904
Total .	186.705	227.061	40.356

3.32 The Seventh Plan also envisages the continuance and expansion of the National Rural Employment Programme (NREP) and Rural Landless Employment Guarantee Programme (RLEGP) which were started in the Sixth Plan. These Programmes are expected to generate 2,458 million mandays of additional employment (9.04 million standard person years)

in rural areas. They are particularly important in providing additional incomes to landless labour households who lack a resource base in the form of land. Depending on the food situation in the country and the position of food stocks with the public sector agencies, the employment promotion programmes could be expanded at a faster rate than is indicated by the current provision of outlays in the Seventh Plan.

3.33 While the great majority of the poor people are to be found in rural areas, one has also to take note of the growing incidence of poverty in urban areas. The persistent migration from the rural hinterlands has led to rapid growth of slums in many of our cities and towns. It has also led to considerable amount of overcrowding in relatively unskilled and low paid jobs in the informal sector. The programmes of urban development included in the Seventh Plan lay considerable emphasis on improvement in the living conditions of slum dwellers. However, to be effective, the problem of urban poverty requires a multi-pronged strategy designed, among others to :—

(a) provide gainful employment to the unemployed, particularly women and youth,
(b) raise the earnings of those already employed in low paid jobs,
(c) step up the productivity and earnings of those who are self-employed workers, and
(d) improve the access of the urban poor to basic amenities like education, health care, sanitation and safe drinking water.

To this end, it is proposed to take up a few pilot projects in selected urban areas. These pilot projects will help identify the type of programmes and support mechanisms (training, extension, credit, marketing and infrastructure) which could make a significant dent on the problem of urban poverty. Wherever possible, the assistance of voluntary agencies will be enlisted for the implementation of these projects.

3.34 The impact of the Seventh Plan on poverty and unemployment will bring about an important qualitative change in the economy. At present the top 30 per cent of the population accounts for over half of the consumer expenditure both in rural and urban areas and for the bulk of the demand for manufactured consumer goods. By the end of the Seventh Plan, with the expected decline in the proportion of the population below the poverty line and with the reduction in the backlog of unemployment, there will be a significant increase in the demand for food articles and for many manufactured consumer goods and services. This increase in the size of the domestic market can provide a base for rapid industrial advance, which in turn will further accelerate the growth in employment. Hence the Seventh Plan strategy which focuses attention on employment generation and poverty reduction will also help strengthen growth impulses in the economy.

Sectoral Growth Profiles

Agriculture

3.35 During the Seventh Plan, the agricultural sector is expected to grow at an average annual rate of 4.0 per cent in terms of gross output and 2.5 per cent in terms of value added. This is significantly higher than the growth rate achieved during the Sixth Plan after correcting for the low base of 1979-80. This higher growth rate is justified on the basis of likely demand generation and of maintaining self-sufficiency in foodgrains. Correspondingly, on the supply side, increased provision of fertiliser and irrigation has been stipulated. Table 3.8 gives output projections for the principal agricultural commodities and Table 3.9 gives the assumptions about area and yield rates that underlie the output projections for the principal crops.

3.36 The growth in agricultural production, if properly directed, can reinforce the attack on poverty and unemployment. In keeping with this approach, the Seventh Plan envisages that a substantial part of the additional production will come from small and marginal farmers and from rainfed and dryland areas. It also envisages a special effort at raising agricultural productivity in rice growing tracts in Eastern and Southern India. The quantitative projections presented in this Chapter have been framed in the context of this strategy.

3.37 Effective implementation of land reforms is essential for achieving higher agricuturual growth and for the successful attack on poverty and unemployment. Efforts will be intensified during the Seventh Plan for the strict enforcement of the existing legislation relating to ceiling on landholdings, especially in the newly irrigated areas. Security of tenure to informal tenants through proper recording of their rights and regulation of rents would be necessary to induce them to intensify the use of modern inputs. Consolidation of land holdings and bringing together of small and marginal holdings into contiguous blocks of land would facilitate the exploitation of groundwater and the provision of various services economically. Updating of land records is necessary to protect the interests of farmers, particularly for improving their access to credit and inputs. Efforts will, therefore, be stepped up during the Seventh Plan to accomplish all these tasks.

TABLE 3.8

Output Projections : Agricultural Commodities

Sl. No.	Commodity	Unit	1984-85	1989-90	Compound annual growth rate
1.	Rice	Million tonnes	60	73-75	4 0-4.6
2.	Wheat	-do-	45	56-57	4.5-4.8
3.	Coarse cereals	-do-	32	34-35	1.2-1.8
4.	Pulses	-do-	13	15-16	2.9-4.2
5.	All foodgrains	-do-	150	178-183	3.5-4.1
6.	Oilseeds	-do-	13	18	6 7
7.	Sugarcane	-do-	180	217	3.8
8.	Cotton	Million bales of 170 kg each	7.5	9.5	4.8
9.	Jute and Mesta	Million bales of 180 kg each	7.5	9.5	4.8
10.	Tea	Million kg	645	766	3.5
11.	Coffee	-do-	165	180	1.8
12.	Milk	Million tonnes	38.8	50.9	5.6
13.	Eggs	Thousand million nos.	13.48	19.90	8.1
14.	Rubber	Thousand tonnes	187	265	7.2

TABLE 3.9

Estimates of Area and Output 1984-85 *and* 1989-90

Area in million hectares
Yield in kgs./hectare

Sl. No.	Crop	Output unit	1984-85			1989-90		
			Area	Output	Yield	Area	Output	Yield
1	2	3	4	5	6	7	8	9
1.	Rice	Million tonnes	41.2	60	1,456	44.0	73 0 to 75 0	1,659 to 1705
2.	Wheat	-do-	24.6	45	1,829	28.0	56 0 to 57.0	2,000 to 2,036
3.	Coarse cereals	-do-	41.0	32	780	40 1	34.0 to 35.0	848 to 873
4.	Pulses	-do-	23.5	13	553	25.7	15.0 to 16.0	584 to 623
5.	Foodgrains	-do-	130.3	150.0	1,151	137.8	178 0 to 183	1,292 to 1,328
6.	Oilseeds	-do-	18.8	13.0	691	20.3	18.0	887
7.	Sugarcane	-do-	3.2	180 0	56,250	3.3	217	65,758
8	Cotton	Million bales of 170 kg each	8.0	7.5	160	8.5	9.5	190
9.	Jute and mesta	Million bales of 180 kg each	1.1	7.5	1,226	1.2	9.5	1,425
10.	Other crops		18.6			18.9		
11.	All India		180.0			190.0		

3.38 There is now only a limited potential for an increase in agricultural production based on an expansion in the area under cultivation. The net sown area is not expected to change much over the Plan, and will remain at around 143 million hectares. However, during the Plan, irrigation potential will increase by 13 million hectares. This will help to increase the area under short duration high yielding-varieties, facilitate multiple cropping and raise cropping intensity from 1.26 in 1984-85 to 1.33 in 1989-90. Thus the gross cropped area is expected to go up from 180 million hectares in 1984-85 to 190 million hectares in 1989-90, which implies an annual growth rate of around 1 per cent. The limited potential for area expansion means that we have to depend largely on yield improvements for meeting the output targets specified in the Plan. These yield increases have to come from the spread of better seeds and farming

practices, the expansion in irrigation which has been referred to above and the growth in fertilizer consumption from 8.4 million tonnes in 1984-85 to 13.5—14.0 million tonnes in 1989-90.

3.39 In order to attain the growth pattern described above, special efforts will be made for effecting a break-through in rice output, especially in the eastern region, for enhancing the productivity and reducing the instability of production in dry land areas by laying emphasis on development of water sheds and adoption of improved practices, for intensification of research and management programmes for production of oilseeds and pulses and for raising the productivity of small and marginal farmers. Programmes for afforestation will also receive special attention during the Seventh Plan. In this context, special mention ought to be made of the role of the newly established Wasteland Development Board which has been charged with the responsibility of drawing up a plan for the development of wastelands through a massive programme of afforestation and tree planting. Other associated aspects of the agricultural strategy are a substantial increase in the area under high yielding varieties, increased consumption of chemical fertilizers (with emphasis on improvement in the efficiency of fertiliser-use), strengthening of the institutional arrangements for timely delivery of key inputs intensifying pest and disease surveillance arrangements and timely control operations, and strengthening of the extension net work on the pattern of Training and Visit system (T&V) for quick and effective transfer of technology to the farmers.

3.40 A key element in the agricultural strategy is the rapid expansion of irrigation facilities. The emphasis will be on early completion of on-going schemes which are in an advanced stage of construction, and on speedy utilisation of potential created by improvement in water management. New starts will be restricted to medium irrigation schemes in drought prone, tribal and backward areas and to minor irrigation schemes. Under the minor irrigation programme, priority would be given for the development of ground water in the eastern and north-eastern states, where the exploitation so far has been at very low levels. This would also enable rice production in these areas to be stepped up by better water management and conjunctive use of surface and ground waters.

3.41 Specific targets for the principal crops are dealt with in what follows :

Rice : An increase in rice production, particularly in the eastern region is a key component of the agricultural strategy for the seventh plan. By the end of the plan, about half the area under rice will be irrigated and this irrigated area will account for about two-third of total production. The overall yield rate is expected to improve by 16 per cent, mainly through productivity gains in the eastern region and aggregate production is likely to go up from 60.0 million tonnes in 1984-85 to 73-75 million tonnes, by the end of the plan.

Wheat : More than 80 per cent of the area under wheat is expected to be under irrigation. The increase in yields is expected to be 10 per cent since the major gains from varietal improvement, irrigation and fertiliser application have already been achieved. The total production of wheat is expected to go up from 45 million tonnes in 1984-85 to 56-57 million tonnes in 1989-90.

Coarse cereals: In keeping with past trends, the area under coarse cereals is expected to go down. However, with the emphasis on dryland farming, an increase in yields of around 10 per cent is expected and this will raise production from 32 million tonnes in 1984-85 to 34-35 nillion tonnes in 1989-90.

Pulses : Pulses are a major source of protein for poor house-holds and, hence, the seventh plan proposes to raise production through an expansion in the area under pulses and a 9 per cent increase in yields. This will raise production from 13.0 million tonnes in 1984-85 to 15-16 million tonnes in 1989-90.

Oilseeds: Shortfalls in the availability of edible oils have posed major problems in the Sixth Plan and hence the Seventh Plan incorporates a special effort at increasing the production of oilseeds. The area under major oilseeds is expected to go up by 1.5 million hectares and yields are expected to increase by 28 per cent. As a result, the total production of major oilseeds is targeted to go up from 13 million tonnes in 1984-85 to 18 million tonnes in 1989-90.

Sugarcane: The production of sugarcane is expected to go up mainly because of a 17 per cent yield increase and will rise from 180 million tonnes in 1984-85 to 217 million tonnes in 1989-90. This increase in sugarcane production is consistent with the projected demand and production for sugar, gur and khandsari.

Cotton: The projected demand for cotton arising from the anticipated cloth demand and the availability of alternative fibres is expected to be 95 lakh bales of 170 kg each. This includes a small export demand of 3.1 lakh bales. The production of cotton is targeted to reach this level from its 1984-85 level of 75 lakh bales through some expansion in area and a 19 per cent increase in yield.

Mining and Manufacturing

3.42 The output of minerals and manufactured goods is expected to increase at the rate of 8.3 per cent per annum over the Seventh Plan period. Production targets for important industrial sectors are presented in Table 3.10. In certain sectors, the

expected level of consumption differs from the production target because of planned imports, exports or stock changes. Material balances for some critical commodities where this is the case are presented in Table 3.11.

3.43 The industrial strategy for the Seventh Plan lays special emphasis on: (a) improvement in infrastructural facilities particularly power; (b) greater attention to modernisation and maintenance of assets; (c) upgradation of technology; (d) improvement in productivity; (e) reduction in cost and improved competitiveness; (f) introduction of new products and, (g) a special effort at accelerated development in selected industries in which the country has comparative advantage.

3.44 Industrial production is also expected to benefit from the emphasis on productivity, improved capacity utilisation, easy availability of intermediates and the greater scope for initiative and enhanced production resulting from recent changes in industrial, trade and fiscal policies. The financial projections on which the Plan is based allow for the required flow of credit to the industrial sector.

TABLE 3.10

Output Projections : Minerals, Manufactures and Infrastructural Services

Sl. No.	Item	Unit	1984-85	1989-90	Compound Annual growth rate
1	2	3	4	5	6
1.	Coal	Million tonnes	147.44	226	8.9
2.	Lignite	-do-	7.8	15.2	14.9
3.	Crude oil	-do-	28.99	34.53	3.6
4.	Iron ore	-do-	42.2	58.1	6.6
5.	Sugar	-do-	6.2	10.2	10.5
6.	Vanaspati	Thousand tonnes	920.0	1,210.0	5.6
7.	Paper and paper board	-do-	1,361.2	1,800.0	5.7
8.	Newsprint	-do-	197.1	340.0	11.5
9.	Cloth (mill and decentralised sector)	Billion mts.	11.95	14.50	3.9
10.	Jute manufactures	Thousand tonnes	1,368.0	1,625.0	3.5
11.	Petroleum Products	Million tonnes	33.23	45.06-45.47	6.3-6.5
12.	Low density polyetheylene	Thousand tonnes	107.2	186.0	11.7
13.	High density polyethylene	-do-	38.9	125.0	26.3
14.	Polypropylene	-do-	27.3	79.0	23.7
15.	P.V.C.	Thousand tonnes	84.0	233.0	22.6
16.	Synthetic rubber	-do-	38.1	72.0	13.6
17.	Polyester staple fibre and filament yarn	-do-	95.2	191.0	14.9
18.	Nylon filament yarn	-do-	33.0	56·7	11.45
19.	Viscose staple fibre and filament yarn	-do-	133.5	224.0	10.9
20.	DMT	-do-	26.6	194.0	48.8
21.	Caprolactam	-do-	16.3	133.0	52.2
22.	Nitrogenous fertilisers	Million tonnes	3.92	6.56	10.9
23.	Phosphatic fertilisers	-do-	1.26	2.19	11.6
24.	Caustic soda	Thousand tonnes	687.9	950.0	6.7
25.	Soda ash	-do-	801.0	1,140.0	7.3
26.	Cement	Million tonnes	30.1	49.0	10.2
27.	Steel (main and mini steel plants)	-do-	8.77	12.64	7.6
28.	Pig iron for sale	-do-	1.22	1.76	7.6
29.	Aluminium	Thousand tonnes	276.5	499.0	12.5
30.	Copper (refined)	-do-	33.5	42.7	5.0
31.	Zinc	Thousand tonnes	57.6	89.0	9.1
32.	Lead	-do-	14.2	27.0	13.7
33.	Machine tools	Rs. crores	303	500	10.5
34.	Tractors	Thousand nos.	85	135	9.7
35.	Transformers	Million KVA	24.45	32.0	5.5

1	2	3	4	5	6
36.	Electric motors	Million H.P.	4.93	6.5	5.7
37.	Hydro turbines	MW	200	1,400	47.6
38.	Thermal turbines	M "	2,900	3,700	5.0
39.	Commercial vehicles	Thousand nos.	96.8	160	10.6
40.	Electricity generation	Thousand million kwh	167	295.4	12.1
41.	Railways (originating traffic)	Million tonnes	263	340	5.3
42.	Ports (traffic handled)	-do-	106.73	147 03	5.6
43.	Electronics	Rs. crores	2,090	10,860	39.04

3.45 The linkages among various sub-sectors in mining and manufacturing have been taken into account in making projections of output, imports and exports. Since most minerals and industrial products are tradeable, bottlenecks in raw material availability can be corrected through contingency imports. However, there are certain inputs like electricity where this option is not available. As stated in an earlier chapter, the availability of power has been a major constraint on industrial growth in the Sixth Plan. Hence in the Seventh Plan, power supply to industrial consumers is planned to rise at 12.6 per cent per annum, a rate which is well above the 7.8 per cent growth rate of power supply to industry observed during the sixth plan.

3.46 Certain specific features of the projections of mineral and industrial output are dealt with in what follows.

(a) *Crude oil*: Crude oil production increased nearly three-fold in the Sixth Plan mainly because of the growth in production from Bombay High. There is now no similar oilfield awaiting exploitation, and production increases in the Seventh Plan are likely to be more modest. The domestic output of curde oil is expected to go up from 29 million tonnes in 1984-85 to 34.5 million tonnes in 1989-90, the bulk of the increase

TABLE 3.11

Material Balances for Selected Commodities

Sl. No.	Commodity	Year	Unit	Domestic demand	Production	Exports	Imports**	Change in stocks
1	2	3 (a)	3 (b)	4	5	6	7	8
1.	Iron Ore	1984—85	Million tonnes	18.00	42.2	24.50	—	—
		1989-90	-do-	29.20	58.10	28.90	—	—
2.	Crude oil	1984-85	-do-	35.56	28.99	6.48	13.64	0.59
		1989-90	-do-	48.04—48.49	34.53	—	13.51—14.36	—
3.	Sugar	1984-85	-do-	7.20	6.20	0.01	1.00	—0.01
		1989-90	-do-	9.80	10.20	0.40	—	—
4.	Textiles	1989-90	Billion mts.	13.20	14.50	1.30	—	—
5.	Cotton yarn	1989-90	Million kg	1,165.7	1,193.1	27.4	—	—
6.	Jute manufactures	1989-90	Million tonnes	1.36	1.63	0.27	—	—
7.	Newsprint	1984-85	Thousand tonnes	385	197	—	210	22
		1989-90	-do-	494	340	—	154	—
8.	Nitrogenous fertiliser	1984-85	Million tonnes	5.64	3.92	—	2.02	0.30
		1989-90	-do-	9.1—9.3	6.56	—	2.54—2.74	—
9.	Phosphatic fertiliser	1984-85	-do-	1.87	1.26	—	0.75	0.14
		1989-90	-do-	3.00—3.20	2.19	—	0.81—1.01	—
10.	Potassic fertiliser	1984-85	Million tonnes	0.86	—	—	0.86	
		1989-90	-do-	1.40—1.50	—	—	1.40—1.50	—

1	2	3(a)	3(b)	4	5	6	7	8
11.	Steel flat products	1984-85	Million tonnes	4.20	2.86	n.a.	n.a.	—
		1989-90	-do-	5.47	5.37	0.29	0.39	—
12.	Steel Non-flat products	1984-85	-do-	6.61	5.83	n.a.	n.a.	—
		1989-90	-do-	8.38	7.27	0.09	1.20	—
13.	Steel : Total	1984-85	-do-	10.81	8.69	0.15	1.99	—0.28
		1989-90	-do-	13.86	12.65	0.38	1.59	—
14.	Aluminium	1984-85	Thousand tonnes	310	276.5	—	56.0	22.5
		1989-90	-do-	450	499			49.0
15.	Copper (refined)	1984-85	-do-	109.6	33.5	—	76.1*	@
		1989-90	-do-	141.4	42.7	—	98.7*	—
16.	Zinc	1984-85	-do-	130.6	57.6	—	73.0	@
		1989-90	-do-	162.8	89.0	—	73.8	—
17.	Lead	1984-85	-do-	61.2	14.2	—	47.0	@
		1989-90	-do-	80.0	27.0	—	58.0	—

* Include toll smelting.

