DRAFT
MID-TERM APPRAISAL
OF THE
EIGHTH FIVE YEAR PLAN
1992-97

1. Original Draft , July 1995
2. Revised Chapters 1 and 2 , November 1995

सत्यमेव जयते

GOVERNMENT OF INDIA
PLANNING COMMISSION
NEW DELHI
(September 1996)

Foreword

The Government of India Resolution setting up the Planning Commission inter-alia states that the Planning Commission will "appraise from time to time the progress achieved in the execution of each stage of the Plan and recommend the adjustments of policy and measures that such appraisal may show to be necessary". Accordingly, the Planning Commission had been undertaking appraisals of the past Five Year Plans. Mid-Term Appraisals were undertaken during the course of the plan period assessing the progress in different sectors of the economy, pointing to further action and suggesting corrective measures.

The Planning Commission, in its internal meeting held on the 28th June, 1994 decided to undertake the Mid-Term Appraisal of the Eighth Plan 1992-97. Accordingly, the exercise for the appraisal of the Eighth Plan was undertaken and a draft document was prepared. The draft Mid-term Appraisal of the Eighth Five Year Plan 1992-97 was discussed in the internal meeting of the Planning Commission on the 6th July, 1995. Based on the deliberations of the meeting, a draft was prepared which was to be discussed in the full Planning Commission meeting scheduled for the 19th September. 1995. However, that meeting of the Full Planning Commission did not take place.

The Planning Commission, subsequently, sought the views of the Central Ministries of Agriculture and Cooperation, Power, Commerce, Finance, Industry and Petroleum on the contents of the draft Mid-Term Appraisal of the Eighth Five Year Plan 1992-97 and the first two chapters of the document were revised based on the comments of these Central Ministries.

The Planning Commission, reconstituted in July, 1996 after the General Elections, reviewed the status of Mid-Term Appraisal. As the Eighth Five Year Plan itself was coming to an end after a few months, the reconstituted Commission decided that no useful purpose was likely to be served by attempting to revise the earlier drafts which contained data up to 1994-95. Instead, it was felt that a fresh re-appraisal of the Eighth Plan, using latest available data, should be undertaken as part of the preparatory work for the Ninth Plan which is due to begin on 1st April, 1997. It was also decided that earlier drafts of the appraisal document even though these could not be considered formally by the Full Planning Commission, should be made available to the public for information.

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Accordingly, the following drafts are being published in this document:

(1) Original draft, July, 1995; (2) Revised chapters 1 and 2, November, 1995. Comments of the members of the public and experts are welcome. The Commission proposes to take these comments into account in the formulation of the Ninth Plan.

The reconstituted Planning Commission will give its appraisal of the performance of the economy during the Eighth Plan in the Approach Paper to the Ninth Five Year Plan.

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NEW DELHI
September, 1996

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DRAFT

MID-TERM APPRAISAL OF THE EIGHTH FIVE YEAR PLAN 1992-97

(July 1995)

EXECUTIVE SUMMARY

Chapter 1

STATE OF THE ECONOMY AND ECONOMIC REFORMS

1.1. The set-backs suffered by the economy in 1990-91 and 1991-92 were taken into account while formulating the Eighth Plan. Thus the growth target (5.6 per cent p.a.) and the macroeconomic parameters were set at relatively conservative levels. A step up in the investment rate was considered necessary for attaining full-employment by 2002.

1.2. The average annual rate of growth of the GDP, which was 5.63 per cent per annum during 1980-1991, came down to 4.6 per cent for the first three years of the Eighth Plan (1992-95). If the Plan target is to be achieved, a growth rate of 7.1 per cent is required in the remaining two years.

1.3. The growth of the manufacturing sector has been 4.7 per cent during 1992-95 as compared to the Plan target of 7.3 per cent. However, agriculture growth has been more than satisfactory at about 3.7 per cent as compared to the targetted 3.1 per cent. Communications and Financial sectors have clearly performed better.

1.4. The current account deficit, which was about $10 billion in 1990-91, has come down to less than a billion dollars in 1993-94 and 1994-95. There has also been a surge in capital inflows in recent years. Total foreign investment has gone up substantially in 1993-94 and 1994-95. Most of this is accounted for by portfolio investments.

1.5. Import growth averaged about 14 per cent per annum during the Plan as compared to the target of 8.4 per cent. The growth in exports has been slower at 13.4 per cent, but in the last two years it has picked up to average 18.5 per cent. Such rates of growth will have to be sustained if the external debt is to be reduced while maintaining reasonable growth of GDP.

1.6. There has not been as yet a marked change in the composition of commodities or of markets which would indicate a structural change in our export sector.

1.7. The economy has pulled out of the recession, and the real effective exchange rate of the rupee has started to appreciate , both of which will tend to lead to a slowing down of export growth unless new export capacities are created rapidly.

1.8. An analysis of the level of export incentives, degree of import protection and the relative position of exports and import substitutes suggests that these measures are not substantially better now than in 1966-67, when India was not an export-oriented economy.

1.9. India's export growth will have to be based on improved productivity and product and market diversification, but an active exchange rate policy may be inescapable in the short run. The export regime should be made more "user friendly". Attention has to be paid to rapidly expanding export infrastructure, which is already a constraint.

1.10. The exchange rate has become central to management of the external sector due to reduction in other forms of trade intervention. The large inflow of foreign portfolio investments has put a strong upward pressure on the real exchange rate, which has appreciated in the past two years.

1.11. The most worrisome feature of foreign portfolio investments, is that it tends to behave pro-cyclically. It may therefore be necessary to maintain some amount of control at the initial stage of our reform process.

1.12. No stabilisation effort can be sustained unless the revenue deficit is brought down to reasonable levels and contained. The main philosophy guiding tax reforms was to have moderate and rationalised rates on a wider base and to ensure better tax administration. The approach appears to have paid dividends.

1.13. Government expenditures have declined by 2 percent of GDP, mostly on account of capital expenditures, but interest payments have risen by 0.6 percentage points.

1.14. The rapid increase in interest payments is a result of rising interest rates on new debt and the decision to reduce money finance of the fiscal deficit to accomodate foreign portfolio investments.

1.15. The average inflation rate in the period 1991-95 is higher than in the pre-reform period. Food prices have increased at a faster pace than prices in general; the principal cause being upward revision in the administered prices of food-grains.

1.16. The inflationary pattern in 1994-95 suggests that shortages tend to develop in certain sectors with rapid growth in incomes. These need to be identified and corrective steps taken.

1.17. Employment has grown at 2.03 per cent per annum for 1992-95, which is lower than the Eighth Plan target of 2.6 to 2.8 per cent. 48 per cent is accounted for by the agricultural sector which grew faster than the Plan target. For the future, measures to ensure the sustainability of agricultural employment need to be implemented.

1.18. Poverty estimates from the NSS "thin" rounds indicate a reduction in poverty since 1987-88. The importance of agriculture to both employment creation and poverty reduction underscores the need to accelerate agricultural growth.

1.19. Regional disparities may have widened even further. Three States - Bihar, Uttar Pradesh and Madhya Pradesh - experienced a sharper deceleration in growth than the national average. Distribution of organised sector credit and extent of Plan investments have also worsened.

1.20. The rate of capital formation, particularly by the private sector, has declined sharply by 2 per cent of GDP. The inflow of foreign direct investments (FDI) also have not entirely lived up to expectations.

1.21. The decline in government investments of 1.7 per cent of GDP has serious implications for the critical infrastructure sectors. While greater private sector participation in infrastructural development is the right direction to follow in the long-run, too much progress cannot be expected immediately due to legislative and procedural changes required.

1.22. The domestic savings rate has declined due primarily to a sharp reduction in household savings. Public savings had improved significantly but received a set-back in 1993-94. Corporate savings has grown steadily. Real foreign savings has averaged only 0.8 per cent of GDP, but the flow of financial savings have been much higher at 2.4 per cent. If these excess financial savings have to be absorbed, public investments have to be raised in the short-run.

Chapter 2

RESOURCES POSITION

2.1. The Eighth Five Year Plan (1992-97) was launched in the context of a serious fiscal crisis. The economic reform programme initiated in July, 1991 sought to augment tax revenues via a comprehensive process of tax reform while recognising the need to compress non plan revenue expenditure. The resource mobilisation exercise for the Eighth Plan was carried out keeping in view the broad objectives of the Plan which regarded 'human development' to be at the core of all development efforts.

2.2. The public sector outlay for the Eighth Plan was placed at Rs.434100 crores at 1991-92 prices. The share of States in the public sector Plan outlay has been going down from the Fifth Plan onwards.

2.3. There is a shortfall of about 7% in the overall approved Plan outlay during 1992-95. The shortfall is particularly marked in the allocations for the State sector. There are also serious shortfalls in the infrastructure and social sectors.

2.4. In regard to other sectors, too, shortfalls in Plan expenditure are noticed in the case of both the Centre and the States. Some of these are Agriculture and Allied Activities, Irrigation and Flood Control, among others

2.5. In terms of the projected financing pattern for the Eighth Plan, Balance from Current Revenue (BCR), resources of public enterprises and borrowings account for 88.8% of the total approved outlay. BCR has been in the negative region for the three year period 1992-95. As for Central PSEs, as against a target of 43.3 per cent they contributed only 31.3 per cent of the aggregate resources during 1992-95. State level PSEs were expected to contribute only 3.9% of States' aggregate resources.

2.6. There has been much higher dependance on borrowings and miscellaneous capital receipts (MCR) by both Centre and States.

2.7. Budgetary support is a crucial factor in the determination of outlays of sectors which do not have any access to internal resources of borrowings. Bulk of the budgetary support goes to the social sector, followed by the infrastructure sector. The infrastructure sectors with significant amount of budgetary support are power, railways, surface transport and coal.

2.8. In assessing the resource availability question for the terminal year of the Plan, i.e. 1996-97, tax revenues in respect of the four major central taxes, viz personal income tax, corporation tax, union excise and customs duties, have been forecast making use of buoyancy estimates. Assuming fiscal deficits of 5.1% and 5.5% of GDP the extent of Central budgetary support available for the Annual Plan of 1996-97 are forecast to be in the range of Rs.50988 crores to Rs.63561 crores respectively.

2.9. Increased resort to borrowing at market rates of interest has led to substantial increase in interest payments.

2.10. As against the Eighth Plan target of an average savings ratio of 21.6% the gross savings ratios in 1992-93 and 1993-94 were much lower at 20% and 20.2% respectively. There has been an increase in the dissaving of the Government.

2.11. Resource mobilisation at the State level was far short of the projections for the Eighth Plan. Substantial shortfalls were noticed in the BCR and contributions of State level public enterprises.

2.12. The performance of the States presents a varied picture. Only Maharashtra and Arunachal Pradesh could mobilise more than 60% of the resource during 1992-95.