@ Included in imports

** Estimated

coming from onshore areas in the Cambay basin and the north-east. Taking crude and petroleum products together, the ratio of net imports to total consumption will rise from 31.0 per cent in 1984-85 to about 38 per cent in 1989-90. But even at this latter level, the ratio will still be very much lower than what it was at the beginning of the Sixth Plan. With the development of the South Bassein field, natural gas will emerge as an important energy source and production is expected to increase from 7.2 billion cubic metres in 1984-85 to 14.9 billion cubic metres in 1989-90.[1]

(b) *Coal :* To achieve the plan targets for thermal power generation based on coal, iron and steel, railway transportation and other industries, and the demand for coal in the household sector, coal production will have to be raised from 147.44 million tonnes in 1984-85 and 226 million tonnes in 1989-90. A major part of the increase in output will come from opencast mines in areas like the Singrauli field. Many of these. are directly linked to power stations either existing or projected. The total demand for coal is estimated to reach 236.7million tonnes by 1989-90. The gap between demand and production will be met by drawing on the coal stocks and through some import of coking coal. The import of coking coal is also necessary for conservation of coking coal and for improving the quality of indigenous coal fed to the steel plants Table 3.15 gives the material balance for coal.

(c) *Sugar :* Based on the projected output of sugarcane of 217 million tonnes, sugar production is expected to increase from 6.2 million tonnes in 1984-85 to 10.2 million tonnes in 1989-90, mainly through the better utilisation of existing capacities and the expansion of existing units to optimum scale. The projected level of output will eliminate the need for imports and also release an amount of 0.4 million tonnes for export in 1989-90. The realisation of the production target will require pricing policies which ensure an optimum distribution of cane between sugar mills and gur and khandsari manufacturers.

(d) *Textiles :* The aggregate output of cloth made from cotton, viscose and synthetic yarns is expected to go up from 11.95 billion metres in 1984-85 to 14.50 billion metres in 1989-90. The production target is intended to meet fully the domestic demand and also provide for export of 1.3 billion metres in 1989-90. The composition of planned production in terms of sectors, type of cloth and the related requirements of cotton yarn and man-made fibres is presented in Table 3.12. As far as cotton cloth is concerned, handlooms will be largest producer and account for 40 per cent of output. To enable the handloom sector to achieve the plan targets, it will be necessary to make effective arrangements for supply of yarn, credit, and assistance for marketing and design development to this sector. In the mill sector, modernisation and productivity improvement are a crucial component of the strategy for increased output. The role of man made fibres will increase and by the end of the Seventh Plan, blended, viscose and synthetic fabric will account for nearly 40 per cent of the total output of cloth (other than silk and wool).

(e) *Man-made fibres :* The changing pattern of fibre

1. Out lays for the petroleum sector will be kept under continuous review and will need to be adjusted if warranted by discoveries of larger oil reserves.

use in the textile industry is reflected in the growth of the output of man-made fibres which will increase from 261,700 tonnes in 1984-85 to 489,500 tonnes in 1989-90, which will meet the projected demand in that year so that imports will not be required. With the growing emphasis on the setting up of economic sized plants, the scope for cost reductions should also increase. By the end of of the Seventh Plan polyester, nylon and viscose will meet roughly 30 per cent of the fibre requirements for cloth production (excluding silk and wool).

(f) *Jute manufactures:* Jute manufactures are used as packaging materials in the form of sacks and hessian. Keeping in view the output levels of different commodities where sacks and hessian are used as packing materials and taking into account the likely substitution by synthetic packaging materials and bulk handling, the domestic demand for jute manufactures is placed at 1,355,000 tonnes in 1989-90. The export demand for jute manufactures has been assessed at 270,000 tonnes in 1989-90. Given the potential to raise jute and mesta production from 75 lakh bales in 1984-85 to 95 lakh bales in 1989-90, the production of jute manufactures will rise from 1,300,000 tonnes in 1984-85 to 1,625,000 tonnes in 1989-90. This level of production will suffice to meet both domestic and export demand.

(g) *Fertilisers:* During the Seventh Plan, the total demand for fertilisers is expected to increase from 8.4 million tonnes to 13.5.-14.0 million tonnes, which implies a growth rate of about 10 to 10.8 per cent. Based on likely commissioning schedules, domestic production is expected to increase by 11 per cent per annum and will reach 8.75 million tonnes by 1989-90. The absolute level of imports will increase but imports as a percentage of total consumption will come down from 41.2 per cent in 1984-85 to 35.2-37.5per cent in 1989-90 The bulk of the increase in production will come from the gas-based fertiliser units being set up along the gas pipeline from the west coast to Uttar Pradesh. Capacity utilisation in the existing nitrogenous fertiliser industry is expected to improve from 74.5 per cent in 1984-85 to 79.5 per cent in 1989-90.

(h) *Petrochemicals:* The Seventh Plan will see a major expansion in the petrochemical industry. The growth in the production of man-made fibres has already been dealt with above. The production of major plastic raw materials (LDPE, HDPE, PP and PVC) is expected to go up from 257,400 tonnes in 1984-85 to 623,000 tonnes in 1989-90 which implies an annual growth rate of about 19 per cent. This large increase will come from the Indian Petrochemicals Complex at Baroda and the new gas based company in Maharashtra.

(i) *Cement:* The demand for cement is expected to grow at the rate of nearly 10 per cent per year during the Seventh Plan and reach a level of of 49 million tonnes by 1989-90. The capacity required for this production has already been licensed. It is expected that domestic production will be fully able to meet the entire demand. The Plan envisages an improvement in capacity utilization in the cement industry from 70.8 per cent in 1984-85 to 81.7 per cent in 1989-90. This assumes adequate supplies of power and coal.

(j) *Steel:* The demand for finished mild steel is expected to increase by about 5 per cent per annum and will reach 13.86 million tonnes by 1989-90. Improvements in capacity utilisation will help to raise production to 12.65 million tonnes by 1989-90 leaving a net gap of 1.21 million tonnes. However, there are imbalances between the pattern of demand and productwise capacities. Because of the delay in the comissioning of the Vishakhapatnam Plant, demand will exceed capacity for non-flat products (other than railway materials), necessitating imports of around 1.2 million tonnes. In flat products, capacities are likely to exceed demand for plates, galvanised plain/galvanised corrugated sheets and tin plates and will be short of demand in the case of hot rolled sheets/coils, skelp and electrical steel sheets requiring imports of 0.39 million tonnes.

(k) *Non-ferrous metals:* The principal development in the non-ferrous sector in the Seventh Plan will be a large increase in the production of aluminium with the commissioning of the Orissa smelter. By 1989-90, aluminium production, may reach 499,000 tonnes which will be a little higher than the expected level of demand of 450,000 tonnes. Copper product-

TABLE 3.12

Production of Cloth and Requirements of Cotton Yarn and Man-made Fibres in 1989-90

Sl. No.	Item	Cloth Production (million metres)	Cotton yarn requirement (million kg.)	Requirement of manmade Fibres (million kg.)
1.	Pure cotton cloth	8,750	951.2	—
	(1) Mills	3,050	381.2	—
	(2) Power loom	2,200	220.0	—
	(3) Handloom	3,500	350.0	—
2.	Blends of cotton and man-made fibres	2,414	138.2	141.2
3.	Cloth (man-made fibres)	3,336	—	316.9
4.	Yarn/fibre requirements for other purposes	—	103.7*	31.4
5.	Total	14,500	1,193.1	489.5

* Includes exports.

ion will increase in pace with demand and the level of import dependence will remian at around 69 per cent. In the case of zinc and lead, domestic production is expected to increase so as to reduce import dependence from 56 per cent to 45 per cent for zinc and from 77 per cent to 66 per cent for lead.

(l) *Engineering industries:* The gross output of non-electrical engineering industries is expected to grow at the rate of 11.8 per cent per annum over the Seventh Plan period, of electrical engineering industries at 12.5 per cent, of transport equipment industries at 10.8 per cent per annum. Major advances in product developmet in machine tool industry are expected in the Seventh Plan. The automotive sector is expanding rapidly and major changes in product quality and technology will be effected during the Seventh Plan period. In other areas of machinery manufacture, the Seventh Plan proposes to expand domestic capabilities in such critical areas as oil-field equipment and process plant equipment where import dependence is presently high. The Plan also emphasises the need for product development and technology induction for the better utilisation of existing facilities in the engineering industry.

(m) *Electronics :* The Seventh Plan envisages a rapid expansion of the electronics industry both for the application of electronics in production processes and offices and for meeting consumer needs. The aggregate output of electronic goods is expected to go up from Rs. 2,090 crores in 1984-85 to Rs. 10,860 crores in 1989-90, which implies a growth rate of 39 per cent per annum. The Plan envisages a rapid expansion in the production of computers, telecommunication equipment, process control systems and consumer items like television sets.

Infrastructure :

3.47 The attainment of the production targets set for the Seventh Plan depends critically on the functioning of crucial infrastructural services like power supply and transportation. Bottlenecks arising from shortfalls in these services have lead to underutilisation of capacity and loss of output in recent years Hence the Seventh Plan lays great stress on ensuring that the investment and production targets for critical infrastructural services are met. At the same time, given the high capital intensity of these sectors we have also to emphasise measures to economise on the demand for these services through conservation measures. In order to economise in the use of electricity, greater caution is also necessary in the clearance of new power-intensive projects. Similarly, a well conceived policy of dispersal of industrial activities can lead to economy in the use of transport services.

3.48 Output projections for certain critical items are dealt with in what follows.

Electricity

The supply-demand balance for power supply in 1984-85 and 1989-90 is presented in Table 3.13. The demand for electricity is expected to grow at 12.2 per cent per annum over the Seventh Plan and reach 223.3 billion (KWH) by 1989-90. The Plan envisages the commissioning of 22,245 MW by 1989-90 and the level of supplies available from utilities and from captive plants should be sufficient to meet demands. This assumes an improvement in the utilisation of thermal power capacity which stood at 50.1 per cent in 1984-85.

Railways :

The demand for rail transportation in 1989-90 is presented in Table 3.14 In terms of originating freight traffic, the load on the railway systems is likely to be 340 million tonnes in 1989-90 as against 263 million tonnes in 1984-85. The average lead of hauls expected to be around 680 km. The Plan envisages that the growth in passenger traffic will be restrained to 2 per cent per annum and that, within this, priority will be given to long-distance passenger traffic and high density suburban traffic. The outlays for the Railways will be kept under continuous review so as to ensure that transport bottlenecks do not hamper the growth of the national economy.

TABLE 3.13

Demand—Supply Balance for Electricity

(Thousand million kwh)

Sl. No.	Item	1984-85	1989-90	Compound annual growth rate
A.	*Demand*			
1.	Industrial	75.0	139.30	13.2
2.	Domestic	15.27	26.88	12.00
3.	Agriculture	20.65	32.42	9.4
4.	Others	14.82	27.63	13.3
5.	*Total*	125.74	223.23	12.2
B.	*Supply*			
1.	Generated by utilities (2+3+4)	156.70	280.40	12.2
2.	Auxiliary consumption	10.86	18.23	—
3.	T and D losses	29.17	52.44	—
4.	Supply from utilities	116.67	209.73	12.5
5.	Generation by non-utilities (6+7)	10.37	15.00	7.7
6.	Auxiliary consumption	1.30	1.50	—
7.	Supply from non-utilities	9.07	13.50	8.3
8.	Total generation (1+5)	167.07	295.40	12.1
9.	Total Supply (4+7)	125.74	223.23	12.2

TABLE 3.14

Demand for Railway Traffic 1989-90

(Million tonnes of originating traffic)

Sl. No.	Commodity	1989-90 (target)
1	2	3
1.	Integrated steel plants	
	(i) Finished products from steel plants (pig-iron for sale and mild steel)	11.00
	(ii) Raw materials for steel plants other than coal	28.00
	Total	39.00
2.	Coal	152.00
3.	Iron ore for export	12.00
4.	Cement	23.00
5.	Foodgrains	24.00
6.	Fertilisers	15.00
7.	POL products	22.00
8.	Other goods	38.00
9.	Railway materials	15.00
	Grand Total	340.00

Other transport : The traffic handled by the major ports at the end of the Seventh Plan has been assessed at 147 million tonnes, as against 106.73 million tonnes in 1984-85. Coastal shipping is expected to carry 7 million tonnes of coastal cargo. The growth in passenger traffic of Air India has been assessed at 4 per cent per annum, and that of Indian Airlines has been moderated to 8 per cent per annum.

Communications : The Seventh Plan envisages the addition of 9.5 lakh direct exchange lines (DELs). A substantial expansion is also envisaged in long-distance switching and transmission and overseas communication. A major change will be the introduction of electronic exchanges.

TABLE 3.14(a)

Import Availability Ratios of Steel, Fertilisers, Crude Oil and Petroleum Products

(Thousand tonnes)

1	1979-80	1983-84	1984-85 (estimated)	1989-90 (estimated)
	2	3	4	5
A. *Finished steel*				
1. Production	6,900	6,140	8,690	12,650
2. Imports	1,898	N.A.	1,990	1,593
3. Availability (gross)	8,798		10,680	14,243
4. (2) as per cent of (3)	21.57		18.63	11.18
B. *Fertilizers*				
(a) *Nitrogenous*				
1. Production	2,226	3,485	3,917	6,560
2. Imports	1,295	656	2,020	2,540 – 2, 740
3. Availability (gross)	3,521	4,141	5,937	9,100 –9,300
4. (2) as per cent of (3)	36.78	15.84	34.02	27.91 –29.46
(b) *Phosphatic*				
1. Production	757	1,048	1,264	2,190
2. Imports	237	143	745	810 –1,010
3. Availability (gross)	994	1,191	2,009	3,000 - 3,200
4. (2) as per cent of (3)	23.84	12.01	37.08	27.00 –31.56
(c) *All Fertilizers*				
1. Production	2,983	4,533	5,181	8,750
2. Imports (including K_2O)	2,005	1,355	3,636	4,750 –5,250
3. Availability (gross)	4,988	5,888	8,817	13,500 –14,000
4. (2) as per cent of (3)	40.20	23.01	41.24	35.19 - 37.50
C. *Crude oil*				
1. Production	11,766	26,020	28,990	34,530
2. Imports	16,121	10,445[1]	7,164[1]	13,510 –14,360

1	2	3	4	5
3. Availability (net)	27,887	36,465	36,154	48,040 —48,890
4. (2) as per cent of (3)	57.81	28.64	19.82	28.12 —29.37
D. *Petroleum products*				
1. Production	25,794	32,926	33,226	45,060 —45,470
2. Imports	4,724	4,328	6,013	6,940 —7,200
3. Availability (gross)	30,518	37,254	39,239	52,000 —52,670
4. (2) as per cent of (3)	15.48	11.62	15.32	13.35 —13.67

(1) Net of crude exports. Figures of crude oil and petroleum products for 1984-85 are provisional.

(2) Of this, 1.5 million tonnes is assumed to be available for export.

TABLE 3.15

Material Balance : Coal : 1989-90

(Million tonnes)

Sl. No.	Item	1984-85 (estimated)	1989-90 (requirements)
1.	Steel Plants & coke ovens	23.70 +0.70*	41.10
2.	Power	62.21 (2.15)	120.00 (9.00)
3.	Railways	9.50	8.00
4.	Cement	7.09	12.60
5.	Fertilisers	3.86	6.50
6.	Soft Coke/LTC	2.15	5.00
7.	Other industries		
	(a) Captive Power (b) Brick/Textiles etc.	26.46	10.00 29.00
8.	Colliery consumption	4.15	4.00
9.	Export	0.11	0.50
10.	Total requirement	139.23 +0.70* Say: (2.15)	236.70 237.00 (9.00)
11.	Production	147.44	226.00
12.	Imports	0.70	11.00
13.	Change in stocks	(+)8.21	

*Imported Coal.

Note : Figures in brackets relate to middlings.

Social services

3.49 The Seventh Plan lays great stress on human resources development and a major component in this is the expansion of the social infrastructure for education, health care, water supply and sanitation. Moreover, there will be special emphasis on raising the quality of education and health care service for general development.

Education : Enrolment in elementary education (Class I—VIII) is expected to increase by 25 million and cover 92 per cent of the population in the age-group 6—14 years by 1989-90. In addition, non-formal systems will be used to bring closer the objective of universalisation of elementary education. Secondary school enrolment is expected to go up by 5 million partly through better utilization of existing schools, and with a special emphasis on vocationalisation. Special efforts will be made to improve the quality of education. As part of this drive, model schools will be set up in each district to impart quality education to promising children, particularly those coming from rural areas. Adult literacy programmes will be pursued with the objective of covering all illiterates in the age-group 15—35 by 1990. In higher education and technical education, the emphasis will be on consolidation and improvements in quality.

Health : By the end of the Seventh Plan, the infrastructure for primary health care as required on present population norms would be fully operational with regard to village health guides, sub-centres, primary health centres and multipurpose health workers. Programmes for the control of communicable diseases, of health services research and of health education will be strengthened. The Plan envisages universal immunisation under the expanded programme of immunisation. The family welfare programme will be implemented with greater vigour so as to achieve couple protection rate of 42 per cent, with increased emphasis on female education and maternal and child health services.

Water supply and sanitation : During the Seventh Plan, the aim, in keeping with the objectives of the International Drinking Water Supply & Sanitation Decade (1981—91), is to provide adequate drinking water facilities for the entire population both in urban and in rural areas and sanitation facilities for 80 per cent of the urban population and 25 per cent of the

rural population.

Housing and urban development : The Seventh Plan aims at providing housing assistance to 2.71 million poor rural families. The promotion of self-help housing and rural housing for economically weaker sections will stimulate and support private housing, especially for middle and lower income groups. Around 9 million slum-dwellers will benefit from a programme for the environmental improvement of slums.

3.50 *Meeting the energy requirements of rural areas :* The Seventh Plan seeks to extend the benefit of electricity to 1.18 lakh villages and energise 23.9 lakh pumpsets for irrigation. In order to meet more effectively the growing demand of energy for purpose of cooking, supply of fuel wood has been included as an additional component of the minimum needs programme. A large scale programme has been drawn up for the development of fuel wood plantations by distribution of seedlings. It is also proposed to expand very substantially the programme for the installation of new improved smokeless chullahs in the rural areas. The programme for the development and utilisation of bio-gas is also sought to be expanded very substantially. Research and development efforts designed to make increasing use of new and renewable sources of energy for meeting the requirement of rural areas will be intensified.