2.13. At current projections of resource mobilisation a resource gap at the States' level of Rs.37,000 crores to Rs.43,500 crores is likely to emerge.

2.14. Overall, significant shortfall is observed in respect of BCR and contribution of PSUs, leading to substantially large reliance on borrowings and miscellaneous capital receipts. There are serious shortfalls in outlay particularly in the infrastructure and social sectors. There is need to explore avenues for revenue augmentation and compression in respect of non plan expenditure, so as to allocate resources for the badly deficient social and economic infrastructure .

2.15. After careful examination of the resources position both from the points of view of additional tax and non tax revenue moblisation as well as expenditure compression it is seen that an amount of Rs.60000 crores should be feasible as the Central budgetary support for the terminal year (1996-97) of the Eighth Plan.

Chapter 3

EMPLOYMENT AND POVERTY ALLEVIATION

3.1. The Eighth Plan envisaged creation of additional employment opportunities of the order of 426 lakhs during the plan period on the assumption that the economy would grow at the rate 5.6 per cent per annum and the employment intensity of growth would be 0.47. An assessment of the performance of the economy in the first three years of the Plan shows that the economy has grown at the rate of only 4.6 per cent per annum but that, there has, been a shift in the composition of growth in favour of employment-intensive sectors and sub-sectors during this period compared to the eighties. As a result, employment has grown at an average annual rate of 2.03 per cent during this period or 63 lakhs per annum compared to a rate of growth of 1.78 per cent or 50 lakh per annum, during the period 1985-92. But this rate of employment growth falls short of the rate of growth of 2.7 per cent or 85 lakh additional employment opportunities per annum envisaged in the Plan. Consequently, open unemployment has increased from 1.70 crore at the beginning of the Plan to 1.87 crore by the end of 1994-95.

3.2. Employment growth needs to average at 3.64 per cent per annum and, therefore, the rate of growth of the economy at 7.3 per cent per annum during the last two years of the Plan.

3.3. Assessments and forecasts by various organisations indicate rates of growth of the economy between 5% & 7%. These would imply a modest scenario of the Plan being able to absorb the net additions to labour force in employment or an optimistic one of being also able to reduce the backlog by about 50 lakh. Prospects of achieving the goal of near full employment by 2002, however, appear feasible through enhancement of public investment in agriculture, especially strengthening irrigation and other rural infrastructure in backward areas, expansion and diversification of rural non-farm sector activities and the small scale sector and faster growth of other employment-intensive sectors like construction, transport, hotels and restaurants and incentives for private investment in housing. Foreign direct investment and domestic investment much of which are in core industries like infrastructure and capital goods industries, would also lead to substantial indirect employment in the economy.

3.4. An analysis based on the relationship between incidence of poverty and availability of foodgrains shows that the incidence is likely to have declined from levels observed in 1991-92.

3.5. The scope and content of Special Employment Programmes has been considerably improved. Annual outlays have been enhanced considerably in the first three years of the Eighth Plan. Several new initiatives have been taken including the introduction of the Intensified JRY in 120 identified backward districts and Employment Assurance Scheme covering 2446 blocks. These have led to substantial increase in the flow of funds to backward areas characterised by a high degree of poverty and under-employment. Under IRDP the major thrust has been on increasing the per capita investment and strengthening of the infrastructure and linkages in order to make the scheme economically viable. The focus has been shifted towards convergence of various poverty alleviation programmes with area development programmes and the sectoral schemes with the objective of building rural infrastructure for more sustained employment.

3.6. Decentralised planning has been given a tremendous impetus by the enactment of the 73rd and 74th Constitutional Amemndment Acts. State Governments/Union Territories have enacted appropriate legislations and it is expected that the elected bodies will be in place by the end of the year. However, in order to make them efffective units of local self-government adequate powers and funds would have to be transferred to them. Furthermore, the role of voluntary agencies is expected to increase in the rural development sector and steps to facilitate this have been initiated by the Government.

Chapter 4

SOCIAL INFRASTRUCTURE

4.1 Social development is the ultimate of all development and, therefore, a goal in itself. It also helps in creating a supportive environment for Economic Growth. Since it is difficult to adopt a 'norm-based' approach for Social Infrastructure, a Minimum Needs approach is adopted.

4.2 The Indicators of Social development have shown an improvement over the years, as can be seen from the Table of selected indicators given below:

Indicators of Social Development

	1951	1981	1991
1. Crude Birth Rate (per 1000)	41.7	33.9	29.5
2. Crude Death Rate (per 1000)	22.8	12.5	9.8
3. Infant Mortality Rate (per1000)	146.0	110.0	80.0
4. Life expectancy at birth (years)	32.1	52.3	60.8
5. Literacy rate Total	18.33	43.56	52.11
Male	27.16	56.37	63.86
Female	8.86	29.75	39.42

4.3 Despite improvement in indicators of social development, India lags behind in comparison to most of the developing countries. Large differences exist within the country also. Crude Birth Rate in 1991 was 18.3 per 1000 in Kerala (lowest) against 35.8 per 1000 in Madhya Pradesh (highest). Similarly, Female Literacy rate in 1991 was 20.80 per cent in Madhya Pradesh (lowest) against 86.90 in Kerala (highest). While 82.31 per cent of households in Punjab in 1991 (highest) had electricity in their homes, only 12.57 percent (lowest) of households in Bihar had electricity.

4.4 Given the low levels of indicators of human development, large differentials across states, large variations between rural and urban areas, gender disparities, and wide gaps between the need and the availability of social infrastructure in this country, the government has to play a key role in the provision and maintenance of social infrastructure. Private investment in provision of social infastructure is of a small magnitude and is restricted to areas which yield returns on investment.

Plan Outlay

4.5 The Eighth plan outlay for social services was fixed at Rs.79,012 crores. Plan outlay for social infrastructure was targetted to increase from 16 percent in the Seventh plan to 18.2 percent in the Eighth plan. However, in the first three years of Eighth plan, the plan allocation for social sectors has declined to below 16 percent. Constraint of budgetary resources, is the reason for this decline in the recent years.

4.6 In the first three years of the Eighth plan, outlay for social infrastructure has been 46 percent of the Eighth plan provision against 55 percent for other sectors. The gap betwen the first three year's allocation for social infrastructure in relation to the plan's outlay, and other sectors has been wider in the central plan when compared to the State's plan. This is due to a larger allocation for economic infrastructure by the centre.

Health

4.7 There have been shortfalls in the achievment of setting up of Primary Health Care Infrastructure. Though, there is an attempt during the Eighth plan to strengthen the existing infrastructure for Primary Health Care, shortage of paramedical personnel is noticed.

4.8 Communicable diseases like Malaria, Leprosy, Tuberculosis, AIDS, etc., continue to be cause for concern and are tackled through Centrally Sponsored Programmes. Because of an increase in life expectancy, there is an increase in the prevalence of non-communicable diseases like Diabetes mellitus, Cardiovascular diseases, Cancers, Cataract, Hearing impairment, Arthritis amongst the elderly persons. Efforts are also on to promote the Indian System of Medicine and Homeopathy which are widely accepted in the country, and practitioners belonging to these systems are available and provide health care at affordable costs in rural areas.

Family Welfare

4.9 Large disparities across states prevail in fertility rates. During the first two years of the Plan, there has been a progressive increase in the number of couples using sterlisation for contraception. For the distribution of reversible methods of contraception -IUD, OC and condoms, strategy of social marketing has been adopted. Maternal and Child Health Programmes are an important part of Family Welfare Programmes and help to reduce maternal, infant and child mortality rates.

Housing and Urban Development

4.10 The National Housing Policy envisages shift in Government's role to act more as a facilitator than as a provider. The needs of the vulnerable sections will continue to be taken care of by the Goverment. As a facilitator government aims at providing basic infrastructure, flow of finance, removal of bottlenecks from legal and regulatory framework, etc,.

4.11 Increase in urban population has created problems of congestion, pollution and deterioration in civic services. Poverty in urban areas is also at high levels. The scheme of environmental improvement of urban slums aims at ameliorating the living conditions of urban slum dwellers and envisages provision of drinking water, drainage, widening and paving of existing lanes, street lighting and other community services. Some Centrally sponsored schemes are under implementation to take care of other urban problems.

Water Supply and Sanitation

4.12 The recent survey of 1991-94 conducted by the State Government has revealed that the dimension of the problem of rural water supply is much larger than what has been visualised in the Eighth plan. At the time of formulation of Eighth plan, it was estimated that besides 3,000 spill-over problem villages, there were about 1.5 lakh 'partially covered' villages/ habitations requiring augmentations whereas, as per the said survey there has been a re-emergence of as large as 1.4 lakh 'no-source' villages/habitations in addition to 3.67 lakh 'partially covered' villages/ habitations.

Literacy and Education

4.13 Enrolment figures at the elementary stage, are not commensurate with targets during the first two years of the Plan. More allocations to education particularly to elementary sector have to be provided. The problem of dropouts is being tackled through incentive schemes of midday meal, etc,. In Adult Education apart from emphasis on enrolment, there are efforts for sustainability of literacy skills. To improve quality of secondary education, Navodaya Vidyalayas are being set up in more districts, and facilities in Kendriya Vidyalayas are being upgraded.

4.14 For improvement of Science Education there is a scheme of central assistance for science kits, upgradation of science laboratories, supply of science related literature, etc,. Quality of Vocational Education is a cause of concern. With a statutory status, the All India Council For Technical Education is in a position to activate a proper planned and coordinated development of technical education in the country. Mission mode in Industry- Institution interface and financial self reliance have been emphasised in the technical and higher education, but results are yet to be seen.

4.15 Schemes for the promotion of Culture like award of scholorships and fellowships to artists in the field of performing, literary and plastic arts have exceeded the Eighth plan provisions. The scheme of Nehru Yuvak Kendras aims at providing the rural and non-student youth with oppurtunity to take part in the process of National Development, as also to develop their own personality and skills.

Minimum Needs Programme

4.16 MNP spending as a percentage of total plan outlay has been declining over the years.

Welfare of Select Social Groups

4.17 There are shortfalls in the liberation and rehabilitation of Scavengers under the National Scheme for Liberation of Scavengers. Achievment under the post matric scholarship for SC/ST has been good. National Minorities Development and Finance Corporation has been set up with an authorised capital of Rs.500 crores. Mahila Samridhi Yojana has been launched to encourage savings amongst rural adult women.

Information and Broadcasting

4.18 The thrust of the Eighth Plan for Information and Broadcasting sector is on bringing about a qualitative change in broadcasting services, expansion of coverage especially in remote areas and modernisation of information and publicity media. The strategy includes functional autonomy of the electronic media and making it self-supporting at least for the Plan investment. The performance of AIR in achieving the physical targets in the three major areas of setting up of broadcasting centres, radio transmitters and studios fixed for the Eighth Plan has been satisfactory during the first three years of the Plan. The performance in the case of Doordarshan has, however, not been satisfactory, in respect of Programme Generation Facility (PGF) Centres and High Powered Transmitters.