Regional balance

3.51 The pattern of growth envisaged for the Seventh Plan is expected to contribute towards the reduction of inter-regional disparities in levels of development. The Plan lays great stress on increases in agricultural productivity particularly for rice, coarse cereals, pulses and oilseeds. At the programme level, special efforts are being mounted for rice production in the eastern region and for dryland and rainfed agriculture. This orientation of agricultural strategy along with area development programmes for drought prone, desert, hill and tribal areas will help raise agricultural productivity in the backward regions which, given the high share of agriculture in income generation, will help to reduce disparities in per capita income.

3.52 The Seventh Plan also envisages a major programme in human resource development. In primary health care, the basic infrastructure of sub-centres and primary health centres required on present norms will be fully in position. This will reduce greatly interregional disparities in access to health services. The universalisation of elementary education and the elimination of illiteracy amongst young adults, which are important Seventh Plan aspirations, will reduce interregional disparities in educational status. A similar reduction in interregional disparity can be expected in other components of the minimum needs programme like water supply, rural roads and rural electrification. Hence, the successful implementation of the Seventh Plan will lead to substantial improvements in the human resources potential of backward regions and in their access to basic infrastructure.

3.53 Agricultural productivity and human resource potential are the critical determinants of a region's economic status and the reduction in interregional disparities in these two elements will help greatly in the task of reducing regional imbalances. Moreover, the Seventh Plan will continue certain policy measures which seek to attack the problem of regional imbalances more directly.

3.54 The transfer of resources from the Central Government to the State Governments for meeting Plan expenditure takes into account the relative economic backwardness of each State. The Gadgil formula for allocation of Central assistance gives first priority to meeting the needs of special category States (the five North-eastern States of Assam, Meghalaya, Nagaland, Manipur, and Tripura together with Sikkim, Jammu & Kashmir and Himachal Pradesh). Per capita Central Assistance to these States is very much higher than the national average. The formula, as modified by the National Development Council for the Sixth Plan, also provides that 20 per cent of the balance of Central assistance is distributed only to the States whose per capita income is below the national average. Per capita Central assistance to States with a per capita income significantly below the national average has been higher than per capita Central assistance to other Gadgil formula States since the Fifth Plan. In the Seventh Plan, this bias in favour of economically backward States will continue. In addition, the need to step up investments in the economically backward States will be kept in view while allocating resources under various Centrally-sponsored Schemes by different Central Ministries. In the Sixth Plan the formula for the allocation of market borrowings was revised to ensure higher allocations for States whose per capita income is below the national average. A similar treatment has been accorded to these States in the Seventh Plan. It would also be necessary to take special steps for greater absorption of institutional credit in the less developed regions. The Seventh Plan also envisages the continuation of the investment subsidy, transport subsidy, concessional finance and other promotional measures for industrial units set up in backward districts. These policy measures will be modified and strengthened so as to make them more effective in the task of diversifying the occupational structure in backward areas.

Some Macro-economic Implications

3.55 The major macro-economic implications of achieving the growth and changes contemplated in the Plan are dealt with briefly below.

Savings

3.56 Public sector savings will have to increase from the realised value of around 4 per cent of GDP in the Sixth Plan to an average value of 4.5 per cent over the Seventh Plan period. For achieving this order of public savings, positive measures will be needed to increase savings of Government and the savings of public enterprises.

3.57 The ratio of financial saving to the total household saving has been projected to increase significantly from 43 per cent in the Sixth Plan to 47 per cent in the Seventh Plan. Apart from the creation of a macro-economic environment conductve to rapid growth of financial savings, the proposed shift in the composition of household savings will require more effective measures for the mobilisation of household savings on the part of financial institutions.

Consumption

3.58 In the consumption pattern, a higher weightage has been given to food consumption mainly because of the expected improvement in income distribution. This will need to be protected by ensuring that the production potential particularly of small and marginal farms is adequately exploited and by containing the relative prices of foodgrains through the expansion of the public distribution system, particularly in the remote areas. Research and development effort, extension support and institutional arrangements for credit and marketing will need much greater attention to meet the requirements of small and marginal farmers.

Industry

3.59 The Seventh Plan envisages a significant acceleration in the rate of growth of industry. For this growth rate to materialise, an acceleration in the export growth and the growth in the domestic demand for manufactured goods have been stipulated. Necessary policy measures will be needed to promote an efficient industrial structure which lays emphasis on cost reduction, quality improvement and upgradation of technology. Structural reforms will be needed in the management of public enterprises so that these enterprises can meet production targets and also generate adequate internal resources for their expansion.

CHAPTER 4

FINANCING THE PLAN

4.1 The financing of a plan involves the diversion, through the use of various financial instruments including taxation, of the required volume of real resources for purposes of investment, without inflation and subject to certain other basic considerations such as equity and efficiency. The inter-dependency of physical and financial planning arises from the fact that while the volume of resources that could be diverted for investment would depend on the rate of investment and the growth of income, the feasible volume of investment, in turn, would depend on how much resources could be mobilised without inflation. Thus, the physical plan targets of investment and the financial targets have to be worked out simultaneously, and in the present exercise, the two sets of targets have been made consistent with each other through a process of iteration.

4.2 The total of resources available for investment consists of domestic savings and inflow of capital from abroad. The volume of domestic savings that could be mobilised depends on the pattern of past behaviour and long-term tendencies in the economy such as the propensity to save of the population and the elasticity of the tax system as well as on conscious efforts to raise the rate of savings through taxation, incentives and institutional and policy changes.

4.3 Although it is true that there is scope for increasing the productivity of capital, in its present stage, the Indian economy requires and can sustain a higher rate of savings than realised in recent years. The rate of gross savings which had reached a peak of 24.6 per cent in 1978-79, has stagnated around 23 per cent during the Sixth Plan. One of the important tasks of policy in the Seventh Plan would be to induce a rise in rate of domestic savings.

4.4 Financial planning involves not only the mobilisation of resources to match the targetted magnitude of physical investment, but also the allocation of the total available savings among the major investing sectors according to their respective requirements. In what follows, total domestic resource availability is arrived at through projections of sectoral savings, i.e., savings by the household, private corporate, government and public enterprise sectors. Then, given the investment targets of the sectors and allowing for inter-sectoral transfers and the expected inflow of capital from abroad (which includes the desired amount of commercial borrowings), the balance between sources and uses of funds is worked out for each sector. This gives the amount of savings to be transferred from the 'surplus' to 'deficit' sectors.

4.5 In projecting the savings of the Government sector (current revenue-current expenditure), a view has been taken of the amounts of additional resource mobilisation that could be reasonably undertaken by the Central and State Governments on revenue account through improvement in administration, structural changes and adjustments in rates. Similarly in regard to public enterprises, in estimating savings (retained profits plus depreciation) effects of action to improve productivity and efficiency as well as adjustments in prices where considered necessary and reasonable, have been taken into account. Given the projected total tax revenues and transfers from Government to the household sector, the disposable income of the latter is derived. Household sector saving is then arrived at by applying trend values of the savings rate. The savings of the private corporate sector have been estimated separately on the basis of the analysis of the operations and finances for the non-financial companies and on the basis of past trends for the financial companies.

4.6 Table 4.1 gives the disposable income, consumption and savings by sectors. Household sector saving is estimated at 20.5 per cent of its disposable income in 1984-85 and is expected to remain at the same level in 1989-90 but public sector saving is expected to rise from 29.1 per cent to 32.4 per cent of its disposable income. The rise in the savings ratio of the public sector arises from its incresing share of disposable income (from 14.6 per cent to 15.7 per cent) and the high marginal savings rate (41 per cent) assumed for the sector. All of the additional resources mobilised by public enterprises would go to augment the resources for investment. The share of the public sector in aggregate domestic saving would rise from 18.5 per cent to 20.9 per cent and that of the household sector would decline from 74.2 per cent to 69.6 per cent. Thus the success of the plan is predicated on a large savings effort by the public sector. The measures to be taken towards this end are indicated later in the Chapter.

4.7 The relative shares of the different sectors in aggregate domestic saving for the plan period as a whole are indicated in Table 4.2. The shares of the public and private sectors are expected to be 19 per

TABLE 4.1

Disposable Income, Consumption and Saving by Sectors

Sl. No.	Item	Rs. crores at 1984-85 prices		Percentage of total	
		1984-85	1989-90	1984-85	1989-90
1.	*Public sector*				
	(i) Disposable income	32198	44606	14.6	15.7
	(ii) Consumption	22834	30163	10.4	10.6
	(iii) Saving	9364	14443	4.2	5.1
2.	*Private corporate and cooperative sector*				
	(i) Disposable income	3737	6514	1.7	2.3
	(ii) Consumption	—	—	—	—
	(iii) Saving	3737	6514	1.7	2.3
3.	*Household sector*				
	(i) Disposable income	183945	233325	83.7	82.0
	(ii) Consumption	146308	185285	66.5	65.1
	(iii) Saving	37637	48040	17.2	16.9
4.	*Total*				
	(i) Disposable income	219880	284445	100.0	100.0
	(ii) Consumption	169142	215448	76.9	75.7
	(iii) Saving	50738	68997	23.1	24.3

cent and 81 per cent respectively. The share of the household sector would continue to be dominant (71 per cent) though less than in the past. Of the total household sector savings, 47 per cent are estimated to be held in the form of financial assets.

4.8 In estimating the total resources availability for plan investment, while conscious effort to raise the volume of savings through additional resource mobilisation effort on the part of the public sector is postulated, private sector savings have been estimated on the basis of past data. It would not be realistic to assume a significant rise in the savings rate in the short run. However, given that the value of the estimated marginal savings rate is only of the order of 28.4 per cent, there is scope for raising it through appropriate policy and institutional changes.

4.9 Aggregate gross domestic savings during the Seventh Plan would amount to Rs. 302,366 crores. Inflow of foreign capital to the extent of Rs. 20,000 crores is postulated. The aggregate resources would, therefore, amount to Rs. 322,366 crores, which is equal to the amount of investment contemplated in the plan. The savings of the sectors, inter-sectoral capital transfers (lending/borrowing) and investment by the sectors are given in Table 4.3. The own savings of the public and the private corporate sectors fall short of their investment plans while the household sector has a surplus of saving over its investment.

TABLE 4.2

Gross Domestic Saving by Sector of Origin (1985-90)

(At 1984-85 prices)

Sl. No.	Sector	Amount (Rs. crores)	Percentage of total
1.	Public saving	57422	19.0
	(i) Government and public enterprises (non-financial)	49156	16.3
	(ii) Public enterprises (financial)	8266	2.7
2.	Private saving	244944	81.0
	(i) Household sector	216165	71.5
	(a) Financial saving	102253	33.8
	(b) Physical assets	113912	37.7
	(ii) Private corporate including cooperative sector	28779	9.5
3.	*Total domestic saving*	*302366*	*100.0*

It is envisaged that there would be a transfer of savings from the household sector to the extent of Rs. 102,253 crores to the other two domestic sectors. And, additionally, the inflow of capital from the rest of the world to the public sector would amount to Rs. 18,000 crores and to the private corporate sector Rs. 2,000 crores. The details of financing of the investment by each of the domestic sectors are shown in Table 4.4. These details provide a broad picture of the flow of funds on capital account in the economy

during the Seventh Plan period. It is seen that the public sector investment of Rs. 154,218 crores is financed to the extent of 32 per cent by own saving, 56 per cent by draft on private savings and by around 12 per cent by foreign borrowings. The corporate sector's total investment of Rs. 54,236 crores is

TABLE 4.3

Financing of Aggregate Outlay (1985—90)

(Rs. crores at 1984-85 prices)

Sl. No.	Sectors	Own savings	Transfers from domestic sectors			Rest of the world	Investment	Current outlay	Aggregate outlay
			Public	Private corporate	House hold				
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Public	49156 +8266*	(—)8266	—	87062	18000	154218	25782	180000
		57422							
2.	Private corporate	28779	8266	—	15191	2000	54236	—	54236
3.	Household	216165	—	—	(—) 102253	—	113912	—	113912
	Total	302366	—	—	—	20000	322366	25782	348148

* Of Rs. 10,000 crores savings of the financial institutions, Rs. 8266 crores would be available.

TABLE 4.4

Financing of Investment (1985—90)

(Rs. crores at 1984-85 prices)

	Private corporate	Government	Household	Total
Investment	54236	154218	113912	322366
Financed by				
1. Own resources	28779	57422*	216165	302366
2. *Borrowing from* :				
A. *Household sector*	15191	87062	(—)102253	—
B. *Government sector* (Public financial institutions)	8266	(—)8266	—	—
C. *Rest of the world*	2000	18000	—	20000
Total borrowings (*A*+*B*+*C*)	25457	96796	(—)102253	20000

N.B. (i)*Includes Rs. 8266 crores public sector financial institutions' savings available for investment.
(ii) (—) Sign indicates lending.

expected to be financed to the extent of around 53 per cent by its own saving, 28 per cent through recourse to the household sector saving via the capital market, 15.3 per cent by the public sector and the remaining 3.7 per cent by foreign borrowing.

4.10 Of the total household sector savings of Rs. 216,165 crores, financial savings are estimated to account for Rs. 102,253 crores, forming 47 per cent. Projections of physical assets in the household sector have been made on the basis of their relationship with personal disposable income in the past years. The details and the forms in which financial savings will be held are given in Table 4.5, while the investments through which the draft on household sector's savings is effected are indicated in Table 4.6. The total financial savings of the household sector amount to Rs. 134,681 crores in gross terms and to Rs. 102,253 crores in net terms (i.e. net of increase in liabilities)

over the five-year period. The major forms of financial savings of the household sector are : deposits with scheduled commercial banks and cooperative societies, currency, life funds, provident funds, claims on Government securities including Unit Trust of India and corporate shares. The methods of estimation of the amounts which would be held in different forms are given in Appendix-I.

Private Corporate Sector Savings

4.11 The private corporate sector is divided into two parts viz., (i) non-financial institutions and (ii) financial institutions. Non-financial institutions include (i) non-Government public and private limited companies and (ii) co-operative non-credit societies.

TABLE 4.5

Household Sector Financial Savings (1985—90)

(Rs. crores at 1984-85 prices)

1. Currency	8527
2. Deposits with scheduled commercial banks including cooperatives	57288
3. Non-banking companies deposits	8592
4. Life funds	9845
5. Provident fund	34675
6. Net claims on Government	8750
7. Corporate/cooperative share and debentures	2911
8. Security of term-lending institutions	23
9. Unit Trust of India	2500
10. Other assets	1570
Total	134681
Liability	(—)32428
Net financial assets	102253

TABLE 4.6

Draft on Household Financial Saving by Instruments (1985—90)

(Rs. crores at 1984-85 prices)

Items	Government	Private corporate sector	Total
1. Currency	8527	..	8527
2. Deposits with banks	28107	3595	31702
3. Non-Banking deposits	1857	5600	7457
4. Life Insurance Corporation	4950	874	5824
5. Provident fund	34675	..	34675
6. Claims on Government	7064	..	7064
7. Corporate shares	..	2911	2911
8. Securities including Unit Trust of India	1882	641	2523
9. Other assets	—	1570	1570
Total	87062	15191	102253

The financial institutions comprise (a) co-operative banks and credit societies (b) non-nationalised commercial banks and (c) private financial and investment companies.

4.12 The projections of the savings of non-Government non-financial public and private limited companies for 1985-90 have been worked out on the basis of the detailed studies of sales, fixed capital formation, inventories, borrowings, depreciation, profits, etc. The savings of the private financial institutions and co-operatives have been estimated on the basis of past trends. The gross savings of the private corporate sector have been placed at Rs. 28,779 crores during the Seventh Plan.

Resources for the Public Sector Outlay—Sixth Plan

4.13 An analysis of the various sources of financing the public sector outlay in the Sixth Five-Year

TABLE 4.7

Pattern of Financing the Public Sector Plan Outlay—Sixth Plan : 1980—85

(Rs. crores)

	Original Estimates			Latest estimates		
	Centre	States (at 1979-80 prices)	Total	Centre	States (Current prices)	Total
PLAN OUTLAY	48900	48600	97500	60689	50132	110821
1. Balance from current revenues						
(a) At 1979-80 rates	1178	13300	14478	(—)4427	6320	1893
(b) Additional resource mobilisation	8390	4134	12524	13133	7013	20146
Total (a+b)	9568	17434	27002	8706	13333	22039
2. *Contribution of Public Enterprises*						
(a) At 1979-80 rates	9911	(—)516	9395	12418	(—)6608	5810
(b) Additional resource mobilisation	3900	4878	8778	5700	7124	12824
Total (a+b)	13811	4362	18173	18118	516	18634

	Original Estimate			Latest Estimate		
	Centre	States (at 1979-80 prices)	Total	Centre	States (Current prices)	Total
3. Market borrowings	15000	4500	19500	17401	4719	22120
4. Small savings	2112	4351	6463	3855	6057	9912
5. Provident funds	1660	2042	3702	1805	2151	3956
6. Term loans from financial institutions	—	2722	2722	—	2582	2582
7. Miscellaneous capital receipts (Net)	6170	(—)2161	4009	10090	(—)2725	7365
8. Inflow of foreign resources	9929	—	9929	8529	—	8529
9. Drawing down of foreign exchange reserves	1000	—	1000	—	—	—
10. Deficit financing/uncovered gap	5000	—	5000	10927	4757	15684
11. Aggregate resources	64250	33250	97500	79431	31390	110821
12. *Central assistance*						
(a) For State Plans	(—)15350	(+)15350	—	(—)17567	(+)17567	—
(b) For relief against natural calamities	—	—	—	(—)1175	(+)1175	—
13. *Resources available for the plan*	48900	48600	97500	60689	50132	110821

Plan (Table 4.7) shows that the balance from current revenues at constant rates underwent a sharp deterioration both for the Centre and the States. Although the additional resource mobilisation through budgetary measures undertaken by the Centre and the States exceeded the targets originally envisaged, the surplus from current revenues, including the revenue from additional resource mobilisation efforts fell short of the original estimate by Rs. 862 crores in the case of the Centre and by Rs. 4,101 crores in the case of States (all in current prices).

4.14 The surplus from current revenues including the yield of additional resource mobilisation efforts which was envisaged to finance 28 per cent of the Sixth Plan public sector outlay, actually contributed only 20 per cent of the financing. The deterioration in the contribution from current revenues was due mainly to the sharp rise in non-plan expenditure partly resulting from the inflationary pressures developed during the Sixth Plan period. Besides the increase in the cost of maintenance of normal services, additional D.A. instalments had to be accommodated from time to time. In fact, inflation, far from enabling Government to increase the resources at its disposal, eroded them in real terms because revenues did not grow as fast as the cost of the goods and services bought by Government. Also, additional resource mobilisation efforts by the public enterprises were neutralised to a large extent by cost increases. Apart from the impact of inflation, certain large items of current outlay, such as defence, subsidies and interest liabilities have also been growing at a fast pace at the Centre. While some of the States have been increasing their commitments unrelated to their plans, their commitments arising from plan expenditure seem to have also grown out of pace with the increase in their revenue receipts (reckoned at the base year rates) which have not shown a corresponding buoyancy to fully offset the liabilities arising on account of growing expenditure. The ratio of tax to gross domestic product, which was 15.56 per cent in 1980-81, increased to 16.65 per cent in 1982-83 but came down to 16.25 per cent in 1983-84. Similarly, the ratio of non-tax revenues to gross domestic product, accounting for 18 per cent of total Government revenues, increased from 3.32 per cent in 1980-81 to 3.80 per cent in 1982-83 but decreased to 3.50 per cent in 1983-84. The automatic growth in revenues (i.e. without ARM) was less than proportionate to the growth in national income, and thus the yield of additional measures undertaken during the Sixth Plan was partly neutralised by the fall in the automatic growth in revenues. While no doubt, it is necessary to take measures both at the Centre and the States to prevent the deterioration in budgetary savings, the reversal of the existing trend cannot be immediately ensured. This serious limitation cannot be lost sight of in evolving any scheme of development financing for the immediate future.

4.15 The contribution of public enterprises of the Centre at 1979-80 rates was higher by Rs. 2,507 crores than the original estimate. However, in the case of State public enterprises, there was a considerable deterioration. Originally they were estimated to incur a loss of Rs. 516 crores at base year rates, but, in fact, the amount of loss turned out to be Rs. 6608 crores. As a result, despite higher additional resource mobilisation by State public enterprises, the overall contribution amounted hardly to Rs. 516 crores as against Rs. 4,362 crores originally envisaged. While the total Sixth Plan expenditure of the Central and State public enterprises taken together was Rs. 56,360 crores, their contribution to plan resources (including the yield of additional measures) was Rs. 18,634 crores.

4.16 One of the major functions of public sector enterprises is to generate surpluses for financing further economic development. An analysis of Sixth Plan financing, however, shows that Central public enterprises financed only 28 per cent of their development outlay from their own internal resources. They mainly relied on budgetary support, which accounted for 56 per cent of their plan outlay. In the case of State enterprises like State Electricity Boards and State Road Transport Corporations, hardly 3.5 per cent of their developmental outlay was financed through their own internal resources. The dependence of State enterprises on State budgetary support was far greater than in the case of the Central enterprises. This is evident from the magnitude of commercial losses of Rs. 4,472 crores and Rs. 961 crores that State Electricity Boards and the State Road Transport Corporations, respectively, are estimated to have incurred during the Sixth Plan. Thus, public enterprises becoming a vehicle of resource mobilisation for financing development expenditure in the country remains a distant goal. While there can be no two opinions that surpluses generated by public enterprises would have to be the mainstay of development financing in future, it would not be realistic to assume that all public enterprises, both Central and States, would turn the corner immediately in the Seventh Plan period and discharge their expected role in resource generation for meeting the growing development expenditure in the country.

4.17 Owing to depletion of budgetary savings and the inability of the public enterprises to adequately contribute to the financing of their plan outlay through their own internal resources, the Government had to rely increasingly on domestic borrowings for financing public sector plan outlays. Total domestic borrowings accounted for 35 per cent of the Sixth Plan public sector outlay. In the earlier plans, excepting the Fourth Plan, domestic market borrowings ranged from 21 per cent to 28 per cent. Greater dependence on borrowings has implications in terms of increasing the burden on the Government budget for meeting interest payments as well as repayments of the principal amount. Further, in the case of a number of States borrowings which should have been appropriately utilised for financing capital expenditure, have been used partly for meeting revenue expenditure. This trend is quite indicative of the nature of resource erosion.

4.18 In short, the development financing structure which has emerged during the Sixth Plan shows serious limitations in the matter of generation of resources to cope with the increasing demand for development expenditure in the country.

4.19 In the face of the resource crunch, mobilisation of financial resources, therefore, presents a real challenge to be faced in the Seventh Plan, both by the Centre and the States. This would obviously require restructuring of the present pattern of development financing so as to rectify emerging imbalances and maintain sound financial planning to achieve the desired goals. Much would depend on how far the different instruments of resource mobilisation respond to the challenge under a dynamic situation and maintain their resilience to adjust themselves to structural and non-structural changes. It is obvious that the process of resource erosion would have to be immediately checked and also reversed, in due course, if development is to be protected. In essence, the Indian fiscal system would have to accomplish the delicate task of raising adequate resources in a non-inflationary manner, besides providing enough incentives for savings and growth in production.

4.20 Within the above broad framework of fiscal objectives, the resources for financing the public sector outlay during the Seventh Plan have been assessed. The assessment has taken into account the past trends, the postulated rate of growth of the economy and the outlook for the future in different sectors of the economy. The estimates based on detailed exercises undertaken by the expert groups have been re-assessed in the light of the recommendations of the Eighth Finance Commission and the Government decision thereon. Concerned Central Ministries, State Governments, Union Territory Administrations, Reserve Bank of India, Life Insurance Corporation, General Insurance Corporation, Industrial Development Bank of India, the Provident Fund Commissioner, the Bureau of Public Enterprises, important public sector enterprises of the Central and State Governments, and various other agencies have been consulted at different stages to firm up the estimates. The estimates of resources have been worked out at 1984-85 prices, assuming a non-inflationary situation over the Seventh Plan period. The revised projections are in broad alignment with the growth rates of receipts adopted by the Eighth Finance Commission for 1984—89 period.

Financial Resources for the Public Sector Plan—Seventh Plan

4.21 The aggregate resources for financing the public sector outlay in the Seventh Plan amount to Rs. 180,000 crores at 1984-85 prices. The details of the estimates are set out in Table 4.8. Separate estimates for the Centre and the States are given in Appendix-II.

4.22 It will be seen that budgetary resources including borrowings and public enterprises would provide Rs. 148,000 crores or 82.2 per cent of the total resources required for financing the Plan, External resources would account for Rs. 18,000 crores or

10 per cent of the assessed resources. The balance of the required plan resources amounting to Rs. 14,000 crores (7.8 per cent of the total) would be met through deficit financing. Brief comments on individual items of financing are given below:

Balance from Current Revenues :

4.23 The aggregate balance from the current revenues of the Central and State Governments, after meeting their current non-Plan expenditure, is estimated at (—) Rs. 5,249 crores at 1984-85 rates of taxation. The estimate takes into account the normal growth of tax and non-tax revenues in the light of past trends, their likely response to the anticipated growth of production and incomes in the coming years and improvement in the collections. The provision of the States' share in Central taxes and statutory grants for the period 1985—90 is made on the assumption that the recommendations of the Eighth Finance Commission applicable to 1988-89 would also apply to the terminal year of the plan. Adjustments in the resources of the Centre and the States to take care of the recommendations of the next Finance Commission would be made as and when the Government's decision thereon is made applicable.

TABLE 4.8

Estimates of Financial Resources for the Public Sector Plan—1985—90

(Rs. crores at 1984-85 prices)

	Amount
1. Balance from current revenues at 1984-85 rates of taxes	(—)5,249
2. Contribution of public enterprises	35,485
3. Market borrowings (net)	30,562
4. Small savings	17,916
5. State provident funds	7,327
6. Term loans from financial institutions	4,639
7. Miscellaneous capital receipts (net)	12,618
8. Additional resource mobilisation	44,702
9. Net capital inflow from abroad	18,000
10. Deficit financing	14,000
11. Aggregate resources	180,000

4.24 On the expenditure side, moderate annual increases have been allowed to meet the normal growth of various items of non-plan expenditure. Besides, adequate provisions have been made to ensure proper maintenance of various assets created through public sector investments over the last six plans, such as roads, irrigation systems, public buildings and other facilities. Unless strict financial discipline is enforced and the growth of non-plan expenditure effectively controlled, the balances estimated on revenue account are likely to deteriorate further and consequently create an imbalance in the financing of the approved outlays.

Central Government

4.25 The total revenue receipts of the Centre at 1984-85 levels of tax rates have been estimated at Rs. 138,399 crores for the Seventh Plan period, after transferring to the States their share in the Central taxes. The non-plan revenue expenditure is estimated at Rs. 150,410 crores, thus leaving a negative balance of Rs. 12,011 crores for the plan. The broad details of the estimate are shown in Table 4.9.

4.26 The estimate of the balance from current revenues of the Centre is based on the following major assumptions :

(i) The revenues from the major taxes, viz., income tax, union excise duties and customs have been estimated on the basis of the same growth rates as adopted by the Eighth Finance Commission for the projections of such receipts for 1984-89.

(ii) With the growing importance of borrowings in the financing of the public sector plan, almost one-third of the outgo from the non-plan revenue expenditure of the Centre is accounted for by interest payments. The estimate for the next five years is worked out on the basis of the prevailing rates of interest on different categories of loans and takes into account both the outstanding loans/credits as also the likely level of fresh borrowings on a net basis for the Seventh Plan period.

(iii) A significant proportion of the non-plan revenue expenditure is currently being provided to subsidise certain activities outside the plan, which have a direct bearing on the growth of the economy aimed at in the plan or are considered essential for maintaining price stability. This mainly includes subsidies on fertilisers, food and export promotion.

TABLE 4.9

Balance from Current Revenues—Centre (1985—90)

(Rs. crores at 1984-85 prices)

	Amount
I. *Revenue receipts*	
1. Tax revenues (gross)	138,941
2. Less: States' share of Central taxes	(—)36,087
3. Tax revenues (net)	102,854
4. Non-tax revenues	35,545
Total revenue receipts	138,399
II. *Non-Plan revenue expenditure*	
1. Interest payments	46,222
2. Subsidies	16,805
3. Defence	45,000
4. Other non-development expenditure	33,911

5. Maintenance expenditure on Sixth Plan Schemes	1,684
6. Grants to States, Union Territories and Local bodies	6,135
7. Grants to foreign Governments	653
Total non-plan revenue expenditure	150,410
III. *Balance from current revenues* (I-II)	(—)12,011

Since it is essential to maximise the resources for the plan, the provision for subsidies for the next five years has been kept at the minimum needed for ensuring that the overall output growth and price stability were not adversely affected.

(iv) The estimate includes provisions in respect of additional D.A. instalments sanctioned by the Centre upto the end of 1984-85. However, fresh expenditure liability which is likely to devolve on the Centre as a result of the recommendations of the Fourth Pay Commission has not been taken into account as its magnitude is not known at this stage.

(v) Necessary provisions for security environment as well as for maintenance of assets created under the Sixth Plan schemes have been made to arrive at the balance from current revenues.

State Governments

4.27 The combined revenue receipts of all the State Governments for the Seventh Plan period have been estimated at Rs. 141,124 crores at 1984-85 levels of tax-rates and fees. As against this the non-plan revenue expenditure for the same period is estimated at Rs. 134,362 crores. Thus, a net balance of Rs. 6,762 crores from current revenues would be available for financing the plan in the State sector. The broad details of the estimate are shown in Table 4.10. Detailed discussions were held with the officials of the State Governments to estimate the growth of revenue receipts and non-plan expenditure for the plan period. The tax receipts of the State Governments have been projected keeping in view the trends observed during the past years and the growth rates adopted by the Eighth Finance Commission for the individual States for different taxes. The non-tax revenues under 'Forests' have been estimated to increase at a rate in accordance with the programmes of the State Governments under forestry working plans.

4.28 As regards provision for non-plan expenditure, except in the case of certain important areas, such as roads and bridges, hospital and medical services, public buildings, police, etc, where higher growth in expenditure has been allowed with a view to ensuring optimum utilisation of capital assets and services already created, in all other areas, the expenditure growth of around 5 per cent per annum has been assumed. Besides, full provision has been made for the cost of all increases in the emoluments sanctioned by the State Governments for their employees, school teachers and employees of local bodies upto the end of 1984-85. In some States, Pay Committees have been appointed and State Governments have taken decisions to implement their recommendations. The liability arising as a result of such decisions on the part of the concerned State Governments has been provided to the extent firm estimates were available.

TABLE 4.10

Balance from Current Revenues—States (1985–90)

(Rs. crores at 1984-85 prices)

	Amount
I. *Revenue receipts*	
1. Tax revenues	79,396
2. Non-tax revenues	20,425
3. Share in central taxes	36,087
4. Grants from the centre	5,216
Total revenue receipts	141,124
II. *Revenue expenditure*	
1. Debt services	20,351
2. Other non-developmental and non-plan developmental expenditure	106,019
3. Maintenance expenditure on Sixth Plan schemes	7,992
Total revenue expenditure	134,362
III. *Balance from current revenues* (*I-II*)	6,762

Contribution from Public Enterprises

4.29 The gross surplus of public enterprises (retained profit plus depreciation), on the basis of 1984-85 rates of tariffs, fares and product prices, is estimated at Rs. 35,485 crores as shown in the Table 4.11.

Railways

4.30 The gross surplus of Railways during the Plan period is estimated at Rs. 4,225 crores which comprises mainly the depreciation provision. This estimate is based on the anticipated growth in freight and passenger traffic.

TABLE 4.11

Contribution from Public Enterprises (1985–90)

(Rs. crores at 1984-85 prices)

Enterprises	Amount
1. Railways	4,225
2. Posts & Telegraphs	1,729
3. Other central enterprises	31,500
4. State Electricity Boards	(—)1,569
5. State Road Transport Corporations	(—)415
6. Other state enterprises	15
Total	35,485

Posts & Telegraphs

4.31 In the case of Posts and Telegraphs, the gross surplus is estimated at Rs. 1729 crores comprising Rs. 2482 crores from the tele-communication wing and (—) Rs. 753 crores from the postal wing, based on the anticipated growth of tele-communication and posts and telegraphs services during the plan period.

Other Central Enterprises

4.32 The contribution of 'Other Central Enterprises' including Ports and DVC, taken together, is estimated at Rs. 31,500 crores as shown in the Table 4.12. The generation of the surpluses of this order assumes better capacity utilisation, improvement in operational efficiency and increase in productivity which is the basic thrust of the Seventh Plan.

State Enterprises

4.33 Among the State enterprises, the major ones, viz , State Electricity Boards and State Road Transport Corporations taken together are expected to incur cash losses at the existing levels of tariffs and fares which are reckoned at Rs. 1984 crores during the Seventh Plan period.

TABLE 4.12

Contribution of Other Central Enterprises

(Rs. crores at 1984-85 prices)

		Amount
I.	*Gross internal resources*	
	(i) Retained profits	5,184
	(ii) Depreciation	24,893
	(iii) Deposits etc.	1,698
	Total I	31,775
II.	*Utilisation*	
	(i) Loan repayments	4,917
	(ii) Working capital	2,600
	(iii) Other charges	317
	Total II	7,834
III.	*Total internal resources available for the Plan (I-II)*	23,941
IV.	Accrual to Oil Industry Development Board	5,259
V.	Accrual on account of Steel Development Fund	2,300
	Total (III+IV+V)	31,500

Market Borrowings

4.34 Taking into account the recent increase in the statutory liquidity ratio of bank investments in the securities of the Government and the relevant provisions governing the deployment of funds in such securities by other institutional subscribers, the net market borrowings for the plan period have been estimated at Rs. 36,108 crores. This estimate is derived on the assumption of a reasonably buoyant growth in the deposits of commercial banks through branch expansion and other measures and a significant increase in the investible resources of other subscribers like Life Insurance Corporation and Employees' Provident Fund.

4.35 Out of Rs. 36,108 crores of aggregate market borrowings, Rs. 30,562 crores are proposed to be drafted for financing the public sector outlay, leaving the balance amount of Rs. 5546 crores to be shared amongst the financial institutions. Of the available market borrowings for financing public sector outlay, Rs. 20,620 crores are allocated for financing the Central plan and the remaining Rs. 9,942 crores for financing the State plans. On this basis, the States' share of market borrowings works out to about 33 per cent and Centre's to 67 per cent.

4.36 Out of Rs. 9,942 crores of market borrowings provided for the State plans, an amount of Rs. 7,012 crores is distributed amongst the States by allowing a uniform step up over the base year level. Besides, market borrowings of Rs. 2,930 crores have been allocated to relatively less developed States for accelerating the tempo of development in those States.

Small Savings

4.37 The contribution to small savings collections has registered a significant rise over the past few years from Rs. 1,121 crores in 1980-81 to Rs. 3,300 crores in 1984-85. Taking into account the growth of households' contribution to small savings as well as from other agencies like the Employees' Provident Funds and other provident funds in the private sector in the light of the observed trend, the total collection of small savings over the plan period is estimated at Rs. 17,916 crores.

State Provident Funds

4.38 For the Seventh Plan, net accruals to State Provident Funds have been estimated at Rs. 2300 crores for the Centre and Rs. 5,027 crores for the States in the light of past trends, existing rates of contribution and anticipated increase in employment under the Central and State Governments.

Miscellaneous Capital Receipts

4.39 This item represents the net balance of receipts and disbursements under a number of budget heads. The capital receipts include recovery of loans and advances from agriculturists, Government employees, local bodies, etc., deposits of non-governmental provident funds and net accretion to deposits and funds. Allowing for the likely non-plan loans and advances to the public sector undertakings, Government employees, agriculturists and foreign governments, subsidy on imported fertilizers and adjustment of States' overdraft as on 31st March, 1985, the net balance under this head for the Centre and States is

estimated at Rs. 12,618 crores.

Term Loans from Financial Institutions

4.40 The financial institutions, viz., Life Insurance Corporation, General Insurance Corporation, Rural Electrification Corporation and National Bank for Agriculture and Rural Development are estimated to extend loans totalling Rs. 3539 crores to the States for various programmes in the fields of housing, water supply, power, transport and agricultural co-operatives. Further, Industrial Development Bank of India under its Bills Rediscounting Scheme is expected to provide Rs. 1,100 crores for the State Plans. The broad details of the loan funds estimated to flow from the financial institutions are shown in Table 4.13.

TABLE 4.13

Term Loans from Financial Institutions to States: (1985-90)

(Rs. crores at 1984-85 prices)

Institutions	Amount
1. Life Insurance Corporation/General Insurance Corporation	2,335*
2. Reserve Bank of India (NABARD)	222
3. Rural Electrification Corporation	982
4. Industrial Development Bank of India	1,100
Total	4,639

* Includes Rs. 100 crores of LIC loan to North Eastern Council.

Note:—The negotiated loans indicated above are in gross terms since repayments to these institutions have been provided for separately.

Additional Resource Mobilisation

4.41 The additional resource mobilisation by the Centre and the States including their enterprises is envisaged at Rs. 44,702 crores for the Seventh Plan. The specific measures to be adopted by the Centre and the States will have to be decided in the light of the economic situation as it emerges from year to year. However, the choice between different forms of resource raising measures would have to be such as to secure the requisite resources in a non-inflationary manner as also to stimulate growth, productivity and savings.

4.42 In the field of direct taxes, appropriate measures would have to be initiated towards securing better compliance, countering tax avoidance and reducing tax evasion. The recent reduction in the rates of income and wealth taxes would facilitate the strict enforcement of direct taxation. It is recognised that rationalisation and simplification of the tax structure greatly helps in better compliance and better enforcement. As regards the corporation tax, several changes have recently been introduced to simplify the structure. Further simplification may be possible; in particular the possibility of block depreciation allowance being granted for machinery in place of the existing machinerywise allowance might be explored as part of the rationalisation measures.