4.19 Due to stif competition being faced from foreign TV channels, any substantial increase in the revenue from the existing level would be difficult for Doordarshan unless it adopts an innovative strategy to counter the challenge. The Non- Lapsable Fund (NLF) created as a repository of revenue generated by AIR and Doordarshan has been the main source of financing Plan investment. Withdrawals from this fund need not be restricted to the net accruals during a year. The Press Information Bureau (PIB) needs to be modernised and developed as a state-of-the-art media centre.

Chapter 5

AGRICULTURE AND ALLIED ACTIVITIES

Section 1: AGRICULTURE

Thrust Areas

5.1 Major thrust areas identified for agricultural development amongst others are accelerated growth in areas which have relatively lower growth, development of rainfed areas, diversification of agriculture, inputs management, enhanced agricultural exports, marketing infrastructure, development of resources in agro-climatic zones, etc.

Agricultural Production Performance

5.2 The first three years of 8th Plan have been marked by fairly consistent level of foodgrains production in the range of 180.00 to 185.oo million tonnes with the production reaching a new peak of about 186.35 million tonnes in 1994-95. The incremental production has not kept pace with the targets set for the 8th Plan. Record of production of oilseeds, sugarcane and cotton were also achieved in 1994-95. The production of pulses show a gradual increase from 1992-93 to 1993-94 with a production level of 14.33 million tonnes in 1994-95. There has been improvement in the productivity levels of agricultural crops excepting wheat, coarse cereals, cotton and sugarcane.From the trend in the foodgrains production, there is likely to be a shortfall for about 9-10 million tonnes in 1996-97 compared to the Eighth Plan target of 210 million tonnes.

5.3 The Eighth Plan outlay for Agriculture & Allied Activities (excluding forestry and wild life) is Rs.10979 crores. During the first three years of the Eighth Five Year Plan, the outlay provided was of the order of Rs.6687.95 crores, accounting for 60.91% of the total.

Fertilizers

5.4 Actual consumption of fertilizers which stood at 127.3 lakh tonnes in 1991-92 declined to 121.5 lakh tonnes in 1992-93 and is anticipated to increase to 140.6 lakh tonnes in 1994-95. The decline in fertilizer consumption was mainly because of substantial rise in the prices of phosphatic and potassic fertilisers. As against the optimum NPK ratio of 4:2:1, an actual ratio has now become 9.5:3.1:1. This calls for taking up urgent steps to correct imbalances in fertiliser use. Increased manufacture and use of slow release of fertilizer needs to be encouraged through a proper package of incentives besides promotion of balanced and integrated use of fertilizers and increased fertilizer consumption in the low consumption rainfed.

Agricultural Credit

5.5 Credit disbursement in agriculture has increased substantially from Rs.11507 crores in 1990-91, to an estimated level of Rs.16,700 crores in 1994-95. Faster growth of agricultural credit cannot be sustained unless viability of credit disbursing institutions is ensured. Cooperative Credit Structure would need to be revamped to increase the flow of credit for agricultural production purposes.

Horticulture

5.6 Area under fruit crops increased by 11.5% from 28 lakh hectares in 1991-92 to 32 lakh hactares in 1992-93. Fruit production in the same period registered a 15.1% increase from 286 lakh tonnes to 329 lakh tonnes. There was 8.8% reduction in area under vegetables while vegetables production increased by 21.2% from 585 lakh tonnes to 710 lakh tonnes during this period.

Plantations

5.7 Tea production has increased from 721 million kg. to 730 million kg. from 1992-93 to 1993-94 and expected to be 800 million kg. in 1994-95. A 10-year Perspective Plan has been drawn up to achieve a production target of 1000 mill. kg. by 2000 A.D. Coffee production has also gone up from 161.5 million kg. in 1992-93 to 180.0 million kg. in 1994-95. In order to boost the growth of coffee sector, policy of Free Sale Quota has also liberalised. Export of spices has increased from 1.3 lakh tonnes in 1992-93 to 1.8 lakh tonnes in 1993-94 and it is expected to be 1.65 lakh tonnes in 1994-95. Production of natural rubber increased from 3.9 lakh tonnes to 4.74 lakh tonnes from 1992-93 to 1994-95. 97% of the domestic demand is met by local production and rest is met from import. Rubber production enhancement strategy includes expansion of area in non- traditional regions, replanting of low and old yielding for higher yielding varieties, and improving productivity of existing area by popularising of adoption of modern and improved agricultural practices.

Diversification of Agriculture

5.8 Strategy of agricultural diversification should encourage diversification of crop husbandry and other allied activities like fisheries, processing of agricultural commodities etc. for higher productivity and better return.

Fisheries

5.9 During 1990-91 to 1993-94, annual growth rate of fish production worked out to 6.2% The production exceeded the target each year. With the continuation of the tempo of higher fishery production, a target of 55 lakh tonnes would be achieved by the terminal year of 8th Plan. Marine products export which was at the level of 1.72 lakh tonnes valued at Rs.1375 crores in 1992-93 has reached the level of 2.44 lakh tonnes valued at 2504 crores in 1993-94. Fish seed production also increased substantially from a low level of 969.1 crore fry at the end of 7th Five Year Plan. to the level of 1350 crore fry in 1993-94. However, technology improvement in case of prawn seed hatchery needs greater attention to cope with the demand.

Dairy Development & Animal Husbandry

5.10 The milk production increased from 557 lakh metric tonnes in 1991-92 to 602 metric tonnes in 1993-94. Artificial insemination (AI) increased from 315 lakhs to about 320 lakhs during the same period. Egg production which was 2198.3 crore numbers in 1991-92 had gone up to 2377.2 crore number by 1993-94. Wool production rose from 399 lakh kgs. to 412 kg. during this period. The Eighth Plan targets of 708 lakh tonnes of milk and 3000 crores of eggs could be achieved. Added attention needs to be focused on improvement of genetic stock through cross breeding/upgrading, promotion of livestock farming and poultry on scientific lines.

Investment in Agriculture

5.11 There has been deceleration in agricultural investment during the 1980s. Total gross investment at 1980-81 prices declined from 4636 crores in 1980-81 to 4345 crores in 1989-90 and recovered to 4595 crores in 1990-91. Thereafter it again declined to 4567 crores in 1992-93. Public sector investment in agriculture primarily relates to departmental irrigation works by Centre & States. Encouragement would need to be given to accelerate the level of investment by private sector for higher growth of agriculture, besides inducing the farmers to intensify their efforts for making higher investment.

Agro-Exports

5.12 Agro-exports increased from Rs.2057 crores in 1980-81 to 9457 crores in 1992-93 further to a record level of 13021 crores in 1993-94. In terms of US $ export increased from $ 2601 million to $ 4115 million in 1993-94. However, the share of agriculture in total exports has come down from 27.7% in 1985-86 to 18.7% in 1993-94. The constraints operating on agro exports are volume insufficiency, quality deficiency, inadequate infrastructural facilities at Air Port and Sea Port, etc. In the changed scenario of liberalisation of Indian economy, emphasis .pa would need to be given to short term and long term strategy for enhancing the competitiveness of agro exports in the global markets besides taking up export promotion measures.

Section 2 :IRRIGATION, FLOOD CONTROL & COMMAND AREA DEVELOPMENT

Decline in Funding for Irrigation Sector

5.13 During the period (1951-94), the creation of irrigation potential increased from 22.6 M.Ha. to 85.05 M.Ha. and consequently utilisation increased to about 76 M.Ha. by 1993-94 as a result of massive investment of around Rs.52600 crores (including Rs.7050 crores of institutional financing but excluding other direct investments by the Public Sector mainly as subsidies to minor irrigation development through various programmes). During 8th Five Year Plan, total outlay of Rs.32525.79 crores has been approved for I&CAD sector (Major & Medium - Rs.22414.53 crores, minor irrigation - Rs.5977.26 crores, flood control - Rs.1623.37 crores and CAD programme - Rs.2510.13 crores) of which overall only about 47.18% (Rs.15347.60 crores) could be spent during three years of the Plan Period i.e., 1992-95 due to which besides the CAD and flood control activities, irrigation potential of the order of 1.76 M.Ha.(against 8th Plan target of 5.08 M.Ha.) and 4.82 M.Ha. (against 8th Plan target of 10.71 M.Ha.) through minor irrigation during 1992-95 have been created. At the time of formulation of 8th Plan the priority to I&CAD Sector envisaged was 18.48% which has gradually been reducing to 15.94% in 1992-93 (actual expenditure), to 15.68% in 1993-94 (R.E.), and to 14.08% in 1994- 95 (R.E.). Consequently, funding of even ongoing 195 major and 323 medium irrigation projects was on an average Rs.3380 crores per annum against their total spill over cost of Rs.38994 crores (at the 1991-92 price level) at the beginning of 8th Plan. The direct fall-out is the steep reduction in the number of projects completed during 1992-95 against the target set for 8th Plan since only about 33% of ongoing major/medium projects are anticipated to be completed during 1992-95.

Low disbursement in Externally assisted projects

5.14 The level of disbursements in irrigation sector has been low with respect to the projections in the agreement with the donor agencies mainly due to inadequate financial support to these projects in the State Plan as well as delay on account of various clearances like Environmental & Forest, R&R, and land acquisition. etc.

Overdue revision of existing low Irrigation Water Rates

5.15 Revision of water rates has been infrequent, hesitant and very much less than the increase in costs. In Tamil Nadu, the water rates were last revised 32 years ago, in Kerala, J&K and Himachal Pradesh since mid-seventies and Andhra Pradesh, Bihar, Gujarat, Karnataka, Madhya Pradesh, Orissa, Rajasthan and West Bengal during early eightees. The revenue collection from the water rates is able to meet, on an average, only one third of the O&M cost. Recently a Group of officials (GOO) set up by the Planning Commission under the Chairmanship of the Member- Secretary, Planning Commission has recommended that the water rates should be appropriately enhanced by the States so as to meet at least O&M cost of the projects in next five years.

Renovation & Modernisation of Major & Medium Projects

5.16 Due to deferred maintenance, the benefits from old irrigation projects has been depleting. About 130 lakh ha. of irrigated area from projects completed before Independence and another 80 lakh ha. from schemes completed 25 years ago are required to be attended to which is estimated to cost Rs.8000- 10,000 crores against which the outlay is Rs.1773 crores in 8th Plan and the expenditure during 1992-95 is only Rs.787 crores (44.3%).