4.43 In the area of indirect taxes, the main thrust would have to be in the form of adjustment and rationalisation of tax rates. Besides, there seems to be scope for improving the elasticity of the Union excise duties by the gradual substitution of specific duties and specific-cum-ad-valorem duties by ad-valorem duties. Alternatively, the specific rates should be periodically adjusted keeping in view the rate of inflation. The existing tax concessions other than those which encourage production in the priority sectors would need to be reviewed and, wherever not justified on this consideration, discontinued.

4.44 In view of the large investments by the public sector in activities and programmes directly or indirectly benefiting the rural sector in general and the agricultural sector in particular, there is need to explore ways of raising revenues by tapping rural incomes in greater measure than hitherto, through both existing and new instruments.

4.45 Substantial effort is called for in mobilising additional resources by the public undertakings, both Central and States. For example, for achieving a return of 10 percent on the capital-at-charge, as suggested by the Paranjape Committee, the Railways would have to mobilise additional revenue of Rs. 5,736 crores. However, in view of the present constraints in the finances of the Railways, additional resource mobilisation through revision of fares, freights, etc., is envisaged to the extent of Rs. 2,500 crores. Keeping in view the expansion in the tele-communications programmes and need to reduce losses on postal operations, an amount of Rs. 250 crores of additional resource-mobilisation by these departmental undertakings has been assumed at this stage.

4.46 The financial performance of other Central public enterprises, in general, continues to be far from satisfactory. Currently, the plan outlays of these enterprises are financed mainly through extra-budgetary resources and Central budgetary support, while only one-third of their plan outlay is financed through their internal resources. In the interest of improving the viability of these enterprises and reducing their heavy draft on the public exchequer, it is envisaged that the Central enterprises, taken together, would mobilise additional resources of Rs. 11,490 crores over the plan period through rationalisation of their pricing policy and by other measures, viz., improvement in capacity utilisation, raising the productivity levels, and drawing down of the inventories etc.

4.47 Subsidies provided through the Central Budget

have over the past shown a progressive rise. Although it would not seem practicable to reverse the trend in the immediate future, possibilities should be explored for reducing all but the most essential subsidies, whether implicit or explicit, so as to augment savings for the plan.

4.48 For financing the Central plan, additional resource mobilisation by the Centre is expected to be of the order of Rs. 22,490 crores. Of this amount, Rs. 8,250 crores is likely to be raised by the Centre through tax and non-tax revenue measures while the Central public enterprises including Railways and Posts and Telegraphs are expected to net an additional revenue of Rs. 14,240 crores.

4.49 For financing the State Plans, the States have agreed to undertake additional resource mobilisation totalling Rs. 22,212 crores. Concerted efforts by the State Governments and their enterprises would be required for realising this target. In this, emphasis should be placed on fashioning an income-elastic tax system, tightening of tax administration and improving the productivity of public enterprises.

4.50 The States are expected to raise additional resources of about Rs. 13,000 crores through various tax and non-tax revenue measures which include, among others, changes in tax rates, reduction in tax evasion, rationalisation of tax laws and better collections. There is also scope for harmonisation of the tax rates of States within a region as also for tapping fresh avenues of revenues from tax and non-tax measures.

4.51 In the State enterprises sector, the commercial losses of the State Electricity Boards over the Seventh Plan period are expected to amount to Rs. 11,757 crores at the existing rates of tariff. Steps in the direction of improving the maintenance, reducing the over-staffing, bringing down the transmission and distribution losses and periodically adjusting the tariff rates could bring about substantial improvement in the financial performance of these enterprises. Considering various aspects including a certain degree of cost escalation adjustments, it would seem reasonable to expect the State Electricity Boards to adopt suitable measures to raise net additional revenue of Rs. 7,000 crores over the Seventh Plan.

4.52 There is also much leeway to be made up by the State Road Transport Corporations, whose combined losses at existing fares are estimated at Rs. 1,434 crores over the Seventh Plan period. Preliminary estimates indicate that with a revision in the bus fare by 1 paise per km in the first year of the plan and 2 paise per km in the third year and through a 5 per cent increase in efficiency through improvement in occupancy ratio, staff-bus ratio, fleet utilisation at optimum level and proper maintenance of bus fleet, these undertakings could altogether raise Rs. 2,700 crores during the Seventh Plan period. However, allowing for certain likely over-runs in the costs, etc., it would seem realistic to expect the State Road Transport Corporations to raise additional revenue of around Rs. 2,200 crores.

4.53 Among the departmental enterprises of the State Governments, receipts from multi-purpose, major and medium irrigation works are expected to fall short of working expenses by Rs. 966 crores over the Seventh Plan period. Water rates need to be fixed at reasonable levels so as to reduce the recurring burden of subsidies to irrigation works on the States' current revenues. During the Sixth Plan, the States have raised not more than Rs. 79 crores through revision in the irrigation rates against the target of Rs. 325 crores. During the Seventh Plan period, the States have necessarily to raise the irrigation rates with a view to covering at least the working expenses.

4.54 While setting the additional resource mobilisation target for the Seventh Plan, it is considered necessary to ensure that no real shortfall in financing the plan emerges as a consequence of utilising additional yields for meeting erosion in the resources estimated at the base level. The experience of the Sixth Plan indicates that although the Centre and the States together were estimated to have exceeded the plan target of additional resource mobilisation by Rs. 11,668 crores, this was more than offset by the deterioration in the balance from current revenues and the contribution of public enterprises, to the extent of Rs. 16,170 crores over the estimated level. It is, therefore, proposed that in the case of both the Centre and the States, any erosion in their contribution of resources estimated at the base level would have to be offset by raising additional resources over and above the revenue envisaged to be raised by fresh measures for financing the plan. In other words, additional resource mobilisation effort would be assessed net of deterioration.

Net Inflow of Capital from Abroad

4.55 The net inflow of external resources for the public sector plan for 1985—90 has been estimated at Rs. 18,000 crores at 1984-85 prices. These estimates are based on projections of balance of payments covering detailed estimates of imports, exports, current invisibles and capital transactions. The assumed net inflow from abroad constitutes 10 percent of the total public sector plan outlay.

Uncovered Gap/Deficit Financing

4.56 The resources estimated from the various sources add upto Rs. 166,000 crores as against the plan outlay of Rs. 180,000 crores for the public

sector. The gap of Rs. 14,000 crores is proposed to be covered through deficit financing. Taking into consideration the current price situation and the trends in the economy, the level of deficit financing, as contemplated, is considered to be within safe limits.

Central Assistance to States

4.57 The financial resources of the Centre are estimated at Rs. 129,039 crores. Of this amount, Rs. 29,737 crores would be transferred to the States as assistance for the State plans, leaving thereby a balance of Rs. 99,302 crores for financing the Seventh Plan outlay of the Centre including the Union Territories. The Central assistance of Rs. 29,737 crores for State plans has been allocated as shown in Table 4.14.

TABLE 4.14

Central Assistance for State Plans (1985—90)

(Rs. crores at 1984-85 prices)

		Amount
I.	*Area Programmes*	*2,459*
	(i) Hill areas	870
	(ii) Tribal areas	756
	(iii) North Eastern Council	575
	(iv) Border Areas Dev. Programme	200
	(v) Other programmes	58
II.	*Assistance for externally aided projects*	*3,800*
III.	*Assistance under modified Gadgil formula*	*23,627*
	(i) Special category States	7,102
	(ii) Other states	16,525
	Aggregate assistance (I+II+III)	*29,886*
IV.	Less: Adjustment for advance Plan assistance given for relief works	(—)149
V.	Net central assistance for State plans	*29,737*

Public Sector—Sources & application of funds

4.58 The details of resources to be mobilised through various instruments and their uses for meeting non-plan and plan expenditure during the Seventh Plan period, by the Central and State Governments, are presented in Appendix III.

Fiscal Implications of the Pattern of Financing

4.59 In the earlier plan periods, the automatic growth of tax revenues has been proportionate to, or slightly more than proportionate to, the growth in national income or GDP. But this did not happen during the Sixth Plan period. Every major tax declined as a percentage of GDP, without additional resource mobilisation between 1980-81 and 1984-85. At the Central level, even though the yield of additional resource mobilisation measures cumulated to 1.58 per cent of GDP by 1984-85, the ratio of Central tax to GDP rose only by 0.14 per cent. This shows that either additional tax measures such as rate increases cut into the automatic growth in revenues or the structure and the functioning of the tax system is such as not to enable it to respond to the growth of income and activity. The same behaviour is seen in respect of State taxes. Even the sales tax showed an automatic growth less than proportionate to the growth in income. Total State tax revenues, without additional resource mobilisation, declined as percentage of GDP from 5.09 to 4.83 during the Sixth Plan period.

4.60 It is also a matter of concern that direct taxes (excluding land revenue and the agricultural income tax) have steadily declined as a percentage of non-agricultural GDP at current factor cost over the last decade or so : it fell from 5.8 per cent of non-agricultural GDP in 1975-76 to as low as 4.2 per cent in 1983-84. Contrary to the expectation that with economic development the ratio of direct to indirect taxes would increase, as a result of poor performance of direct taxes the Government has been forced to rely increasingly on indirect taxes, which rose from 11.7 per cent of GDP at market price in 1975-76 to 14.0 per cent in 1984-85, while direct taxes fell from 3.4 per cent to 2.3 per cent during the same period.

4.61 The fact that there was a continuous decline in the proportion of direct taxes to non-agricultural GDP as well as to total GDP, and the experience of the Sixth Plan period during which, inspite of a substantial effort at additional resource mobilisation, through tax rate adjustments etc., amounting to nearly 2.3 per cent of GDP, the tax ratio rose only by 0.5 percentage point, clearly indicate that the tax system must be re-structured and/or its administration and enforcement improved significantly. This is one of the major tasks of long—term fiscal policy which should be initiated during the Seventh Plan period. For the Seventh Plan, the resource exercise projections are postulated on the assumption that automatic growth as well as policy measures would raise the aggregate tax ratio from 16.3 per cent in 1984-85 to 18.3 per-cent in 1989-90 . The success of the plan is crucially dependent on the achievement of this target.

4.62 Table 4.15 shows direct taxes as percentage of non-agricultural GDP in the period 1975-76 to 1983-84. It is seen that the ratios of the Central as well as the State direct taxes to GDP (except that of corporation tax) have steadily declined. This trend needs to be reversed.

4.63 The trends in public finances during the Sixth Plan and the budgetary projections for the Seventh Plan excluding additional resource mobilisation indicate the emergence of a serious resource crunch in the public sector, which is likely to persist. In view of this , there is an urgent need to formulate a long-term strategy for fiscal management and policy and for improving productivity in the public sector. This question is addressed in detail in Chapter 6.

TABLE 4.15

Direct Taxes As Percentage of Total Non-agricultural Gross Domestic Product At Current Factor Cost : 1975-76 to 1983-84

Nature of tax	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84
1. Corporation tax . . .	2.24	2.17	2.54	2.34	2.31	1.84	2.35	2.30	2.32
2. Tax on income	3.15	2.78	2.09	2.20	2.22	2.11	1.76	1.65	1.51
3. Wealth tax	0.14	0.14	0.10	0.10	0.11	0,09	0.10	0.09	0.08
4. Land revenue and agricultural income tax	0.68	0.52	0.50	0.53	0.37	0.28	0.32	0.27	0.27
5. Other direct taxes . .	0.26	0.41	0.35	0.16	0.13	0.25	0.41	0.41	0.27
6. Total direct taxes . .	6.47	6.02	5.58	5.33	5.14	4.57	4.94	4.72	4.45
7. Total direct taxes (excl. land revenue and agricultural income tax)	5.79	5.50	5.08	4.80	4.77	4.29	4.62	4.45	4.18

APPENDIX I

Estimates of Financial Assets and Liabilities of the Household Sector

Currency

Projections of household demand for currency have been made by regressing it on GDP at factor cost at constant prices, the GDP factor cost deflator and on two dummy variables, representing the investment in bearer bonds and growth pattern in currency.

Deposits

The increase in deposits comprises the deposits in scheduled Commercial banks, cooperatives and non-banking companies. The deposits of the banks are estimated as a function of GDP at factor cost and GDP deflator. The share of the household sector is assumed at 79 per cent. The deposits of the non-banking companies have been taken at 15 per cent of the deposits with the banks.

Life Insurance Fund

This is household saving in the form of the Life Insurance Fund, which is of a contractual nature. The life fund is estimated to increase by Rs. 9845 crores over the Plan period.

Provident Fund

The net accretion to Provident Funds comprises contribution to provident fund by Central and State Government employees, Employees' Provident Fund (EPF), and other provident funds. The accretion to EPF includes the contributions of employees and employers and interest on investment. The projections have been made on the basis of regression of accretions to provident fund on GDP at constant market prices, GDP market prices deflator and the ratio of non-agricultural income to national income at constant prices.

Shares and Debentures (Corporate and Cooperative and Units of UTI)

Projections of investment in Corporate and Co-operative shares and debentures have been obtained by relating this variable to GDP at constant market prices, GDP market price deflator and ratio of non-agricultural income to national income. The savings in the form of Units of Unit Trust of India is based on trends observed in the recent past.

Claims on Government

The net claims on Government of the household sector consist of Central and State Government securities and contributions to small savings and bearer bonds. These have been projected by estimating the parameters from regressions by using GDP at current market price and other variables like small savings and investment in bearer bonds in the recent past.

Securities of term lending and other financial institutions

These have been estimated on the basis of a regression relating them to GDP at factor cost at constant prices, GDP factor cost deflator and the ratio of non-agricultural income to national income.

Other Assets

The estimates of other assets representing mainly net position in trade transactions with private companies and State Electricity Boards are placed around at Rs. 1570 crores at 1984-85 prices.

Financial Liabilities

The Financial liabilities have been worked out on the basis of the ratio of gross household financial assets to personal disposable income and net household saving in physical assets. These have been calculated at Rs. 32,428 crores which works out to 24 per cent of the gross household financial assets.

APPENDIX—II

Estimates of Financial Resources for Seventh Plan : 1985—90

(Rs. crores at 1984-85 prices)

	Centre (including UTs)	States	Total (Col. 1+2)
	1	2	3
1. Balance from current revenues (at 1984-85 rates of taxation)	(–) 12,011	6,762	(—)5,249
2. Contribution of public enterprises			
(a) Centre : (i) Railways	4,225	—	4,225
(ii) Posts & Telegraphs	1,729	—	1,729
(iii) Other enterprises	31,500	—	31,500
(b) States : (i) State Electricity Boards	—	(—) 1,569	(—) 1,569
(ii) State Road Transport Corporations	—	(—)415	(—)415
(iii) Others	—	15	15
Total(2)	37,454	(—)1,969	35,485
3. Market borrowings (net)	20,620	9,942	30,562
4. Share in small savings	6,377	11,539	17,916
5. State provident funds	2,300	5,027	7,327
6. Miscellaneous capital receipts (net)	19,809	(—)7,191	12,618
7. Negotiated loans	—	4,639*	4,639
8. Additional resource mobilisation	22,490	22,212	44,702
9. Net capital inflow from abroad	18,000	—	18,000
10. Deficit financing	14,000	—	14,000
11. Total resources	129,039	50,961	180,000
12. Central assistance for state plans	(—)29,737	29,737	—
13. Aggregate resources	99,302	80,698	180,000

*Includes loan from Life Insurance Corporation of Rs. 100 crores to North Eastern Council.

APPENDIX—III

Public Sector—Sources and Application of Funds : Seventh Plan 1985—90

(Rupees in crores at 1984-85 Prices)

Receipts	Centre & U.Ts.	States	Total
(A) *Revenue Receipts*			
1. Tax Revenue (Gross)	138,941	79,396	218,337
2. States' share of Central Taxes	(—)36,087	36,087	..
3. Non-Tax Revenue	35,545	20,425	55,970
4. Grants from the Centre	..	5,216	5,216
Sub-Total (Revenue Receipts)	138,399	141,124	279,523
(B) *Other Receipts*			
1. Contribution of Public Enterprises	37,454	(–)1,969	35,485
2. Market Borrowings	20,620	9,942	30,562
3. Share in small savings	6,377	11,539	17,916
4. State Provident Funds	2,300	5,027	7,327
5. Misc. Capital Receipts (net)	19,809	(–)7,191	12,618
6. Negotiated Loans	..	4,639	4,639
7. Additional Resource Mobilisation	22,490	22,212	44,702
8. Net Capital inflow from abroad	18,000	..	18,000
Sub-Total (Other Receipts)	127,050	44,199	171,249
Total Receipts (Revenue Plus Other Receipts (A+B)	265,449	185,323	450,772
(C) Central Assistance to State Plans	(—)29,737	29,737	..
(D) Deficit Financing	14,000	..	14,000
Grand Total (A+B+C+D)	249,712	215,060	464,772

Expenditure	Centre & U.Ts	States	Total
(A) *Non-Plan*			
1. Interest Payments	46,222	20,351	66,573
2. Maintenance Expenditure on the Sixth Plan Schemes	1,684	7,992	9,676
3. Subsidies	16,805	..	16,805
4. Defence	45,000	..	45,000
5. Other non-development expenditure	33,911	106,019	139,930
6. Grants to States, U.Ts. and local bodies	6,135	..	6,135
7. Grants to Foreign Governments	653	..	653
Sub-Total (Expenditure-Non-Plan)	150,410	134,362	284,772
(B) *Plan Outlays*	—	—	—
1. Agriculture	4,325	6,249	10,574
2. Rural Development	4,931	4,143	9,074
3. Special Area Programmes	..	3,145	3,145
4. Irrigation & Flood Control	1,029	15,950	16,979
5. Energy	32,035	22,786	54,821
6. Industry & Minerals	18,675	3,786	22,461
7. Transport	17,199	5,772	22,971
8. Communication, Information and Broadcasting	6,373	99	6,472
9. Science & Technology	2,309	157	2,466
10. Social Services	12,167	17,183	29,350
11. Others	259	1,428	1,687
Sub-Total*	99,302	80,698	180,000
Grand Total (A+B)	249,712	215,060	464,772

*Plan Outlays are rounded off to nearest Rs. 1 crore.

CHAPTER 5

BALANCE OF PAYMENTS

General

5.1. India adjusted rather well to the second oil shock and the marked deterioration in the international economic environment that followed. The tempo of growth and real investment were maintained during the Sixth Plan period by a strategy designed to avoid crippling cutbacks in imports. This strategy involved reordering of investment priorities and other measures to bring the current account deficit to a sustainable level over the medium term; and necessary balance of payments support for it was obtained from an Extended Fund Facility (EFF) arrangement with the IMF for SDR 5 billion. The success of these measures is reflected in the annual growth of GDP at the targeted rate of 5.2 percent, a sharp drop in reliance on energy imports as also in the current account deficit relative to GDP, and in an improvement of the external payments position permitting India to forego SDR 1.1 billion of the SDR 5 billion contracted under the EFF.