Lag in the creation and utilisation of irrigation potential

5.17 As per available figures, the gap between the potential creation and utilisation at the end of 1993-94 is obtained at the level of 8.79 M.Ha., which is on the basis of different criteria adopted by different states and not as per the definition prescribed by the Planning Commission. In case of minor irrigation, the above figure is on normative basis. Thus, the statistical data base for potential creation and utilisation of irrigation needs to be urgently reassessed and firmed up. The CAD programme (1974-75) which presently covers 181 major and medium projects with total area of 21.18 M.Ha. administered through 54 CADAs spread to 22 States and 2 UTs is for bridging the gap between potential created and utilisation. Based on experience gained over last 20 years, this programme needs to be re-oriented/re-structured, in order to make it more effective in terms of end result, i.e., optimising the utilisation of irrigation potential and agricultural productivity. Total expenditure of Rs.4[illegible]7 crores (including Rs.1425.65 crores under Central Sector) was incurred upto the end of 1994 for this programme.

Conjunctive use of Surface and Ground Water

5.18 About 6 M.Ha. of the area is considered to be waterlogged out of which about 3.4 M.Ha. is by surface flooding. It has been found that the area with Water logging within 2 Mtr. depth below Ground level is 36.36 M.Ha. in August which goes on decreasing in subsequent months to 3.42 M.Ha. in April. The simultaneous development of ground level in conjunction with surface water would help in lowering the water table and hence mitigate water logging conditions. Besides this construction of augmentation TWS for increasing the supplies in the canals during summer months when water is in short supply is already in existence in certain canal system in Punjab, Haryana, U.P. & M.P. which needs to be adopted in other areas of need.

Participatory Irrigation Management

5.19 There are about 4455 WUAs in various forms and sizes covering about 0.347 M.Ha. irrigated area which is less than even half a percent of the total area presently under irrigation in the country. Presently, WUAs are being organised for the areas covered by one course outlet (covering about 40 ha. area) which subsequently may be upgraded to the distributory/minor levels.

Chapter 6

INFRASTRUCTURE

Section 1: ENERGY

Hydrocarbons

6.1 Consumption of petroleum products grew at around 5.5% during 1992-95 against the anticipated rate of 6.9 per cent during Eighth Plan period. Crude oil and natural gas production in 1996- 97 are expected to be about 38.5 Million Tonnes (MT) and 25 Billion Cubic Meters (BCM) against the targets of 50 MT and 30.18 BCM respectively. Crude oil production during 1992-97 is now estimated to be 167 MT against the target of 197.3 MT. As a result, shortfall in domestic oil production, the total import bill during 1992-97 may be of the order of Rs.89,500 crores as against the plan estimate of Rs. 74,600 crores.

6.2 The establishment of new reserves will significantly fall short of the target of 1325 MT of oil and oil equivalent of gas during the 8th Plan period. An accelerated exploration programme has been taken up and success of this programme will be critically important for the level of domestic production in the coming years.

6.3 The refining capacity in the terminal year is expected to reach the target of 65 million tonnes per annum. A number of initiatives have been taken for private sector participation in the oil sector. Success in this area will depend upon quick formulation of the approach about the oil pricing regime, greater autonomy to public sector undertakings and other related issues. The earlier decision to allow development of already discovered fields by private parties need to be reviewed because of improved internal resource position of national companies like ONGC and OIL.

Coal

6.4 Coal consumption grew at an annual rate of 4.3% during the first three years as against the rate of 6.9% envisaged for the Eighth Plan period. Production grew at the rate of 3.4% per year during 1992-95 as against the rate of 6% envisaged for 1992-97. The domestic consumption and production during 1996-97 are expected to be 311 MT and 300 MT against the targets of 311 MT and 308 MT respectively. Lignite production is expected to be 18 MT against the target of 19.6 MT in 1996-97.

6.5 Transport bottlenecks persist in the movement of coal. It is necessary to attempt large scale beneficiation of non-coking coal to reduce the rail transportation requirement. Railways also need to substantially increase their coal transportation capacity.

6.6 Projects for a capacity of 36 million tonnes only have been sanctioned against the target of production of 72 million tonnes per year from new projects. Action on new projects needs to be speeded up.

6.7 Private sector participation in coal production projects has been allowed only for captive mine development for new power projects. Commercial mining by private sector would need to be permitted by providing access to infrastructure and awarding suitable areas/coal blocks to meet the increasing demand for coal.

Power

6.8 Capacity addition during the Eighth Plan was targetted to be 30538 MW. Actual addition may be between 16500 and 18000 MW only. The Plant Load Factor for thermal stations in the country increased to 60% in 1994-95 as against 57.1% in 1992-93. The energy and peaking deficits in 1996-97 would be significantly higher than 20.7% and 9% respectively envisaged at the time the Eighth Plan was formulated.

6.9 The share of hydro-power will come down to 25.7% in 1996-97 from 27.8% in 1991-92. Hydro-projects will continue to languish unless additional budgetary support is given by the Government. Such support is also necessary for improvement of the transmission and distribution system. Nuclear power has been plagued by high cost, long lead time for new projects and unsatisfactory operational performance.

6.10 While some State Electricity Boards (SEBs) have shown improvement in their financial performance, the commercial loss of all SEBs taken together has been above Rs. 6000 crores per annum. The tariff structure needs to be made remunerative to improve the financial position of SEBs.

6.11 Competitive bidding should be resorted to for future power projects and proper emphasis should be given on improvement in the financial position of SEBs to obviate the necessity of counter-guarantees by the Government. PSUs also need to be given equal opportunity for participating in competitive bidding and to raise funds from domestic and international market.

Rural Energy

6.12 There is likely to be shortfall in achievement of the targets relating to village electrification, pumpset energisation and in power generation programmes through Non-Renewable Sources of Energy (NRSE). Actual achievements during 1992-95 for village electrification and pumpset energisation have been 11,000 villages and 11.65 lakh pumpsets against the Eighth Plan targets of 50,000 villages and 25 lakh pumpsets. NRSE needs to be encouraged in the villages yet to be electrified and located in far-flung and remote areas.

Energy Conservation

6.13 It is necessary to set up an Energy Conservation Authority with statutory powers to achieve any significant success in realising the present energy conservation potential. Such an organisation can formulate the policy package, the financial incentives as also necessary programmes and projects for different supply and end-use sectors.

Plan Outlay

6.14 While the oil sector has not faced any problem about plan expenditure, the coal and lignite sector expenditure during 1992-95 was 57.6% of the approved outlay for Eighth Plan at constant prices, the corresponding figures for Central and State power sector being 47% and 26% only. There have been shortfall in raising Internal and Extra Budgetary Resources.

Section 2: TRANSPORT

Railways

6.15 The passenger traffic in the Railways was 30500 crore passenger kilometer (PKM) in 1993-94 against the target of 32665 PKM. The originating freight traffic in 1993-94 was 3587 lakh tonnes against the target of 3700 lakh tonnes. The improvement in productivity of railways in terms of Net Tonne Kilometer (NTKM) per wagon per day has been sluggish and the target of 1750 NTKM/wagon/day for 1996-97 is unlikely to be achieved.

6.16 Track renewal programmes are on schedule. However, some of the areas needing attention are rehabilitation of bridges, improvement in operational efficiency of the system, technical upgradation of assets, selective expansion of line capacity on heavily congested sections, proper prioritisation of ongoing projects, effective policy package for private participation, etc.

Roads

6.17 Resource availability for maintenance and construction of new roads, particularly National Highways, has been inadequate. National Highways now account for 35% of road traffic, though constituting only 2% of the road network. These need special attention.

6.18 Apart from additional budgetary allocation, an effective policy for involving the private sector needs to be evolved.

Road & River Transport

6.19 The physical performance of State Road Transport Undertakings and Ports registered improvements. However, their financial performance as a whole has not been satisfactory. Central Inland Water Transport Corporation also incurred a loss of Rs. 9.62 crore in 1993-94. Policies need to be evolved for facilitating private investment in all these areas. Shipping Corporation has taken steps for modernisation of their fleet. Coastal shipping has not been able to achieve its full potential.

Civil Aviation

6.20 There has been significant increase in private participation in this sector. This has, however, affected the earnings of Indian Airlines and improvement in operational efficiency and financial performance of the national airlines will be critical in the coming years.

Section 3: COMMUNICATION

Posts

6.21 An outlay of Rs.325 crore was approved for the 8th Plan. About 57% of the outlay (at 1991-92 prices) is likely to be utilized during the first three years. The pace of utilization of funds on technology upgradation has been slow during the first two years but the expenditure has picked up from 1994-95. The expenditure on buildings has been excessive and out of control and needs to be checked effectively.

6.22 Slow pace of opening of post offices in the rural areas is an area of concern. Only about 44% of the Eighth Plan target is likely to be achieved during the first three years. A changeof strategy is envisaged from 1995-96 with the launching of a new scheme called 'Panchayat Sanchar Sewa Yojana.' Due to its low cost, the new scheme is expected to provide services to thrice the number of villages with the same expenditure as under the existing scheme.

6.23 Large amount of subsidy provided on postal stationery and services is one of the main reasons for deficit. To ensure efficiency and improved quality of services, selective opening up of some services to the private sector may be desirable such as opening of new post offices, printing of postal stationery and sale of stationery through licenced agents. A comprehensive cost reduction strategy needs to be worked out by the Department.

Telecommunications

6.24 Rapid expansion of network, modernising it with the state of art technology and improving efficiency are the basic thrust areas of the Eighth Plan. An outlay of Rs.25137 crore was approved for this sector including Rs.23946 crore for the Deptt. of Telecom. About 61% of the outlay is likely to be utilized during the first three years of the 8th Plan.

6.25 The National Telecom Policy announced in 1994 aims to ensure telephones on demand, achieve universal coverage and to ensure international standard services. The target for new telephone connections has been revised upward to 100 lakh DELs i.e. an addition of 25 lakh over the original target. For rural connectivity, the target has been revised from 3.6 lakh villages to covering all the 5.7 lakh villages of the country by March,1997. The additinal resources needed to achieve these targets are expected to flow from the private sector. During the first three years, 36.4 lakh new connections have been provided i.e. 49% of the Eighth Plan target. About 1.14 lakh villages are expected to be covered during the first three years i.e. 33% of the Plan target. Keeping in view the efforts initiated by the Department to mobilize resources from other means like leasing etc., the original target of 75 lakh DELs is likely to be achieved.

6.26 Limited availability of funds with the public sector has been the single most important factor restricting the growth of telecom facilities. More than 20 lakh people are waiting for the basic telephone facilities. The outlay available for the telecom sector has been determined by the capacity of the public sector to generate internal resources and to raise money from the market (bonds). In the first three years against the target of mobilizing the internal resources of Rs.10720 crore at 1991-92 prices, the actual achievement is likely to be Rs.10193 crore resulting in short-fall of Rs.527 crore. This is inspite of 15 to 20% tariff increase effected in 1993. The growth in revenue per DEL has been much lower than the assumed rate of 6%. One of the main reasons for lower realization is lack of a proper tariff policy. A comprehensive rationalization may be needed in order to ensure optimum mobilization of resources.

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6.27 The Eighth Plan has emphasized the need for fundamental structural and institutional reforms in the sector to ensure development of telecom facilities at the required rate and bring them at par with the international standards. The entire issue of reforms has been discussed and debated at length at different Policy formulation levels in the Government. The main areas involved are :

i) Involving private sector in the basic telecom services;

ii) Separation of three major functions of policy formulation, regulation and service provision;

iii) Setting up of an independent regulatory mechanism; and

iv) Evolving appropriate organizational structure for the operational network of the Department of Telecom.

6.28 On the basis of consensus reached, institutional reforms in respect of involvement of private sector in basic services and setting up of an independent regulatory mechanism (TRAI) have already been affected. Consensus is yet to emerge with regard to other two areas.

6.29 For any reforms programme to be effective, changes have to be implemented as a package. Viewed in this context, monopoly in long distance operations should not be allowed to continue as competition in basic services has already been permitted.

6.30 In the changed scenario, the present departmental structure of DOT is neither feasible nor a desirable organizatinal pattern. One of the more appropriate alternative may be to set up one or more independent corporations for its operational network,as in the final scenario 4 or 5 private companies may emerge as the main operators in the country. With the regulatory and service provision being carved out to separate entities the Deptt. of Telecommunications will be left only with policy making functions. This would also call for review of the role of Telecom Commission.

6.31 As a result of deregulation of telecom equipment manufacturing and changed procurement policy of DOT, the two equipment manufacturing units in the public sector i.e. I.T.I. and H.T.L. are struggling for growth and stability. Lack of demand, decline in prices and surplus labour force are the major problems of these companies. As a long term strategy, these units have to modernize and diversify into the new areas to effectively compete with the private sector. To help these companies overcome their problems in the short-run, adequate orders have to be ensured by the Deptt. Some price preference (10 to 15 %) may also be needed for a limited period.

Chapter 7

INDUSTRIAL DEVELOPMENT POLICY AND PUBLIC SECTOR REFORMS

7.1. The major thrust in the 8th Five Year Plan for development of industries was on virtual abolition of industrial licensing, reforms in the Monopolies and Restrictive Trade Practice (MRTP) Act, enhanced external competition through rationalisation of tariff, liberalisation of the foreign investment approvals and foreign technology agreements and reforms in public sector including dereservation. The Industrial Policy of 1991 has taken into account the direction given in the 8th Five Year Plan.

7.2. The 8th Plan aims at industrial growth rate of about 7.5% per annum corresponding to the GDP growth rate of 5.6% per annum. The National Renewal Fund (NRF) has been constituted to protect the interest of the workers adversely affected. Government have been taking various steps from time to time to tackle the issue relating to sickness in industries.

7.3. The 8th Plan visualises greater autonomy and more efficient performance of public sector enterprises. There has been some shortfall in raising of internal and extra budgetary resources by the Central PSEs. As against the total 8th Plan allocation of Rs. 35195 crores (including budgetary support of Rs. 7150 crores) for the CPSEs in the Industry & Minerals Sector, the actual expenditure in the first three years has been Rs. 20900 crores (including budgetary support of Rs. 8090 crores). The CPSEs have thus raised Rs. 12810 crores through IEBR in the first three years against a Plan target of Rs. 28045 crores. A Large number of PSEs have signed MOUs for improved efficiency. Greater functional autonomy has to be extended to the public sector to enable them to compete with the private sector under the present liberal environment.

7.4. The procedure for environmental clearance needs streamlining for expeditious project implementation.

7.5. The dis-investment strategy of public sector needs to be reviewed for making it more transparent. The recommendations of the Rangarajan Committee for devising a clear action plan instead of yearwise targets, financial restructuring of the PSEs, issue of prospectus etc. need consideration. Part of the resource generated through dis-investment may also be considered for being ploughed back to the enterprises for technological upgradation and diversification programmes.

7.6. Some of the State Governments have taken significant steps in industrial reforms.

7.7. The Industrial Policy has started paying dividends as reflected in the estimated growth of 8.3% in industrial production during April - December 1994-95 which is a significant improvement from 2.3% in 1992-93 and 4.1% in 1993-94.

Sectoral Performance

7.8.1 Steel Sector: The target of production fixed for the steel sector in the 8th Plan is expected to be achieved.

7.8.2 Non-Ferrous Metals: The target for non-ferrous metals is not likely to be achieved fully.

7.8.3 Fertilizers Sector: Fertilizers sector calls for a long- term policy to attract private investment. The gas-based fertilizers plants need to be assured of continuous supply of gas.

7.8.4 Engineering Sector: A large number of public sector enterprises under the Department of Heavy Industry needs to be re-vamped, as they are incurring losses continuously over the years. Against a Plan profit target of Rs.1151 crores, these units may suffer losses of Rs. 1174 crores.

7.8.5 Cement Industry: While the over-all performance of the cement industry is good, the public sector enterprise, Cement Corporation of INdia, needs overhauling.

7.8.6 Sugar Industry: The sugar policy in operation requires revision to ensure availability of sugarcane to the sugar industries and to bring about greater efficiency in this sector. There is a good case for delicensing of the industry.

7.8.7 Petro-Chemicals: The 8th Plan production targets in most of the petro-chemicals are likely to be achieved. There may be some shortfall in the targetted production of some basic chemicals. .PA

Minerals

7.9. Minerals Sector has been thrown open to private enterprises through the amendment of MMRD Act, 1957. There has been delay in taking up two mining projects of 5 million tonnes of annual capacity each by NMDC. With de-control and a substantial reduction in import tariff and a downtrend in the LME prices of non-ferrous metals, the public sectors in non-ferrous metal manufacturing have suffered a set beck. However, there has been some sign of improvement in the LME prices thereby improving the operational results of the public sector enterprises. Three copper smelters with a total capacity of around 2.5 lakh tonnes per annum are expected to be set up in the private sector.

Village & Small Industries (V&SI)

7.10. The SSI Sector contributes about 40% to the gross turnover for the manufacturing sector and 30% to the total exports. It also offers excellent employment potential. New schemes like Prime Minister's Rozgar Yojana (PMRY) to provide self-employment to educated unemployed youths is under implementation. The scheme has a target of 14 lakh employment during 8th Plan period. The Khadi and Village Industries Commission (KVIC) has taken up major programmes to create 2 million new jobs during the remaining period of the 8th Plan with an investment of about Rs. 5600 crores. In the handloom sector, a scheme for setting up for 3000 Handloom Development Centres (HDCs) and 500 Quality Dyeing Units (QDUs) have been taken up at an estimated cost of Rs. 849 crores. In order to create employment opportunities in the handloom, handicrafts, wool, sericulture and coir sectors, a number of schemes have been introduced. National Sericulture Project (NSP) is under implementation at an estimated cost of Rs. 555 crores with the assistance of World Bank and Swiss Development Corporation (SDC).

Food Processing Industries (FPIs)

7.11. The FPI's share in the GDP is of the order of 18% and it provides employment to about 1.5 million people. 70% of the industry is in the un-organised sector. This sector suffers from inadequate investment, shortage of working capital and outdated technology. This sector has a big potential for rapid growth and needs to be promoted with all necessary assistance.

7.12. Government of India has taken several steps for promotion of this industry, including declaration of this industry as a priority sector, delicensing of major areas, automatic approval upto 51% of foreign equity participation, simplification of investment procedures etc.

Chapter 8

SCIENCE & TECHNOLOGY AND ENVIRONMENT

Science & Technology

8.1. As against the total Eighth Plan outlay of Rs. 4119 crore, the expenditure during the first three years is expected to be of the order of Rs. 3176 crores for the Central S & T, Departments/Agencies.

8.2. The major thrusts have been on basic research in frontline fields; innovative research to achieve self reliance, diffusion of appropriate technologies and integration of S&T in socio- economic and rural sectors. The thrust of the Atomic Energy research has been on design and development of nuclear reactors for power generation, basic research, isotope production etc. These have resulted in the development of several spin-off technologies.

8.3. Under Bio-technology, the thrust has been on R & D product development, technology transfer and demonstration; integrated manpower development, augmentation of infrastructural facilities and their optimal utilisation, special programmes for specific groups and weaker sections etc. Significant achievements have been made, besides launching of Technology Mission-mode projects on bio-fertilizers, biological pest control and aquaculture. There is a need to formulate a bio-technology profile for the country as well as to ensure transfer of technology.

8.4. In the ocean areas, the emphasis has been laid on stabilising the Antarctic and polymetallic nodules programmes, the development of ocean data and information system etc. Besides the expeditions to Antarctica, several achievements have been made in the areas of polymetallic nodules programmes; coastal ocean monitoring and prediction system; marine satellite information system, preparation and dissemination of potential fishing zone, setting up of a new Institute, the National Institute of Ocean Technology (NIOT) etc.

8.5. Major activities in the S & T include support to R & D projects, national facilities, special technology development programmes, launching of technology mission-mode projects on sugar production technologies, advanced composites and fly ash utilisation and disposal, promoting technology information system, home grown technologies through Technology Information Forecasting and Assesment Council (TIFAC); international S&T coorperation and joint programmes with developed countries; development of technologies for the socio-economic sector were largely directed towards rural and urban poor; augmentation of facilities for metereological forecasting, seismological observations etc. A technology development fund has been created to accelarate the commercialisation of indigenous technologies. In future, the emphasis would be to strengthen the R&D efforts further, transfer of knowhow to industry, strengthening of international S&T cooperation; operationalisation of the National Centre for Medium Range Weather Forecasting, selective modernisation of infrastructural facilities of the aided scientific institutions etc. The need in this area is the application of research results for technology development leading to the improvement in the quality of life through the involvement of industries/users and also by reactivating the STAC and IS-STAC etc. There is a need for the S&T enterpreneurship development programmes to be tied up with the employment generation programmes. A total modernisation programme of the IMD programme is progressively being undertaken.

8.6. The CSIR has made significant achievements in the areas of drugs, pesticides, chemicals, biotechnology etc. Mechanism for the export of technologies and the systems of patenting were strenghthened. Future thrust would be on the modernisation of various

CSIR laboratories , upscaling of technologies, extension of societal programmes etc. Despite the achievements made by the CSIR, there are certain weaknesses noticed. The steps needed to rectify them are : further restructuring of the non-plan oulay, projectisation of the programmes especially the modernisation aspects of the CSIR laboratories etc. For the creation of technology transfer fund, a joint approach with the DST is required. The NISSAT, NRDC and CEL need to be made self- sustaining.

8.7. The thrust of Space, Science & Technology has been on the development of operationalisation of indigeneous satellities, launch vehicles etc. Significant achievements include launching of multi-purpose communication satellites; development of capabilities for the ASLV,PSLV and GSLV and the Remote Sensing application for forest mapping, crop inventory, ground water targeting, flood mapping; integrated management for sustainable development thorugh micro-level planning, setting up of Antrix Corporation etc. In the future, second generation multi-purpose communication satellites would be launched. There is a need for advance action in the indigeneous technological development of strategic items; capability for launching the INSAT class satellites, building up of necessary inventories by involving industries, stock piling of the inventories for future INSAT systems etc.