During the Seventh Plan, debt service obligations will rise more sharply because of the harder average terms of external debt, including commercial borrowing contracted in recent years, repayments to the IMF, and a substantial fall in concessional aid flows. Once again, therefore, the balance of payments will have to bear the added burden of absorbing adverse external factors, this time in the form of declining net real concessional aid flows and, on average, higher interest rates with shorter maturities attaching to external loans and credits. The process of structural adjustment to strengthen the balance of payments undertaken in the Sixth Plan period will thus need to be intensified in order to forestall the equally undesirable alternative outcomes during the second half of 1980s, namely, excessive external indebtedness or slowing down of growth due to import shortages.

TABLE 5.1

Balance of Payments 1980-85: *Selected Indicators*

	Trade deficit (Rs. thousand crores)	Current account deficit (percent of GDP at Market prices)	POL: imports consumption ratio (percent)	Foreign[1] exchange reserves (months of import equivalent)
	1	2	3	4
1980-81 . .	5.8	1.4	73	4.6
1981-82 . .	5.8	1.8	57	3.0
1982-83 . .	5.4	1.3	46	3.6
1983-84 . .	5.9	1.1[2]	36	4.3
1984-85[2] . .	5.2	1.2	31	5.0

Sources :Reserve Bank of India and the Ministry of Finance.

1. Excluding gold and SDRs.
2. Planning Commission provisional Estimates.

Sixth Plan Experience

5.2. On the whole, the balance of payments performance during the Sixth Plan period was much better than had been initially anticipated. The current account deficit during 1980-85 is now estimated to have been only about two-thirds of the projected amount. That is why, despite a large shortfall in net aid compared to the projected inflow, and only marginally higher other borrowings, foreign exchange reserves actually increased to well above the targetted equivalent of three months' merchandise imports. This favourable outcome is attributable to a variety of factors. Better functioning generally of infrastructure, accelerated replacement of energy imports, progress/of import substitution in steel, non-ferrous metals cement and fertiliser industries, and sustained increase in agricultural output in effect brought about a decline in the volume of bulk imports. They also facilitated the maintenance of selective liberalisation intended to free the economy from some of the counter-productive rigours of import restrictions. The volume growth of non-bulk imports too was much less than had been expected; and total imports, in real terms, increased at an annual rate of just about 3 per cent. At the same time, net invisible earnings substantially exceeded Plan projections, mainly because of the unanticipated and continued buoyancy of expatriate remittances. Finally, the loss imposed by the steep rise in international energy and other import prices in the wake of the second oil shock, though still sizeable, turned out to be somewhat smaller than was earlier foreseen.

5.3. Export earnings, however, fell well short of the target. The disappointing performance of exports is related to an unusual combination of adverse internal and external developments. The growth of Indian exports depends on the expansion of world trade to a significant extent; and, the first three years of the Plan period coincided with the severe international recession of 1980-83 and the accompanying stagnation of world trade. A number of products and product groups, some of them important or

TABLE 5.2

Balance of Payments Performance 1980-85

(Rs. thousand crores in 1979-80 prices

	Sixth Plan projections	Estimate actuals
Exports	41.1	33.00
Imports	—58.9	—54.0
Trade balance	—17.8	—21.0
Invisibles, net	8.7	14.6
Current account deficit	—9.1	—6.4
Financing :	9.1	6.4
Net aid	5.9	3.8
Other borrowing	5.1	5.3
Use of foreign exchange reserves (—)-(increase)	1.0	—0.6
Loss from decline in the import purchasing power of exports	—2.9	—2.1

dynamic exports, such as engineering goods, leather and leather manufactures, and textiles, were also affected by resurgent protectionism in developed market economy countries. Production of exportables too suffered at times from power shortages, while other types of supply constraints began to appear in the case of such exports as tea and marine products. Finally, poor exports growth could be ascribed to the high cost and diminishing competitiveness of specific products. The operation of all these factors and the predominance of the domestic market reduced the already small share of exports in GDP further. The volume of such fast growing exports as engineering, leather and leather products actually declined; and were it not for the rapid volume growth of garments, chemicals and allied products, gems and jewellery, and expanding volume of unspecified exports, consisting, among others, of diverse agricultural products, total exports in real terms would have fallen significantly over the Plan period.

5.4 The shortfall in exports and the consequent increase in the trade deficit during the Sixth Plan beyond the projected level will not make it easy to deal with likely future balance of payments difficulties, the more so because of the smaller scope for concentration of import substitution in some areas, especially crude oil production. The management of the balance of payments during 1985-90 will have to address this problem, notwithstanding the current high level of reserves and the decline in current account deficit relative to GDP.

Seventh Plan Projections

5.5 The substantial diversification of the commodity composition of exports that has taken place since the mid-1960's *cushions somewhat the impact of commodity market fluctuation on export earnings. All the same since around 1970, exceptionally rapid volume growth of exports has been confined to a small set of products, including engineering goods, chemicals and allied products, gems and jewellery, garments, leather and leather manufactures and marine products. The consequent commodity concentration of incremental exports, though symptomatic of specialisation in line with competitive advantage, could create difficulties in the event of unforeseen protectionist obstacles, or localised supply problems. Although this type of commodity concentration may persist to an extent over the medium term, the proposed policies, emphasizing general strengthening of export competitiveness, will not only help attain the plan export target but also lay the basis for more rapid and diversified export growth in the post plan period.

*The degree of diversification is, at present, similar to that of exports from some developed countries.

5.6 A breakthrough in exports leading to a substantial step up in real growth of export earnings is a key element of the foreign trade and payments strategy retained in the Seventh Plan. The volume of exports is projected to rise to nearly 7 per cent annually during 1985-90. This projection has been built up from statistical forecasts, or in some cases, from estimates of availability and domestic demand for different commodities and commodity groups. They have, moreover, been tested with the aid of aggregative analysis of past export performance, and incorporate the likely impact of changes in foreign trade policy within the Plan period. Commodity details of export projections are set out in Table 5.3.

5.7 Industrial products will contribute sizeably to the attainment of the target set for exports. But among them, engineering goods, chemicals and allied products readymade garments and gems and jewellery alone will account for somewhat over half of the projected increase in the volume of exports. These exports, except for gems and jewellery, will expand much more rapidly than GDP during the Plan period. In fact, even in the longer run export growth will have to rely on manufactures and, more important still, on an increasingly wider spectrum of products. For one thing, unlike in

TABLE 5.3

Merchandise exports (fob)

(Rs. crores at 1984-85 prices)

Products/product groups	1984-85	1989-90	Seventh Plan Total 1985-90
1	2	3	4
1. Tea	718	770	3724
2. Coffee	221	232	1136
3. Tobacco unmanufactured	212	258	1193
4. Cashew kernel	217	312	1334
5. Processed food	328	424	1918

1	2	3	4
6. Spices	217	270	1243
7. Marine products	388	446	2113
8. Jute manufactures	207	222	1078
9. Iron ore	438	608	2676
10. Leather and leather manufactures	533	577	2796
11. Cotton textiles	380	440	2077
12. Garments	875	1336	5683
13. Engineering goods	870	1862	7011
14. Chemicals and allied products	760	1224	5105
15. Gems and jewellery	1367	1663	7700
16. Other handicrafts	415	494	2307
17. Sub-total (1 to 16)	8146	11138	49094
18. Others	1816	2693	11559
19. Grand Total (17+18)	9962	13831	60653

the case of agricultural commodities, output growth of manufactures is not constrained by the availability of land, while shortages of raw materials and other inputs can be overcome through recourse to imports. For another, market penetration becomes easier because of their exceedingly small share at present in the world trade in manufactures.

5.8 A much smaller, though still important, proportion of addition to exports is expected from a number of heterogeneous commodities, ranging from metallic ores to oil cakes, which includes a variety of agricultural commodities, (other than plantation products, tobacco and processed foods) such as rice, wheat, fruit and vegetables. The volume of this category of exports, though growing more rapidly than real GDP, is correlated to the latter, partly because, taken together, they are affected less by world market conditions than by internal factors. This relation is assumed to remain unchanged, since further acceleration of export growth may be difficult to attain for the reason, among others, that some of the important products in this group include basic foods, or agricultural commodities competing with them for land, irrigation facilities and other resources.

5.9 The projected volume growth for another class of commodities which include, among others, tea, spices, cotton textiles, leather and leather manufactures, and marine products will not, however, keep pace with the growth of GDP. Such exports are beginning to encounter supply constraints because of increasing domestic demand, or inadequate output growth, or both. Export targets set for them are rather modest, based as they are on realistic assumptions about feasible expansion of production in the medium term through measures to imporve productivity; for the full effect of investment to strengthen the production base may be felt only after a period of time. Comparatively modest targets have also been retained in the case of jute manufactures, cotton textiles (mill and handloom), iron ore and unmanufactured tobacco, where the limits to export growth are set primarily by world demand. World exports of cotton textiiles are expected to increase at a rather slow pace; and the export volume growth rate projections, though not very high, assume some lowering of protective barriers by developed countries. As for jute manufactures, exports will continue to be affected by competition from synthetic substitutes as well as jute products from other sources.

5.10 Imports during the Seventh Plan period are projected to increase at an annual rate of 5.8 per cent, or only a little more rapidly than the pace of growth of the economy. But the estimated rise in the requirements of bulk imports, which include among others, petroleum, oil and lubricants. metals, newsprint and edible oils, will increase slightly faster than GDP. Demand projections for bulk commodity imports are checked with the aid of commodity specific material balances as well as market clearing consistent with the input-output model. For other imports, consisting of a very large number of disparate commodities and products, a more aggregative method is used to estimate import requirements.

5.11 The demand for petroleum products is forecast to increase by 5.5—6.4 per cent annually; this rise in consumption reflects not only the growth and changing structure of GDP, but also the effects of energy pricing policy and other meaures to restrain the growth of demand for petroleum products. The production of crude oil is projected to go up from 29.0 million tonnes in 1984-85 to 34.5 million tonnes in 1989-90, which represents, even in absolute terms, a very much smaller increase in the availability of domestic crude than in the Sixth Plan period. As such, the value* of imports of crude oil and petroleum products, the latter depending on the increase in refining capacity, are estimated to go up from Rs. 3446 crores, or 22 per cent of the total import bill in 1984-85 to Rs. 5136 crores or 25 per cent of it by 1989–90.

5.12 The Plan envisages a substantial increase of some 3.56 million tonnes (in terms of nutrients) in the production of nitrogenous and phosphatic fertilisers. Even so, because of the sharp rise in requirements, there will be a significant increase in imports of manufactured fertilizers; but the demand for imported materials and inputs for fertiliser production, in which the country is deficient, will also go up sizeably. Thus, imports of fertilizers and fertilizer inputs together will increase, on the average, by about 10 per cent annually over the

*All values are in constant 1984-85 rupees.

entire Plan period.

5.13 Steel, cement, synthetic and regenerated fibres, newsprint and non-ferrous metals are among the bulk commodities whose imports are expected to decline, or to increase only marginally, with the progress of import substitution. Thus steel imports (including alloy and special steels) are projected to fall by Rs. 85 crores, their share in total imports dropping from 6.2 to 4.3 per cent between 1984–85 and 1989–90. In the case of cement complete self-reliance will be attained early in the Plan period, no recourse to imports being projected beyond 1985-86. Domestic production of man-made fibres, too, will rise sufficiently to meet requirements fully, though only in 1989-90. As for newsprint, imports are projected to fall almost by one-third over the Plan period. The rather modest annual increase of 1.6 per cent in imports of non-ferrous metals is attributable to a relatively large rise in the output of zinc and aluminium, aluminium imports even ceasing altogether in the penultimate year of the Plan. Coking coal imports will, however, increase, but being a minor bulk commodity their share in the import bill will still be somewhat less than 1 per cent in 1989–90.

5.14 No foodgrain imports are envisaged because of the existing high level of stocks, expected increase in production and reduced impact of possible droughts with further extension of irrigation. But there is likely to be some decline in import requirements of edible oils, largely because of rapidly increasing domestic demand and insufficient medium-term potential for much more than a commensurate increase in domestic production.

5.15 Non-bulk imports, which include a very wide variety of often highly differentiated products, at present constitute about half of total imports. Equipment, components and spares, drugs and pharmaceuticals, precision instruments, export-related imports like unpolished diamonds are the important imports falling into this residual category. Though well below unity earlier, the import elasticity of non-bulk imports with respect to GDP is estimated to have risen to 2.17 between 1973–74 and 1981–82. This shift in the import elasticity is attributable partly to the pent up demand for consumption and inventory built-up from the period before the introduction of selective import liberalisation in mid-seventies. Judging by the more recent experience of the Sixth Plan, the relationship between non-bulk imports and GDP is returning to the normal pattern. Accordingly, non-bulk import requirements have been projected on the assumption of an import elasticity of 1.2, which implies an average annual growth of 6 per cent in real terms. The Commodity breakup of the bulk imports in the Seventh Plan is presented in Table 5.4.

TABLE 5.4

Merchandise Imports (cif)

(Rs. crores at 1984-85 prices)

Products/product groups	1984-85*	1989-90	Seventh Plan total 1985-90
1	2	3	4
1. Crude oil and petroleum products**	3446	5136	22273
2. Chemical fertilisers and fertiliser raw materials	1819	3015	13144
3. Finished, alloy and special steels	973	888	4340
4. Major non-ferrous metals***	350	380	1908
5. Cement	33	..	33
6. Newsprint	120	86	473
7. Edible oils	1200	909	4545
8. Coking coal	50	164	600
9. Synthetic and regenerated fibres	67	..	143
10. Sub-total (1 to 9)	8058	10578	47459
11. Other including contingency imports	7542	10116	47978
12. Total imports (10+11)	15600	20694	95437

*Provisional estimates.

** Net of crude and product exports.

*** Aluminium, copper, zinc, lead, tin and nickel.

5.16 The projected Seventh Plan trade profile does not leave much room for risks entailed by unforeseen developments. Some provision is, therefore, needed for absorbing the effects of unpredictable events and, accordingly, a margin for contingency is built into the overall import forecast. The first such risk is the occurrence of extensive drought. The agricultural sector is being increasingly better equipped to overcome the effects of scanty precipitation, but the residual damage to the economy and the foreign trade sector is still far from being negligible. Second, among other things, India's export performance depends significantly on the growth of world trade; and medium-term world trade trends continue to be somewhat uncertain. Third, the loss from worsening of the terms of trade in the Seventh Plan period is likely to be Rs. 700 crores on present indications, or much smaller than the one suffered during 1980-85. India's terms of trade are rather sensitive to international oil prices, which are assumed to remain more or less unchanged in real terms. Finally, projections of net invisible earnings tend to be much less firm as compared to other elements of the balance of payments.

5.17 Expatriate remittances and travel receipts are, by far, the most important elements of net invisible earnings. A substantial proportion of expatriate remittances originates in the oil producing countries of the Middle East; and unforeseen changes in their development plans and public spending, stemming from uncertainties surrounding the international oil market make it hazardous to forecast the inflow of remittances even over the medium term. The nominal level of expatriate remittances is projected to remain more or less unchanged, thus implying some continuing decline in real terms. Projections of invisible flows also take into account the relatively small, but growing, exports of 'non-traditionals' such as consultancy services and related specialised expertise. On the whole, net invisible earnings are expected to offset somewhat less than half of the deficit on merchandise account, or a much smaller proportion of it than in the Sixth Plan period.

5.18 The growth of tourist arrivals had suffered from the effects of the severe international recession of the early eighties, which had particularly hit the major source markets. With the international market economy countries coming out of the recession, and more importantly, more effective tourist promotion and market penetration efforts, the growth of tourist arrivals should again attain a higher trend rate. In projecting net invisibles, travel receipts are accordingly assumed to increase on average by about 7 per cent annually.

5.19 The deficit on current account, or foreign savings requirements, implicit in the Seventh Plan Projections or merchandise and invisible flows will be Rs. 20,000 crores. The corresponding financing requirements will, however, be higher because of the fall in the import purchasing power of exports resulting from the larger increase in import prices. Additionally, foreign exchange reserves would have to be replenished by Rs. 200 crores over the Plan period so that their level does not fall below the required minimum of three months' merchandise imports.

5.20 The external borrowings programme of Rs. 20,900 crores that is projected will ensure adequate availability of imports to attain the GDP growth target. Its size and composition, more over, will maintain future debt service obligations within manageable limits. The viability of external borrowing programme is usually assessed in terms of conventional indicators like the ratio of debt service payments to current receipts. Because of the changing export coverage of imports, this debt service ratio does not always correctly indicate the proportion of imports that will have to be financed through external borrowing. Thus the current account deficit relative to imports, or, more generally, as a proportion of GDP is, in some respects, a better index of the debt service burden. However, judging by both indicators, the borrowing programme does not exceed safe limits; the debt service ratio remains below 20 per cent, and the current account deficit relating to GDP averages to 1.6 per cent over 1985–90.

Balance of Payments Policy

5.21 Sustained and well directed efforts will be needed during the Seventh Plan period to avert renewed scarcity of foreign exchange. Maintaining a viable balance of payments without constraining output growth or capital formation to unacceptable levels will thus be a prime strategic concern. As such, the actual deficit on current account, and the manner in which it is financed, will have to be kept close to plan projections and anticipations; otherwise the debt service burden could become so onerous as to reduce the availability of foreign exchange for financing the vital minimum of imports. The trade deficit will need to be adequately contained by a much more rapid growth of exports than in the past. Export development, in fact, acquires particular importance as a means of sustaining sufficient and uninterrupted supplies of imported inputs for smooth functioning of the economy, of activating idle capacity, and of exposing industry increasingly to the more exacting world market. At the same time, the diversification and deepening of efficient import substitution will require continued support, partly because of greater caution to be exercised in the replacement of energy imports by non-

TABLE 5.5

Balance of Payments Projections 1985–90

(Rs. thousand crores at 1984-85 prices)

1. Exports	60.7
2. Imports	—95.4
3. Trade balance	—34.7
4. Invisibles (net)	14.7
5. Current account deficit	—20.0
financing	
1. Net aid and other borrowing	20.9
2. Use of foreign exchange reserves (—= increase)	—0.2
3. Loss from decline in the import purchasing power of exports	—0.7
Memo items (per cent)	
1. Debt service relative to current receipts	17.6
2. Current account deficit relative to GDP	1.6

renewable domestic resources. Apart from the possibility of replacing imports in certain areas at a relatively low cost in terms of domestic resources, import substitution has the advantage of being less subject to uncertainty than exports. Greater attention will thus need to be paid not only to the expansion of production in competitive lines but also to all-round improvements in productivity and the consequent reduction in import consumption norms. The attainment of the balance of payments objectives of the Seventh Plan is admittedly not an easy task. But it can be accomplished successfully within an appropriate policy frame, even when its full impact would be felt only after a period because of the logistics of, and reaction time to, changes in policy directions. The major constituents of the required policy are spelt out in Chapter 6.