8.8. In the areas of Forensic Science, infrastructure facilities in terms of equipment and manpower were augmented to strengthen their R&D efforts and the scientific analysis of crime detection. The efforts of the Police Wireless system were on testing and evaluation of high speed telecommunication systems for their telecommunication network. Proper projectisation of the requirements in this sector is urgently needed.

8.9. In the context of New Economic Policy, steps taken to re- orient the S & T activities include: the creation of a Technology Development Fund, closer interactions with the user industries for technology transfer; launching of application oriented R & D programmes etc. Some additional steps needed are : a vigorous market-oriented reserach, creation of a corpus fund through 2-3% of the turnover of major industries for the promotion of industrial R&D so as to reduce the dependence on the budget support eventually from the Government. Also required is the awareness and the necessary preparation on the Post-GATT scenario, particularly on the IPR and patents amongst the S & T institutions and universities.

Environment

8.10. The Government adopted a National Conservation Strategy and Policy Statement on Environment and Development and the Policy Statement on Abatement of Pollution. India has played a major role in the United Nations Conference on Environment and Development at Rio and later became signatory to various international conventions aiming at protecting the environment.

8.11. The allocation for the Ministry of Environment and Forests, the nodal agency for environmental protection, for the Eighth Plan is Rs.1200 crores, of which Rs.938.19 crores have been spent during the first three years.

8.12. The Ganga Action Plan (GAP) which is 100% Centrally Sponsored Schemes (CSS), in its first phase, has attempted to take up 261 schemes. Of these, 230 schemes have been completed so far. The Ganga Action Plan Phase II has been taken up as a 50:50 CSS between the Centre and the States (U.P, Delhi, Bihar and West Bengal) and the National River Action Plan (NRAP) is also being launched.

8.13. A National Afforestation and Ecodevelopment Board (NAEB) to undertake eco-development activities in and around the protected areas and a Department of Wastelands Development Board for integrated ecodevelopment works in the non-forest areas have been created.

8.14. The GAP Phase I, though could improve the water quality of River Ganga, the reduction in the levels of coliforms, heavy metals and pesticides need further improvement.

8.15. Further works undertaken under the GAP-II and the NRAP would be able to adopt suitable technologies with adequate investments. There is a need to collect and disseminate environmental data which could be properly integrated to Environmental Impact Assessments. Priority is also to be given for inventorisation of bio-diversity.

Chapter 9

STATE PLANS - TRENDS & REFORMS

9.1 The approved Eighth Plan outlay for the State Sector is Rs.186235 crore. Of this, the four Special Area Programmes of BADP, HADP, TSP and NEC account for Rs.4500 crore. The remaining outlay of Rs.181735 crore consists of a total outlay of Rs.175485 crore for States and Rs.6250 crore for U.Ts. The actual expenditure of the States in the first three years of the Plan period has been Rs.78121.99 crore, i.e. 44.52% of the approved outlay and that of U.T.'s has been Rs.3851.67 crore which is 61.63% of approved outlay. Taking the States and Union Territories together the actual expenditure in 1992-95 is 44.11% of the approved Eighth Plan Outlay.

9.2 Shortfall of expenditure of the States in the first three years is a cause for major concern. In 1992-93 only 8 States out of 25 were able to reach or exceed the Annual Plan outlay for that year. For 1993-94 and 1994-95, the corresponding numbers are 6 and 13 respectively. For the three years taken together, only 7 States has either achieved or exceeded approved Annual Plan outlays.

9.3 Viewed some what differently, only three States have been able to reach near the 60% level of approved Eighth Plan outlay. Another 13 States have achieved between 45 to 58% i.e. higher than the average of 44.52% of all States taken together. Seven States have reached a level of 30 to 45% and there are two .pa States which have achieved less than 30%, the lowest performance being 18.19% by Bihar.

9.4 Starting from Annual Plan 1993-94 a new procedure has been evolved for formulation of the States Plans in which the resources available are assessed and first decided between Deputy Chairman and the Chief Ministers of the States before detailed Plan proposals are formulated and sent by the State Governments. This has the merit of formulating a detailed Plan which can be related from the very beginning to the resources in sight. However, the shortfalls in Annual Plans 1993-94 and 1994-95 of quite a few States show that the procedure has to be followed more rigorously and assessment of resources particularly, promises of mobilisation by States in this regard, made carefully.

9.5 The scheme of earmarking of outlays which has been in vogue since 1969 has been reviewed and made more flexible by:

(i) reducing the extent of the earmarking, and

(ii)making the areas to be earmarked selective as well as State specific.

9.6 Balanced development of all the regions of the country has been a long term objective of successive Five Year Plans. The instruments available for removing regional and inter-State disparities are:

(a) Regulating the normal Central Assistance; and

(b) Special Area Programme to target sensitive and backward

areas.

9.7 It is a matter of concern that the inter State disparities continue to persist after planning for more than four decades.

9.8 Additional Central Assistance for externally aided projects is now a significant source of Plan financing. The disbursements on this are increasingly going to a few States, with as much as 62.3% of such assistance being shared by four States in the first three years of the Plan period. By and large, the States which are able to implement externally aided projects faster and better are also those which are more developed. Hence there is a need to moderate more effectively, externally aided projects among different States so that the objective of the balance in the regional development is not overlooked.

9.9 The States have not fallen behind in the process of the restructuring and liberalisation of the economy. Some States have taken steps which are quite bold in nature. Not only has disinvestment in State level public enterprises taken place, but even privatisation carried out. Several States have permitted their enterprises to make public issues. Budget support to the enterprises has been reduced. A few States have made efforts to rationalise tax structure and improve collection of taxes. Abolition of entry tax and octroi by some States are other important features of reforms made.

Chapter 10

DECENTRALISED PLANNING

10.1 From the very beginning of Planning decentralisation of the planning process has been a matter of concern. Earlier this was looked at by quite a few Committees. If development has to be in tune with the needs of people and particularly the poor and a high degree of coordination achieved at the field level the planning process has to start at least in the District level if not the Block level. Guidelines were issued by the Planning Commission from time to time for formulation of District plans as well as Block level plans.

10.2 After the 73rd and 74th Amendments of the Constitution, it is necessary to look at the matter afresh. Not only are the Panchayati Raj Institutions and the urban local bodies to be suitably empowered by the States through appropriate legislation, they have to be given adequate finance. State level finance commissions have been constituted for this purpose.

10.3 The NDC Committee on Micro Level Planning and involvement of people at grass root level looked into the question of decentralisation of planning process and made several recommendations which include :

i) Adoption of block/taluka/mandal as the smallest unit of planning;

ii) Monitoring and evaluation of schemes in the sphere of micro level planning;

iii) Merger of institutions such as DRDAs etc., with the Panchayati Raj Institutions wherever feasible;

iv) Allocation of untied funds by the States to the Panchayati Raj Institutions;

v) Training of personnel in the field level; and

vi) Sharing of expenditure only of technical staff on planning upto Block/ taluka level between Centre and the State Governments.

10.4 Most of these recommendations have to be implemented by the State Governments and they were addressed for this purpose. The response has been mixed. No uniform picture emerges.

10.5 The most important issue is what should be the smallest unit of planning - District or Block. Even though the NDC Sub- Committee recommended adoption of Block as the unit of planning, there is no unanimity among the States on this. Keeping in view the present administrative structure in the States upto field level and lack of technical expertise at sub District levels, it does not appear practical to adopt a level lower than the District as the unit of planning, at the present stage.

10.6 Hierarchy of Panchayati Raj Institutions provide a convenient structure for planning at District level and integrating implementation to Sub district levels. There may not be any need to continue institutions for coordination such as DRDAs etc., once planning and implementation is done under the aegis of Zilla Parishads. Since the felt needs of the local people can be effectively gauged and responded to under Panchayati Raj Institutions including Zilla Parishads, a view has to be taken in due course as to whether parallel programmes under other Ministries and Departments need to be continued.

10.7 Non Governmental Organisations which operate in the domain assigned to the PRIs should do so in close association with them. Whether or not a NGO should work in these areas may be left to the judgement of the Panchayats.

CHAPTER 1

STATE OF THE ECONOMY AND ECONOMIC REFORMS

1. THE BACKGROUND

1.1 The Father of the Nation, Mahatma Gandhi, laid down the basic principle which was to guide and inform India's development strategy and economic policy for the more than four decades that have passed since Independence :

"I will give you a Talisman. Whenever you are in doubt or the self becomes too much with you, apply the following test : Recall the face of the poorest and weakest man you have seen and ask yourself if the step you contemplate is going to be of any use to him; will he gain anything by it? Will it restore him to control over his own life and destiny? In other words, will it lead to Swaraj for the hungry and spiritually starving millions?" This talisman is at the heart of the twin concerns of attaining rapid growth of output and employment and of ensuring equity and social justice which have informed economic policy-making in the country. This was also the basis of "human development" recognised as the broad objective of the Eighth Five Year Plan.

1.2 The emphasis on distributive justice, regional balance and alleviation of poverty leading towards empowering the people to achieve their "Swaraj" has been the cornerstone of our national policy. However, the instruments of our policy, in the absence of adequate flows of domestic and international resources, were characterised by: (a) trade and exchange controls; (b) selective access to foreign investments and technoloy; (c) discretionary controls on industrial investment and capacity expansion; (d) dominance of the public sector in industrial activity; and (e) public ownership and regulation of the financial sector. It was increasingly realised since the late 1970s that many of these controls and regulations had outlived their utility and were in fact hampering, rather than helping, growth and development.

1.3 In response the Government has been attempting to reform many of these policies, especially those related to inward- oriented trade and investment policies since the early 1980s. Although these policy changes did not constitute a package of reforms comprehensive enough to fully reverse the protectionist bias of the trade regime and other distortions, they started yielding results fairly early, and the Indian economy moved on to a higher growth path in the 1980s as compared to the previous three decades. The average annual growth rate of GDP climbed steeply to 5.7 per cent during the Sixth Plan period (1980-85) and 5.8 per cent during the Seventh Plan (1985-90) as compared to the 3.4 per cent that had been maintained during the 1950 to 1980 period. The decade of the 1980s also witnessed a significant reduction in the incidence of poverty in the country from above 40 per cent of the population by one measure to less than 20 percent. This higher growth performance was, however, accompanied by certain inter-related adverse developments.

1.4 First, the Government's savings deteriorated substantially since the mid-1980s. The savings of the Government (Centre, States and UTs) constituted about 2 per cent of GDP between the mid-1970s and early 1980s, but the Government started dis-saving since 1984-85. By 1990-91 these dis-savings constituted more than 2 per cent of GDP. Reflecting this trend in Government savings, the fiscal deficit of the Government, which was less than 9 per cent of GDP in 1980-81, shot up to about 12 per cent in 1990-91. The bulk of this deterioration of the fiscal deficit was accounted for by the Centre's fiscal deficit which worsened from 6 per cent of GDP in 1980-81 to 8.4 per cent in 1990-91.

1.5 Second, the country's balance of payments deteriorated more or less continuously through the 1980s, and most particularly since the mid-1980s. The salient features of the balance of payments developments over this period are presented in Table-1.

1.6 As may be seen, the trade balance had remained more or less constant at around -\$7.5 billion for the entire period 1980-90. However, the current account balance steadily deteriorated from an average of 1.3 per cent of GDP during the Sixth Plan to 2.3 per cent during te Seventh Plan and 3.3 per cent in 1990-91. This deterioration was primarily due to the rapid increase in interest payments. Much of the increase in interest payments was the result of the sharp rise in

TABLE 1

BALANCE OF PAYMENTS 1980 - 1991

(US$ billions)

	1980-81	1985-86	1989-90	1990-91
1. Trade balance	-7.55	-7.83	-7.46	-9.44
2. Net Invisibles excluding interest	+5.81	+4.08	+3.68	+2.52
3. Interest payments	-0.36	-1.12	-3.06	-2.76
4. Current Account balance	-2.10	-4.86	-6.84	-9.68
Capital Account Transactions				
5.(a) Private receipts	0.20	2.10	5.90	8.40
(b) Private payments	0.08	0.17	3.72	5.70
6.(a) Government receipts	1.28	1.85	7.22	10.36
(b) Government payments	1.58	0.73	3.70	4.11
7. Foreign exchange reserves	5.85	5.97	3.37	2.23

private capital receipts, particularly external commercial borrowings and deposits by non-resident Indians (NRIs), which not only had higher interest liabilities, but also shorter maturities. As a consequence, the government also had to step up its borrowings and reduce its foreign exchange reserves in order to bridge the difference. Thus the proportion of the current account deficit financed by external assistance declined substantially from about 75 per cent in the early 1980s to about 22 per cent in 1990-91. All these factors culminated in the country's external debt liabilities rising sharply from about $23 billion in 1980-81 (12 per cent of GDP) to $82 billion in 1990-91 (24 per cent of GDP). The debt service ratio (debt service payments to current account receipts on balance of payments) correspondingly also increased from 10 per cent in 1980-81 to 30 per cent in 1990-91.

1.7 Matters came to a head in 1990-91, when international oil prices rose sharply as a result of the Gulf War. The trade balance deteriorated sharply by $2 billion, and remittances from Indian workers in the Gulf also went down. The net result was an almost $3 billion decline in the current account balance, and a sharp reduction in the foreign exchange reserves, which declined to only about $1 billion by the end of 1990-91. These adverse developments led to a crisis of confidence about the Indian economy among the international lenders. By April 1991, not only was there a significant withdrawal of non-resident Indian (NRI) deposits from India, but more importantly a number of international banks stopped honouring Indian letters of credit (LC) for import transactions. The economy also suffered from serious inflationary pressures, scarcity of essential commodities and deterioration of fiscal discipline. By June 1991 the annual inflation rate was running at about 16 per cent, and the economy was on the verge of a major crisis.

1.8 In response to the emerging crisis, in July 1991 the Government initiated a series of stabilisation measures to bring the situation under control. The first step was a substantial devaluation of the rupee while retaining the import controls that had been imposed by the RBI. In addition, the fiscal deficit of the Central Government was sharply curtailed from 8.4 per cent in 1990-91 to 6 per cent in 1991-92. Subsequently an arrangement was entered into with the International Monetary Fund (IMF) to provide balance of payments support, which helped to ease the situation considerably. The Government also initiated a process of structural reforms in trade and industrial policies aimed at correcting the macroeconomic imbalances and other distortions that had developed during the previous years. However, the dominant influences on the economy in 1991-92 were those of the stabilisation measures, which led to severe import compression and recessionary conditions.

1.9 At the time the Eighth Plan was formulated, the set- backs suffered by the economy in 1990-91 and 1991-92 had to be taken into account. The broad contours of the programme for structural reform of the Indian economy which were begun in July 1991 were also known by that time. Much of these developments were taken on board during the formulation of the Plan. It was, therefore, observed that : "...in view of the impact of structural adjustment programme, the resource crunch which the public sector is facing, and the need for correcting the fiscal imbalances, it would be prudent to plan more or less for the growth rate achieved during the decade and lay down foundations for higher growth in the future." Thus the growth target, and the macroeconomic parameters supporting it, were set at relatively conservative levels compared to what may have been possible on the basis of the performance of the economy during the Seventh Plan period. The relevant figures from the Eighth Plan document are presented in Table-2.

1.10 As can be seen from the table, the Eighth Plan envisaged a somewhat lower rate of growth than achieved in the Seventh, but with much greater reliance on domestic investible resources. It was also recognised that the earlier trend of imports growing faster than exports would have to be reversed in order to avoid serious balance of payments and external debt difficulties. The increase in the incremental capital-output ratio (ICOR) was assumed due to two principal reasons : (a) gains in output from better utilisation of existing capacities may not be available in the Eighth Plan to the same extent as during the Seventh; and (b) the stock of investments in the pipe-line was less than what it was at the commencement of the Seventh Plan.

1.11 The Plan envisaged that even with the conservative targets laid down, the objectives of reducing unemployment to zero by the year 2002 and attaining significant reduction in the incidence of poverty could be realised. Although some set-back was expected in the short-run from the structural adjustment programme, it was at least partially captured in the parameters of the Plan. In particular, the higher incremental capital-output ratio (ICOR) assumed in the Plan was primarily to take account of the adverse developments during 1990-91 and 1991-92. The need to step up the investment rate in order to compensate for the likely lower utilisation of existing capacities was the corner-stone on which the Plan was built whereby the objective of attaining full-employment by 2002 could still be attained.

1.12 There is a general acceptance of the need to pursue the structural reform programme for the long run viability and sustainability of the growth process in India across a wide cross-section of Indian public opinion. However, it is important to work out mechanisms of its implementation which can withstand the short- to medium-run effects of the reforms, particularly during the transition phase, on the more vulnerable sections of society and on the economic and social infrastructure of the country. In addition steps must be taken to overcome a certain amount of pessimism that might be generated in the course of the reforms regarding the likely growth in output, investments, employment and the general standards of living.

TABLE 2

MACRO- PARAMETERS FOR THE EIGHTH PLAN (1992-97)

	VIIth Plan	VIIIth Plan
1. Growth rate of GDP p.a.	5.8%	5.6%
2. Domestic Savings (% of GDP)	20.3%	21.6%
3. Current Account Deficit (% of GDP)	2.4%	1.6%
4. Investment (% of GDP)	22.7%	23.2%
5. ICOR	3.9	4.1
6. Growth rates of :		
(a) Exports	8.1%	13.6%
(b) Imports	10.0%	8.4%

1.13 The following paragraphs describe the current status of the various critical variables and parameters of the Indian economy and take stock of the developments in our economy since the inception of the economic reforms in 1991 and during the Eighth Plan period. They also indicate the areas of success as well as areas of concern, and evaluate the role that Plan expenditures and public investments will have to play at this juncture, making the most effective use of our resources.

2. Growth Performance

1.14 The response of the economy in terms of growth performance since the initiation of the reforms in 1991 appears somewhat negative when compared to the past trends. The average rate of growth of the GDP during the period 1980-1991 was 5.63 per cent per annum. The growth rate came down to 1.10 per cent in 1991-92, and rose to 4.3 per cent in 1992-93. If the advance estimates of growth made by the C.S.O. of 4.3 per cent in 1993-94 and 5.3 per cent in 1994-95 materialise, the average growth during the four years of economic reforms (1991-95) will be 3.74 per cent. For the first three years of the Eighth Plan (1992-95), however, the growth would average to 4.6 per cent - one percentage point lower than the target. If the Eighth Plan target is to be achieved, the economy will have to grow at the rate of 7.1 per cent in each of the remaining two years of the Plan (1995-97).

1.15 A comparison of the sectoral growth rates over the two periods, ie. 1980-1991 and 1991-1994 [Table 3], shows that the performance of the manufacturing sector has suffered severely. Manufacturing had been a leading sector during the eighties and, after a relatively low growth performance during the first three decades of planning, it had achieved a growth rate of 7.6 per cent on average for a whole decade. Even with an expected revival in growth of 3.6 per cent in 1993-94 and 8.3 per cent in 1994-95, the average growth rate for the period 1991-95 will be only 2.6 per cent and for the Plan period 1992-95 will be 4.7 per cent. This is considerably lower than the Plan target of 7.3 per cent.

1.16 Agriculture and infrastructural sectors also had done well during the eighties and their performance too has been somewhat lower during the 1991-94 period. Insofar as the Plan is concerned, however, agriculture growth has been more than satisfactory at an expected average of about 3.7 per cent for the three years 1992-95, as compared to the targetted 3.1 per cent. Investments made in the past in electricity, gas and water and transport sectors have sustained their growth, although at a somewhat lower rate than during the eighties.

1.17 The sectors which have clearly performed better in the post-reform period are the Communications and Financial sectors. The growth in the communications sector was facilitated by a large back-log of unfulfilled demand and the ability of the Government to raise resources by raising the tariffs. Cost reductions arising from induction of new technologies also contributed significantly. Insofar as the financial sector is concerned, much of the boom is attributable to an active stock market, supported to an extent by excess liquidity in the system during this period and the recessionary conditions prevailing in the real sectors of the economy.

1.18 The relatively poor growth performance during the first three years of the reform process need not in itself be a source of concern. Indeed, if this episode is seen in the context of international experiences in stabilisation and structural adjustment, the Indian experience of low growth has been both brief and mild. At no stage has the Indian economy had to suffer a negative growth rate of GDP, and in the fourth year of the reforms (1994-95) the growth rate has picked up almost to its pre-reform level. In contrast most other countries have had to suffer extended periods of negative growth and it has taken even longer for them to regain their historical growth rates. The 1991-94 recessionary episode in India was no doubt the outcome of the stabilisation efforts, and the effects of the structural adjustment programme are expected to be felt on output and employment growth in the next few years. The success or failure of this programme will however depend critically on the Government's ability to identify the areas of vulnerability and to take appropriate action for addressing them.