CHAPTER 6

FRAMEWORK OF ECONOMIC POLICY

6.1 In a mixed economy such as ours, the programmes of investments embodying the pattern of allocation laid down in the Plan are to be implemented both through direct public sector oulays and through influencing and regulating the flow of resources in the private sector, consisting of households and business enterprises in agriculture, industry and trade. Thus, in addition to the programme of public sector investment, the Plan must contain a set of policies designed to bring about the desired pattern of investment in the private sector. Other policies supportive of the plan will be those which lead to efficiency and economy in resource use in both the public and the private sector. Thus, the success of the Plan would depend, among others, on the choice of the correct policy framework.

6.2 In designing the policy framework, both the choice of instruments and the nature of use need to be considered. The Government has at its disposal two types of instruments : direct or physical controls such as licensing and indirect or financial controls involving the use of fiscal, monetary and credit policies. The mix of these instruments and the extent of intervention would have to be determined from time to time depending upon the experience of the past, the stage of development and the circumstances prevailing at a given time. In addition to policies for influencing the broad pattern of allocation in the private sector, the Plan also contains policies in regard to promoting development in particular areas such as agriculture, energy, protection of the environment, family planning and so on. The policies required for particular sectors are discussed in the respective Chapters in Volume II. The broad policy framework discussed in this Chapter relates mainly to fiscal policy in the broad sense (public sector management as well as budgetary policy to influence the private sector), monetary policy and credit management, foreign trade policy and physical controls on economic activities.

Fiscal Management

6.3 The budget is among the most potent instruments of economic policy. Through it the Government creates and sustains the public economy consisting of the provision of public services and public investment; at the same time, it is an instrument for re-allocation of resources according to national priorities, re-distribution, promotion of private savings and investments, and the maintenance of stability. Thus, the budget must be geared simultaneously to the sustenance and growth of the public economy and to the pursuit of the broader objectives of fiscal policy. This implies that the methods of raising resources for the public sector should be such as to influence the rest of the economy in beneficial ways and, within the public economy itself, resources must be used in the most efficient way.

6.4 In the long run, the ability of the Government to provide for the needed public services and to undertake public investment on an increasing scale would depend on the soundness and buoyancy of the tax structure on the one hand and public expenditure policies that would contribute to the maintenance of budget balance on the other. An unsustainable budget deficit not only leads to general instability in the economy but also forces the Government to resort increasingly to methods of raising resources that cause distortions and produce other undersirable effects on the economy. In other words, the ability of the Government to pursue a meaningful fiscal policy gets eroded. In India, the size of the public economy[1], measured in terms of revenue expenditure share, has grown from 10.9 per cent of GDP in 1960-61 to 15.7 per cent in 1975-76 and further to 19.9 per cent in 1984-85. Alongwith this increase in expenditure, there was a more or less commensurate increase in the tax ratio up to the middle of the seventies; it rose from 9.0 per cent in 1960-61 to 15.1 per cent in 1975-76. Since then, however, the tax ratio has not kept pace with the expenditure ratio. These tendencies have gradually eroded the capacity of the Government sector to generate the necessary surplus to expand essential ublic services and to contribute to the financing of public investment. The process of erosion seems to have accelarated during the Sizth Plan period.

6.5 The balance from current revenucs at 1984-85 tax rates during the Seventh Plan period is estimated at (—) Rs.5,249 crores. In the past this figure has almost always been positive. If the target of additional resource mobilisation through budgetary measures to the extent envisaged is achieved, the current account balance will become positive at Rs. 16,001 crores. However, since the Plan provides for current outlay of Rs.25,782

[1]. Including only the Central and State Governments.

crores, the net savings on Government account would become negative at (—) Rs. 9,781 crores. This would mean that even if the sizeable mobilisation effort involved in raising the tax ratio by two percentage points is put through, the Government sector would be borrowing to the extent of nearly Rs. 10,000 crores to finance current outlay, indicating the existence of a long-term disequilibrium in the budget.

6.6 This situation has arisen because of several causes. The current outlays outside the Plan have been increasing at a rate faster than current revenues. This is partly due to inflation : it would seem that expenditures are more responsive to inflation than tax revenues. Apart from the fact of inflation, certain large items of current outlay such as defence, interest payments and subsidies have been growing fairly fast at the level of the Central Government. Some States have been increasing their commitments unrelated to their Plans and these commitments, taken together with the committed expenditures arising out of completed Plan schemes including interest payments have been rising out of pace with the rate of increase in revenues.

6.7 Since Government savings have become negative, the entire investment in the Government sector has to be financed through borrowing. In addition, the Government is required through the budget to contribute substantially to the investment plans of public enterprises because of the failure of the enterprises in general to generate the resources needed for their own growth. There is further erosion of budgetary resources owing to the need to make subsidy payments for loss-making enterprises including a large number of sick units taken over from the private sector. All of these required the Government to undertake a large borrowing programme which on the one hand increases the burden of indebtendness for the future budgets and on the other hand leads to the preemption of a large proportion of the resources of the financial institutions and the capital market. In this context, a long-term strategy has to be evolved to restore balance between budgetary revenue and expenditures so as to enable the public sector to finance developmental outlay without inflation and at the same time to pursue a sound fiscal policy in relation to the private sector.

6.8 The first component in the long-term strategy is to reform and strengthen the tax structure and its enforcement, so as to make it buoyant and responsive to growth in income. The second element in the strategy lies in the formulation of an adequate expenditure policy. The third element is the maintenance of fiscal discipline which could be aided by the requirement to pursue a non-inflationary fiscal policy. Fourth, an equally important element in the strategy is to formulate policies for the public sector enterprises to improve their performance and generate surpluses on an adequate scale.

Current Revenues

6.9 On the revenue side, attention has to be paid to both tax and non-tax sources of revenue. In respect of taxation, the basic task is to make the tax structure more income-elastic as well as price-elastic while retaining the necessary degree of equity. For the tax system to become more income-elastic, first, it must cover adequately all sectors of the growing economy. Particular attention has to be paid in this context to the unincorporated industrial sector and the agricultural sector. Second, a major effort has to be undertaken to improve administration and enforcement so as to reduce evasion. The scope for substantial increases in the elasticity and yield of the tax systems of the Central and State Governments has been brought out by several studies.

6.10 The non-revenue earning development activities of the Government are wide-ranging. The major components are social services like education and health, scientific research and technical extension and the provision of some items of social infrastructure like water supply and roads. The provision of these services on a virtually free supply basis with little contribution from the beneficiaries rests essentially on considerations of general social benefit arising from these services and of equity. This case is valid and, at the present stage of social development, demanding substantial payment for these services will hurt poor households, backward regions and, most importantly, future generations. However, a part of the expenditure on these services benefits households who can afford to pay. They should be made to do so for these services in greater measure in future through appropriate changes in fees, cesses and municipal taxes.

Finances of Local Authorities

6.11 The tax and expenditure policies discussed so far relate to the Central and State Governments. Reliable figures of revenue and expenditure relating to the local authorities are not available on a comprehensive basis. However, from whatever data that are available and from studies of selected municipal bodies conducted by various agencies, it can be stated that the finances of urban local bodies are in a sorry state and these bodies are unable to provide even the basic municipal services which are obligatory for them to provide, let alone undertake schemes of investment. While there can be more generous schemes of assistance by the State Governments and there is need to give the local authorities greater access to institutional finance, the major part of the resources needed for their functioning would have to be raised by themselves. But the tax systems of most

of the local bodies are poorly structured and poorly enforced. A major effect would have to be undertaken to improve the productivity and equity of the local tax systems and also to train the staff of the local authorities in methods of sound financial management.

Control of Public Expenditure

6.12 The Seventh Plan has been drawn up on the assumption that non-plan expenditures of the Central and State Governments will grow at around 5 per cent in real terms i.e., at a rate equal to the growth rate of GDP. This, on past evidence, will require a strenuous effort at expenditure control. More specifically, existing procedures for the scrutiny of non-development expenditure proposals will have to be strengthened and subjected to the discipline of cost-effectiveness analysis. Administrative reforms which eliminate unnecessary work, reduce overlap and simplify procedures will have to be hastened. In fact, in many areas, such reforms can lead not merely to a reduction in expenditure but also to an improvement in relations with the public.

6.13 The efficient management of facilities, needed for providing public services like schools, roads, waterworks and so on will require more systematic attention to maintenance, fuller utilisation and cost-effectiveness. It will be necessary in many of these sectors to institute changes in management structures and procedures which will allow these facilities to be run as performance-oriented enterprises rather than as Government departments. Planning and budgetary procednres should be re-examined so that an integrated view is taken of development outlays, regardless of whether they are on new schemes of the current plan or on the maintenance of schemes started in earlier plans.

6.14 Subsidies directed at poor household are justified on grounds of equity and long-term needs and cannot be eliminated. However, many of the subsidies tend to benefit also the not so poor, and are open-ended. This often means a loss of control over the total burden on the exchequer. For example, the sale prices of fertiliser is fixed at some point in time, and hence, all increases in production costs brought about by inflation or other factors have to be covered by increases in the subsidy. If the adjustments in the fixed sale prices are infrequent or inadequate, the subsidy burden grows over the years. Ways of avoiding this open-endedness must be seriously considered and the subsidy burden must be kept down to a reasonable level. It is also necessary that the rationale for subsidy proposals, particularly in plan schemes, is examined more thoroughly taking into account the possibility of leakages, the economic status of beneficiary groups and the cost-benefit case for the subsidy. A time-bound programme to eliminate subsidies[1] to particular loss-making public sector units must also be drawn up.

6.15 As one of the means of achieving the objectives mentioned above, the principle of zero-based budgeting which requires the expenditure on even on-going activities to be justified needs to be introduced. It is to be applied not only to items of non-development expenditure, but also to those of development expenditure. This would make possible redevelopment of personnel, thereby cutting down new recruitment. The rate of growth of expenditure on goods and services could also be reduced in this way.

6.16 In the longer term, there is a need for the formulation of an adequate expenditure policy. While details of the policy cannot be dealt with here, two major principles may be mentioned. First, since there are competing claims on resources, priorities have to be laid down and it should be stipulated that as the economy grows, certain items of expenditure should be maintained as a constant percentage of GDP, other items with higher priority should be allowed to increase relatively to GDP at postulated rates, and yet others should gradually decline, if not absolutely at least as a proportion of GDP. For this scheme to be operationalised, various expenditure items should be aggregated into well-defined groups and targets should be laid down for each group in terms of ratio of GDP which should be maintained during a five-year period. For example, it could be stipulated that the aim should be to keep budgetary subsidies as a constant proportion of GDP unless extraordinary circumstances warrant otherwise, whereas expenditure on education and health can be planned to increase as a proportion of GDP. Second, in undertaking schemes of investment particularly in relation to projects which are not directly revenue yielding, the scale of the investment undertaken during a plan period should be conditioned by the anticipated increase in revenues accruing to the budget, so that the rate of increase in maintenance expenditure in the future would not outstrip the rate of increase in revenue.

6.17 Another important element in the long-term strategy is to pursue a fiscal policy leading to non-inflationary growth. Experience has shown that inflation, far from increasing the real resources at the disposal of the public sector tends to erode them, partly because of the higher inflation elasticity of budgetary expenditure, and partly because of the

[1] In practice, only loans are given to cover cash losses, but if loans are never repaid, they will turn into subsidies. Besides, non-reciept of an adequate return on investment means an implicit subsidy from the budget.

diminution in the surpluses in the public enterprises through cost increases. This can be corrected to a certain extent by making taxes more responsive to inflation (e.g., by shifting to 'ad valorem' duties), and by timely adjustment of public enterprises' prices. However, a non-inflationary fiscal policy calls for fiscal discipline, and the avoidance of overdrafts at the level of the States and excessive deficits at the Central level. If the principle of avoiding excessive deficit in the Government sector as a whole is strictly adhered to, an additional beneficial consequence would be the automatic enforcement of greater control of expenditure and maintenance of fiscal discipline. Keeping this objective in view, the Seventh Plan provides for only a moderate volume of deficit financing at the Centre.

6.18 While public enterprisss in several cases are expected to serve certain social purposes rather than to maximise profits, the major public enterprises which are in the core sector and in public utilities have been established in order that social ownership could ensure fast development of these vital sectors, and at the same time prevent concentration of wealth and monopolistic practices. In all the industrialised countries, major industries such as steel, aluminium, coal, power and railways grow largely on the basis of surpluses generated by themselves, and to the extent equity finance was raised, an adequate rate of return had to be maintained. In India, too, these industries, though in the public sector, must generate surpluses through proper pricing and efficient operations. The needed resources are so large that they cannot be raised through market borrowings by the Government or through taxation. At present, the burden on the budgets for subsidising and funding public enterprises is too large for the health of the public economy. The reform of the public enterprises system with a view to making them efficient and capable of generating surpluses commensurate with the scale of capital invested in them must rank high in the agenda of fiscal reform. The aim should be to make the public enterprises financially viable and productive of surpluses. Tnis financial autonomy must be matched by a corresponding managerial autonomy, with secretariat intervention being limited to policy guidelines and the direction of major investment programmes. An arms-length relationship between the commercial enterprises in the public sector and the government will also require major changes in the mode of organisation of departmentally-run activities. Several government committees have made recommendations oriented towards these ends. During the Seventh Plan period, the action that is needed to be taken on these recommendations must be completed.

Fiscal Policy for Growth

6.19 As stated earlier, fiscal policy involves more than raising resources for the Government sector. It comprises powerful instruments for influencing marco variables such as savings, investment, the price level and costs as well as the allocation of resources. And these must be employed to the best advantage. Indeed, a proper fiscal policy would stimulate growth and savings and these in turn would lead to a faster rate of growth of Government revenues. For example, a major part of the tax revenue of the Central Government is derived from taxes levied on the industrial sector (excises) and on imports (customs). Therefore, a fiscal policy that leads to a higher rate of growth of industry and of exports would automatically lead to an acceleration in the rate of growth of revenues, increase in revenue from Union excise duty and in revenue from duties on higher imports made possible through higher exports.

6.20 As regards industry the major tasks of the fiscal policy would be (a) to enable industry to raise a much greater part of the resources needed for its expansion from internal resources and the capital market than hitherto; and (b) to rationalise and simplify the tax structure so as to make enforcement and compliance easier, reduce the scope for litigation and disputes and minimise distortions. The recent changes in the direct tax system are basically designed to achieve these objectives. With the reduction in the burden of personal income taxation and the favourable treatment given to savings in specified financial assets, more of household savings may be expected to be channelised into the capital market.

6.21 Another objective of fiscal policy in the present context must be to induce a higher rate of savings in the household sector and to reduce significantly the volume of black income generation. Maintenance of price stability is important from the point of view of stimulating private savings. Positive real rates of return on financial assets net of taxes need to be ensured. The recent reduction in the rates of personal income and wealth taxes combined with strict enforcement is designed to reduce black income generation.

6.22 With a sizeable proportion of income and wealth evading taxation, the redistributive impact of progressive taxation had been severely blunted. A reduction in the scale of black income generation would improve distribution of income and wealth after taxation. Besides, if the magnitude of tax evasion is significantly reduced, there would be a greater volume of tax revenue, and a greater volume of public expenditure benefiting the poorer section of the population would become possible.

6.23 Indirect taxes affect costs and prices. While the impact on the prices of final goods is unavoidable

and is meant to reduce consumption, the aim should be to minimise the impact on costs of inputs and to avoid distortion in costs by unwarranted changes in relative prices. A rationalisation of the indirect tax structure would lead to reduction in costs and it is essential for improving international competitiveness. The rationalisation would have to be initiated in such a way that the reform wold not only produce beneficial effects on the private economy but also lead to buoyancy in revenues.

Money and Credit

6.24 Monetary policy relates to the regulation of the volume, cost, and allocation of credit. But monetary and fiscal policies are iterrelated, because fiscal policy almost always brings about changes in money supply through the budget deficit. A fiscal policy that keeps the budget deficit down would give greater scope for autonomy to monetary policy. An excessive budget deficit on the other hand would shift the burden of control of inflation to monetary policy. This would generally necessitate a restrictive credit policy which may lead to insufficient supply of credit to industry and trade. In the Seventh Plan the amount of deficit financing (net Reserve Bank credit to the Government) has been fixed at a level considered just sufficient to genrate the additional money supply needed to meet expected increase in the demand for money. That is, a non-inflationary fiscal policy is postulated.

6.25 Since the Indian economy is vulnerable to inflationary impulses arising from a sudden fall in agricultural output and rise in import prices and since cost-push factors are at least as impotant as demand-pull factors, an anti-inflationary policy must consist of the following elements, besides the avoidance of excess money creation:

(i) bufferstocking and public distribution of foodgrains in order to moderate the impact of weather induced fall in production; and

(ii) maintaining exchange reserves at a level that provides adequate margin for precautionary imports of other essential items like edible oil and fertilisers to counteract the effects of domestic shortages.

6.26 A very large part of the total credit available is diverted to the public sector through statutory requirements and other means. This ensures that the essenital programme of investment in the public sector would be assured of funds. Similarly, selective credit control and the differential rate of interest scheme ensure that priority sectors and weaker section obtain a certain minimum of credit at concessional rates of interest. In addition, public financial institutions are enabled to raise resources at lower than the market rate in order to finance investment by private industries. This pattern of credit allocation has helped in securing allocation of capital funds in accordance with Plan priorities. However, it has meant that the role of the capital market would remain limited and that the allocation of credit would not be crucially dependent on the efficiency and profitability of the enterprises demanding funds. A reference has already been made to the undue dependence of public enterprises on budgetary support for securing investible resources. While the basic arrangements for the allocation of credit to priority sectors and to the Government will need to be retained, a stage has come to enlarge the role of the capital market and for enterprises to bid for resources on the basis of their capacity and credit-worthiness. Private industries should be encouraged to seek a much larger volume of support from the capital market and on a selective basis public enterprises may also be encouraged to resort to the capital market.

6.27 The beginnings of a change in this direction are already noticeable. In recent years there has been a growing tendency to mobilise finance directly through the capital market. This tendency has been strenghened by changes in policy in regard to interest rates and other terms of offer. The amount of resources mobilised by the private sector through the capital market has greatly increased. A good secondary market in finaneial instruments is being built up which is attracting savers who value liquidity. Further, reform of the stock market and improvement in its functioning would accelerate the development of the primary and the secondary markets. The capital market could also be deepened by the creation of new financial instruments and new financial institutions.

6.28 The organised part of the capital market has left out some sectors of activities, the most notable being housing. In the past the commercial banks, which in several countries finance housing activity, have been permitted to lend to a only very limited extent to the housing sector. So far only a small proportion of housing investment has been institutionally financed, the bulk of it being financed through own savings, sale of assets and borrowing from the unorganised market. Some promising developments have taken place recently in this area, but far more remains to be done. Financial intermediaries specialising in housing finance will be able to tap new sources of savings and help to bring housing investment within the framework of the organised credit system. The Seventh Plan envisages a major effort in this direction.

Framework of Controls

6.29 In the Indian economy the allocation of resources broadly according to plan priorities and targets has been sought to be achieved through, (a) direct public investment, (b) fiscal and monetary policies, and (c) regulation of the private sector and public enterprises through physical controls such as investment and import licensing, exchange control, price control and quantitative allocation of materials through Government agencies. Of these, in the earlier phase of development, public investment and physical control were greatly more important. The apparatus of control originated during the Second World War and was adapted to fulfil the needs of a planned economy. Importance was given to physical controls in the early stages of development because it was felt that financial instruments would not be able to achieve the kind of results that could be obtained through detailed industrial licensing, which could limit capacities to the expected demand for goods and thus conserve scarce resources. In view of the shortage of resources then prevailing and the undeveloped state of the economy, it was necessary to resort to physical controls. But as the economy developed and the industrial structure became more and more diversified and complicated, the licensing mechanism and other physical controls became more difficult to operate. With the fast growth in the number and variety of products, determining proper capacities became increasingly unsatisfactory. At the same time, the manner of operation of industrial licensing created undue delays and led to wastage of opportunities, Often small and uneconomic sizes of plants were licensed leading to high costs. Similarly, quantitative import controls led to a high wall of protection and the creation of high cost industries. Rigid price controls in many cases led to stagnation of output and perpetuation of shortages. In view of these developments and more particularly in view of the enlargement of the resources base and the degree of sophistication attained by the Indian economy, it was considered necessary to reduce the rigour and range of physical controls and place greater reliance on financial controls which would give signals but would not involve inefficiency and delays. The Sixth Five Year Plan noted: "The framework of rules and regulations relevant to the nascent stage of development are not necessarily appropriate to the complex industrial structure which has since been built up. Without sacrificing the basic principles of a planned economy, sufficient flexibility would need to be built into the system to impart a sense of dynamism to take advantage of the considerable technological and managerial capabilities that have been developed over the years."

6.30 During the Sixth Plan period considerable liberalisation was introduced in th rules and operations relating to industrial and import licensing. The level of investment below which licensing was not required was raised to Rs. 5 crores. A sizeable number of commodities were placed on the open general licence (O.G.L.). In the light of the experience gained during the Sixth Plan, more recently, substantial changes in licensing policy have been introduced. Several important industries have been delicensed and broad-banding has been introduced to impart flexibility in regard to choice of product by the entrepreneurs. The steps that have been taken, while removing the delays and complications caused by licensing procedures, are expected to lead to faster growth and greater competitiveness in a wide range of industries. Of course, investments in important industries, particularly those requiring large volume of investment, would need to be more closely regulated.

6.31 In a planned economy, the broad allocation of resources would necessarily have to be under Government control. Besides, through direct public investment and the pre-emption of investible resources of the required magnitude, the Government could ensure that the sectors producing essential goods would be provided with the funds needed for their growth. In other words, growth in these sectors would be regulated according to the needs of the economy. For the rest of the economy the allocation of resources could be left to be determined by the demand in the market which, however, could be influenced by financial means such as indirect taxation.

6.32 The Seventh Plan lays greater stress on improvements in productivity and cost-reduction in industry and other sectors. This may require in the first instance better utilisation of capacity already available. It would also require in some cases the establish ment of large plants and the expansion of existing plants to an economical scale. These scale requirements are particularly important in technology-intensive industries where a substantial research and development effort is required. Hence fragmentation of capacities has to be avoided. This would mean acceptance of a measure of dominance, which however could be controlled through other means. Also, some of the provisions for the reservation of item for small scale industries need to be re-examined.

Price Controls

6.33 Over the years, price control has been removed in respect of most commodities. In respect of two important commodities, namely, sugar and cement, the dual price system has been introduced which has served to take the pressure off the controlled market. In these cases only the levy prices are controlled. Apart from these, price control now exists only for bulk drugs and certain varieties of paper. In addition,

there is a regime of administered prices in regard to a number of commodities produced mainly in the public sector, such as steel, fertiliser and petroleum products. Also the charges and tariff of public utilities like Railways and State Electricity Boards are fixed by Government.

6.34 A general principle that has gradually found acceptance is that, except in the case of monopolies and public utilities (which are natural monopolies), no commodity should be subjected to price control on a permanent basis, while temporary price controls may be called for to deal with certain shortage situations. Also, if rationed supply of a commodity like sugar and rice is considered necessary, a dual market system should be adopted so that a black market may not be created and the profitability of the concerned industry may be sustained through free market sales. The dual market system should, however, be restricted to the most essential goods, because a lower price than cost in the controlled market would inflate demand and ultimately lead to mis-allocation of resources.

6.35 Commodities subject to administered prices, though few in number, play a critical role in the economy. They account for about 30 per cent of the weights in the wholesale price index, 18 per cent of private consumption expenditure and 30 per cent of intermediate consumption. Hence any increase in these prices generates cost-push pressures in a large number of sectors. A policy framework for these administered prices has to take account of this and also the need to ensure that the production of these commodities remains remunerative.

6.36 Agricultural prices, particularly foodgrain prices, play a critical role in determining the distribution of income and the rate of inflation. At present the Government announces support prices on the basis of advice tendered by the Commission on Agricultural Costs & Prices whose terms of reference have recently been expanded. The Commission takes into account the cost of production of different crops and the need for incentives to encourage production. This basic framework for determining support prices has worked well and needs to be strengthened. On distortion that has crept in is the announcement of substantially higher minimum prices by State Governments on the basis of limited considerations which do not take into account the inter-se-parity between different crops and different areas. Another difficulty is the notional nature of the support prices when there is no organised system of official procurement. The example of rice and wheat shows that a system based on rationally determined support prices and backed by arrangement for procurement can reduce fluctuations, maintain profitability and stimulate steady growth. An effort must be made to establish such systems for other crops like coarse grains, pulses and oilseeds so that rationally determined support prices are made effective through public purchase and, of course, public distribution. Agricultural price policy should be increasingly concerned with the determination of appropriate relative prices of different crops with a view to ensuring efficient use of resources.

6.37 The policy framework for determining the prices of industrial products is not as fully articulated. In certain cases prices are fixed separately for each producer, as in the case of fertilisers, and in others prices are product specific and may vary by region, as in the case of levy cement and sugar. The general approach is to fix prices on a cost-plus basis but the details of the procedure vary. Sometimes prices are fixed on the basis of actual costs, as in the case of coal; but generally certain standards of efficiency and capacity utilisation are takan into account in fixing standard costs. The basis on which a return to capital is allowed also varies. For some commodities a specified return on net worth is allowed and in some an overall return on capital employed. It is necessary that this diversity of procedures is rationalised and a common approach established for price fixation. Prices must always be set on the basis of reasonable norms of efficiency and, at the same time, enterprises should be allowed to retain the benefits of productivity raising and cost reducing innovations. The return on capital should be determined on the basis of the level required to generate and attract investment funds. Most important, the lag between cost increases and price adjustments should be drastically reduced. Small and frequent price adjustments should be preferred to large and infrequent ones.

6.38 The prices of industrial products are often fixed without paying due regard to the impact on the demand for related poducts and their consistency with development strategy. The energy sector is an important case where, because of substitution possibilities, a measure of consistency is required in the pricing of related products like kerosene, soft coke, electricity and LPG. Moreover, the impact of conventional energy prices on the promotion of non-conventional energy also needs to be taken into account. Similarly, the pricing of different metals and other materials must take into account the substitution possibilities which need to be encouraged or discouraged. Existing procedures for price fixation must be modified to take into account these wider considerations.

6.39 The prices of most industrial products are set in a manner where an explicit subsidy is not required, though there may be a measure of cross subsidisation

amongst products. However, fertilisers are an important exception. Here the final price paid by the farmer is very much below the average cost of production and a large and growing budgetary provision for a fertiliser subsidy has become necessary. Fertiliser sale prices cannot be raised to cover the entire gap without dislocating and jeopardising agricultural growth. Alternative schemes which limit the quantum of the subsidy will have to be worked out as otherwise the burden of subsidy under the present system will rise very rapidly with the growth in domestic production.

Trade Policy

6.40 The trade deficit, though declining over the Sixth Plan period, still constitutes a structural weakness of the balance of payments. In fact, except for brief periods, a relatively large merchandise deficit nas been a persistent feature of India's foreign trade. The main factors underlying it become directly relevant for policy prescription. This does not imply, however, that policy concerns be confined to merchandise trade. Invisibles, particularly tourism and expatriate remittances, which have emerged as important elements of the balance of payments on current account, too deserve attention.

6.41 India's foreign trade sector and balance of payments have to contend periodically with unforeseen internal and external shocks, such as sudden and sharp deterioration of the terms of trade or droughts and other internal supply problems of varying intensity. Apart from developments which cannot be easily foreseen, or which cannot be easily influenced through national policies, the pull of domestic demand and high production costs have been persistent obstacles to the rapid growth of exports.

6.42 Considering the nature of internal constraints to be overcome, the lack of clear indication so far of an enduring improvement in the international economic environment, and uncertain prospects for expatriate remittances, a whole array of policy instruments, ranging from general and aggregative to selective and specific commodity will need to be deployed to attain Seventh Plan balance of payments objectives. These would include, among others, measures to extend the same treatment to exports and efficient import substitution.

6.43 Import licensing has been a major instrument for according protection and keeping down the level of imports. Quantitative import restrictions, though no doubt effective, have also fostered a chronic disregard for productive efficiency by creating a protected domestic market. And in the absence of equally secure and commensurate incentives for sales abroad, they have discriminated against exports in the same way as a generalised export duty. As a consequence, a large number of import products are replaced at a much higher domestic resource cost than would have been involved in acquiring equivalent foreign exchange through exports. In line with Sixth Plan policy concerns, deliberate efforts were mounted to minimise this bias against exports; and the policy package for exporters from the domestic tariff area (DTA), consisting essentially of import replenishment, duty drawbacks, cash compensatory support or CCS, concessional credit and provision or domestic intermediates, was streamlined and liberalised. The residual discrimination against exports, however, remains significant, as export incentives generally still do not compare favourably with those extended to production for the home market.

6.44 With the existing structure of import restrictions and tariffs, incentives for import substitution vary widely from product to product; and there is no simple or clearcut manner of computing the equivalent benefits to exports. Moreover, while incentives to import substitution are already included in the high cost of domestic products and do not involve direct budgetary subsidies, compensating incentives to exports, including even those (like the CSS) essentially refunding indirect taxes not rebatable though drawbacks, are a visible charge on budgetary resources. These problems, however, can be tackled. Greater reliance on tariffs than on import restrictions to restrain the demand for imports, as also lesser variability in the structure of tariffs would provide a better norm for setting export incentives extended in various forms including import replenishment, drawbacks, cash compensatory support, fiscal concessions and preferential access to bank credit and term finance. Considering that CCS is in the nature of a drawback, its coverage should be extended to all products barring only those which face rigid export supply constraints or inelastic demand abroad. Manifestly, the shift away from import licensing towards less differentiated tariffs, which is an essential element of this policy package, has to be accomplished step by step in a manner that avoids unnecessary drawal of foreign exchange reserves or other unwelcome side effects.

6.45 Discrimination against exports can be avoided as has been done through the establishment of Free Trade Zones (FTZ), or the more recent 100 per cent export oriented units (EOUs)—a foot loose version of the former. That a striking success has so far eluded them is largely due to their operations not always being more attractive than partial production for exports in the domestic tariff area (DTA). Duty free and open access to imports does ensure that

prices of import substitutes used in the FTZs or EOUs cannot, as in the case of exports, exceed the border price. The resulting parity of treatment with import substitutes, however, does not necessarily make exports more profitable than those from the domestic tariff area (DTA). Conceivably, exports from the domestic tariff area could well have yielded a better return in some cases. For, until 25 per cent of output was allowed to be sold in the domestic market, the difference between the rather small fraction of import price representing the annual equivalent of import duty exemption on capital goods on the one hand, and the REP benefit, on the other, constituted broadly the incentive differential between FTZ type and DTA regimes*.

6.46 The favoured treatment of import substitution could, moreover, be offset by concentrating on the expansion of some 'thrust' industries with demonstrable and lasting comparative advantage in the export market. Among other things, enlarged and easier access to imported inputs and exemption from relevant provisions of industrial licensing would enable them to benefit from modern technology and economies of scale. The 'thrust' industries could then undertake to enter the export market in a very big way by expanding production well beyond domestic demand, the resulting supply shortfalls elsewhere in the economy being corrected through recourse to imports.

6.47 Measures to remove the discrimination against exports and to promote their growth must be accompanied by proper policies for containing domestic demand, as otherwise the gain in exports may be neutralised to a large extent by increase in imports. While this might still leave a favourable impact on income, not much contribution would be made to the reduction of the trade deficit. Trade and current account deficits, however, are not affected so much by excessive aggregate spending as by a pattern of demand with preferences for exportables and import substitutes. The demand for import substitutes could spill over into imports directly (as in the case of oils and fats) or indirectly through the use of imported inputs.

6.48 Clearly, balance of payments difficulties stemming from the structure of demand cannot be overcome simply by correcting the existing policy bias against exports; for, that would only shift resources from import substitution to exports whenever the latter are more competitive internationally. Thus, in addition other measures will be needed which are designed to restrain generally the growth of domestic requirements of import substitutes and exportables (other than wage goods and essentials like foodstuffs) as well as to strengthen the production base for both. More important still, they will have to become progressively more competitive, price and quality wise, with their internationally traded counterparts. Otherwise, the demand for imported intermediates, components and equipment may not decline relative to GDP while it would become difficult to find outlets abroad for surpluses of exportables. International competitiveness, not just in some enclaves but in large segments of the economy, is indispensable for eventual self-reliance. Their competitiveness, moreover, would have to be protected from erosion through a domestic rate of inflation higher than inflation abroad.

6.49 General policy measures to lessen the impact of demand patterns on the external balance can be further strengthened by suitable action at the commodity level. Some examples will illustrate these possibilities which involve pricing, investment incentives, infrastructure support and counter-protective methods. A shift from the present practice of setting grower prices of coffee partly with reference to the fluctuating international price could, by providing a more stable real return, lead to steadier average and output growth trends in the future. Investment in tea bushes has been woefully inadequate over the past several years which, together with the fast growing domestic demand, has begun to impinge seriously on the availability for exports. Existing obstacles to more rapid and sustained expansion of cardamom production, a major export spice, could be removed through provision of better irrigation and a change from the practice of leasing land to growers by concerned State Governments for a 25-year period, which discourages investment. As regards import substitution, generally only marginal lands are allocated to the cultivation of edible oilseeds because of lack of high yielding genetic material, susceptibility to pests and insufficiently effective price support. More orderly marketing, expansion of irrigation with application of fertilisers to groundnuts and introduction of high oil content sunflower are the types of measures to improve the growth of oilseed production.

6.50 External imbalances may also build up, or be aggravated, by excess spending and the resulting scarcity of local currency finance. They will have to be rectified through better demand management and resource mobilisation. Fiscal discipline, emphasising expenditure control, and appropriate monetary and credit policies, are needed, as stressed earlier in the chapter, to prevent the emergence of excess demand.

*Direct tax concessions are roughly comparable, with the higher net tax price of of domestic inputs used by DTA exporters is partially offset by arrangements to provide some of them at international prices.

5.51 The mutually reinforcing interaction between productivity and the balance of payments comes into sharp relief against the backdrop of the major means of improving the performance of the economy. First, a rapid growth of exports will reduce the need to rely on high cost and inefficient import substitution. Second, the containment of external deficit within manageable limits will permit better capacity utilisation through relatively flexible and liberal access to imports. Third, technological upgradation and modernisation as well as increasing technical sophistication of domestic products will win wider acceptance for them in export markets and increase their substitutability for imports.

6.52 Technological dynamism, however, requires, the stimulus of a competitive environment with both domestic and international pressures on firms to improve technology. A sustainable combination of import liberalisation and deregulation of manufacturing capacity would thus be a necessary spur to technological change without which liberal access to technology imports may not have the desired effect. Easier access to foreign technology will not only permit rapid absorption of innovations abroad but also encourage domestic development of new processes and products for the reason that innovation seldom takes place in isolation. All the same, discretionary regulation of technology inflows will still be necessary in order to ensure that high technology imports in the export sector carry an export obligation as well as to avoid acquisition of replicable or unduly high cost technologies. In fact, unnecessary imports or excessive costs can be even more effectively avoided through further progressive development of local technological capabilities which will (a) increase the bargaining power of domestic firms vis-a-vis foreign suppliers of technology and (b) make them more discerning about the import of different elements of a technology package.

6.53 Over the years service exports, particularly tourism, have emerged as an important element of current earnings comparable to major merchandise exports like engineering and chemicals. The potential for tourist earnings, which have a relatively large value added component, can be more fully exploited in various ways. First, greater attention should be paid to competitiveness relative to other destinations with regard to both price and non-price factors. Second, marketing effort abroad should be consolidated and strengthened. It should also be related to the mix of different types of tourism, categorized by tourist areas of interest and per capita expenditure, which is most likely to maximise earnings. Third, some further specialisation between private and public sectors in the future development of tourism may also become necessary. While the public sector would devote greater attention to general promotion, transportation and other basic infrastructure, the private sector would take up other aspects of tourist development including hotel construction. Finally, in order to maximize foreign exchange earnings from new investment in high cost tourist facilities for foreign travellers—five star hotels, for instance-competing domestic demands should be discouraged through appropriate taxes.

6.54 To be fully effective, policy changes discussed above require adequate institutional and organisation back up. They must also evoke the desired response from firms in different sectors of activity. The relevant administrative rules, regulations and procedures in all their detail should faithfully reflect policy intentions. This does not, however, imply operational rigidity, but adaptability to changing situations and circumstances. In this context existing institutions, like the Export Promotion Councils and the Commodity Boards, have an important role to play. They should be providing periodically accurate market information and in-depth commodity knowledge to inform administrative decision making. Promotion and marketing is the other function which they need to emphasise, particularly the provision of such services to firms not sufficiently equipped to venture out, or further, into export markets on their own. For, export selling involves location of buyers and establishment of trading connections over an immensely large area; changes in tariffs or trade regulations in importing countries, intense competitions, and shifts in tastes or technology add to the complexities and risks selling in the world market. However, large well-established firms in manufacturing, owing to the experience accumulated and connections developed over decades, possess substantially the type of flexibility and resources required to operate abroad. The success of policy adjustments will therefore depend, among other things, on the responsiveness of large firms, and on their willingness to equip for, and invest in, a substantial expansion of export operations instead of continuing to rely mainly on the domestic market. Small firms do not haye similar resources at their disposal. In their case an important role could be played by large merchandising houses which would mobilise finance, organise supplies and develop commercial contacts to establish viable export markets.

6.55 To conclude, the management of the balance of payments, in the Seventh Plan period and beyond, calls for a pragmatic many-sided approach rather than a monolithic strategy. Policy, guidelines, instead of being selective, have to be pervasive. Improvements in productivity, vigorous resources mobilisation and strict demand management, and

virtual freeing of exports from the adverse impact of import restrictions, other regulatory measures and indirect taxation, constitute the main structural features of an appropriate policy frame.

MGIPRRND—2 PC/85—VI—19-11-85—15,000