3. The External Sector

1.19 Since the stabilisation efforts were initiated, the country has been able to tide over in a most impressive manner the balance of payments crisis that erupted in early 1991. Both the balance of payments situation

TABLE 3
SECTORAL GROWTH RATES

S.No.	Sectors	Eighth Plan Target	81-82 to 91-92	91-92	92-93	93-94
1.	2	3	4	5	6	7
1.	Agriculture		3.85	-2.74	5.3	3.0
2.	Forestry & Logging	3.1	-0.44	-1.29	0.4	0.5
3.	Fishing		5.56	5.65	6.4	6.1
4.	Mining & Quarrying	8.0	8.46	3.66	1.5	4.8
5.	Manufacturing	7.3	7.59	-3.23	3.1	3.6
6.	Electricity,Gas & Water Supply	7.8	8.82	7.52	7.5	5.9
7.	Construction	4.7	4.44	4.60	0.5	1.2
8.	Trade	6.0	6.12	0.32	6.5	4.4
9.	Hotels & Restaurent	6.0	6.42	0.06	6.0	5.8
10.	Railways		4.15	6.02	-1.1	-0.7
		6.7				
11.	Transport by other means		7.92	6.91	6.1	6.5
12.	Storage	6.0	4.09	-1.66	-0.6	-1.7
13.	Communication	6.1	6.22	6.86	10.8	11.0
14.	Banking & Insurance	6.0	11.99	21.68	2.8	12.9
15.	Real Estate ownership of dwelling & business services	6.0	3.57	3.81	3.3	3.3
16.	Public administration and Defence	6.0	6.99	2.21	5.1	4.4
17.	Other services	6.0	5.60	5.81	3.7	5.2
18.	Gross Domestic Product	5.6	5.63	1.10	4.3	4.3

and the foreign exchange reserves position have improved considerably in the last three years. The current account deficit, which was about $10 billion in 1990-91, has come down to less than a billion dollars in 1993-94 and 1994-95. As a percentage of GDP it has declined from 3.3 per cent to about 0.3 per cent over the period. This sharp reduction in the current account deficit has obviated the need for exceptional external financing within a short period of three years.

1.20 The improvement in the current account balance has also been accompanied by a major turn-around in the capital account. Not only has the capital flight that had started in 1990-91 been arrested, there has also been a surge in capital inflows, especially in the form of foreign portfolio investments, in recent years. Total foreign investment, which was about $165 million in 1990-91 has gone up to about $4.1 billion by 1993-94 and $3.9 billion in the first three quarters of 1994-95. Most of the surge in foreign investments is accounted for by portfolio investments, which increased from only $65 million in 1990-91 to about $3.5 billion by 1993-94 and $3.1 billion in the first 9 months of 1994-95.

1.21 The surge in capital inflows coupled with a declining current account deficit has led to a substantial build-up of foreign exchange reserves (excluding gold and SDRs), which increased from about $1 billion at the end 1990-91 (equivalent to about two weeks of imports) to over $15 billion by the end of 1993-94 and stands at about $19.4 billion at present. This is certainly a positive response of the economy to the stabilisation and adjustment efforts. However, it has also brought with it certain problems in managing monetary and exchange rate policies, and has some adverse long-run implications which will be discussed further in later sections.

1.22 Imports declined in absolute terms in 1991-92, and although they have picked up since 1992-93, their annual growth rate has been lower on the average in comparison to 1990-91 [Table 4]. While the decline in imports consequent to the devaluation of the rupee was to be expected, other factors some of which are exogenous to the reform process have also influenced the behaviour of imports. Imports of POL measured in dollars have declined in absolute terms in the post-reforms period, even though the domestic output of petroleum was falling. This decline has largely occurred due to the fall in the international prices of crude oil since 1991 associated with the general recovery of world oil output after the dislocations caused by the Gulf War. Non-POL non-food imports in 1993-94 had not crossed the pre-reform level primarily due to the recessionary conditions in the manufacturing sector. The indications, however, are that with industrial revival in 1994-95, imports have grown at a rate above 22 per cent. Thus during the three years of the Plan period import growth will have averaged about 14 per cent per annum as compared to the target of 8.4 per cent.

1.23 The growth in exports in the three years following the reform of trade and exchange rate policies, ie. the period 1991-92 to 1993-94, has been slower than in the six year period preceding the reforms, ie. 1985-86 to 1990-91, [Table 5]. However, seen in relation to GDP, the buoyancy of exports has improved. More importantly, in the last two years (1993-94 and 1994-95) the growth rate of exports has picked up remarkably to about 20 per cent and 17 per cent respectively. Such rates of growth will have to be sustained for the next few years, since it has been estimated that with a growth rate of imports of about 13.5 per cent, a growth rate of exports of about 18 per cent will have to be maintained over the next decade or so if the external debt burden is to be gradually reduced to manageable proportions while maintaining a reasonable rate of growth of the economy. Some slackening in the export growth target can be accomodated if foreign investments continue to expand, but it may not be prudent to rely on this possibility in the initial years of the reform process. It is therefore necessary to examine the nature of the export performance and to assess the likeli-

TABLE 4

GROWTH OF IMPORTS

(Percentage)

Items	90-91	91-92	92-93	93-94	94-95
(1)	(2)	(3)	(4)	(5)	(6)
1. Total Imports	14.4	-24.5	10.3	3.2	24.9
2. DGCIS Imports	13.2	-19.4	12.7	6.1	21.7
3. Non-DGCIS Imports	22.4	-57.0	-18.0	-43.0	119.3
4. POL Imports	60.0	-11.0	13.7	- 5.6	0.7
5. DGCIS Non-POL Imports	3.1	-22.2	12.3	10.6	29.1
6. Food Imports*	1.5	-50.8	85.0	-37.2	244.7
7. Non-Pol Non-Food Imports	3.1	-21.2	10.9	12.2	25.1
8. Memo Items:					
(a) Non-DGCIS Imports ($Millon)	3842.0	1653.0	1355.0	773.0	1695.0
(b) Non-DGCIS (% of Imports)	13.8	7.9	5.8	3.2	3.7
9. Capital Goods	10.4	-27.5	7.0	33.3	50.3

* Cereals + Edible Oils + Fruits & Nuts + Pulses + Sugar.

hood of maintaining such high growth rates. garments, handicrafts and gems & jewellery. There has not been as yet a marked change

TABLE 5

Performance of External Trade in Pre-reform & Post-Reform Periods.

	Unit	1985-86 to 1990-91	1991-92 to 1994-95
1. Exports Growth rate	% p.a.	10.7	10.1
2. Imports Growth rate	% p.a.	10.1	3.5
3. Trade Deficit	% of GDP	3.0	1.3
4. Current Account Deficit	% of GDP	2.5	0.7
5. GDP Growth Rate	% p.a.	5.8	3.6
6. Exports-GDP Elasticity		1.8	2.8
7. Imports-GDP Elasticity		1.7	1.0

1.24 The main strength of India's exports continues to be in the traditional items - Agriculture & allied products, textiles & in the composition of commodities or of markets which would indicate a structural change in our export sector. There is, how-

TABLE 6

Composition of exports

S.No.	Commmodity	89-90	90-91	91-92	92-93	93-94	94-95
1.	Agricultural & allied Product	16.5	18.5	17.9	16.9	18.0	16.0
2.	Ores & minerals (Excl coal)	5.0	5.3	5.2	4.0	4.0	3.8
3.	Manufactured goods,	73.4	71.6	73.6	75.7	74.9	77.3
(i)	Cotton yarn, fabrics, made ups etc.	5.3	6.5	7.3	7.3	7.0	8.4
(ii)	Readymade garments	11.6	12.3	12.3	12.9	11.6	12.4
(iii)	Leather & leather manufactures including footwear of leather	7.0	8.0	7.1	6.9	6.0	5.9
(iv)	Handicrafts other than gems and jewellery (including handmade carpets)	3.0	2.8	3.7	3.8	3.5	3.1
(v)	Gems & jewellery	19.1	16.1	15.3	16.6	18.0	17.2
(vi)	Machinery, transport equip., engg.goods, metal product, iron and steel	12.0	12.4	12.6	13.4	13.6	12.7
(vii)	Chemical & allied product	7.2	7.2	8.3	6.6	6.7	9.6
4.	Mineral fuels & lubricants	2.5	2.9	2.3	2.6	1.8	1.6
5.	Others	2.6	1.7	1.0	0.8	1.3	1.3
	Total	100.0	100.0	100.0	100.0	100.0	100.0

ever, a significant increase in the buoyancy of exports in the traditional sectors, with new items entering the market and a steady, though slow, increase in the export of machinery and engineering goods sector, all of which would be favourable for the maintenance of high growth of exports in the future [Table 6]. The sharp increase in export growth in the last two years has come after the low level reached in 1991-92 due to the collapse of the rupee payment area (RPA) exports and a partial reemergence of the past rupee markets. To a large extent this revival is due to the greater utilisation of India's debt repayment obligations by Russia, which cannot be expected to grow in any significant manner nor contribute to India's foreign exchange position. The remainder, which is dollar denominated trade with the past RPA countries, holds out better prospects for the future.

1.25 In so far as exports to the "general currency area" (GCA) are concerned, it may be argued that the major impetus to growth arose initially from two sources : (a) the recession in the Indian economy during the period 1991-94; and (b) the substantial depreciation of the exchange rate of the rupee since 1991. However, on the one hand the economy appears to have pulled out of the recession, and on the other hand the 22 per cent depreciation of the real effective exchange rate of the rupee between 1989 and 1993 has now started to get reversed [Table 7]. Thus the increased "pull" of the domestic market and the reduced level of export profitability will tend to lead to a slowing down of export growth unless new capacities with export capability are created rapidly. This requires not only that the investment pattern should be reoriented towards the exportables sectors, which is the basic objective of the reforms in any case, but also that the rate of investments be stepped up sharply in order to increase the supply of exportables and to expand the infrastructural facilities for the exporters.

TABLE 7

Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Rupee (Base: 1985=100)

(10-Country Trade-based weights)

Year	REER	% Variation	NEER	% Variation
(1)	(2)	(3)	(4)	(5)
1985	100.00	-1.9	100.00	-2.2
1986	88.92	-11.1	81.25	-18.8
1987	82.21	-7.5	71.01	-12.6
1988	77.48	-5.6	62.98	-11.3
1989	74.25	-4.2	56.84	-9.7
1990	67.86	-8.6	50.24	-11.6
1991	58.53	-13.7	39.09	-22.2
1991-92	55.68		35.96	
1992-93	50.44	-9.4	29.52	-17.9
1993-94	50.54	0.2	27.50	-6.8
1994-95	52.72	4.3	26.36	-4.1

1.26 In order to attain rapid growth in export capability, export profitability must be greater than the return on domestic activity. The large gap that has existed between profits on domestic sales and on exports needs to be reduced substantially in order to attract investments in the exportables sectors. The steady reduction in the customs duty levels and in non-tariff protection of import substitutes that has occurred since 1991 will certainly have a desirable effect, which should be examined in a somewhat longer time perspective.

1.27 An analysis of the level of export incentives, degree of import protection and the relative position of exports and import substitutes since 1966-67 is presented in Table 8. As may be seen, the export incentive index, defined as the ratio between the export earnings index and the domestic price index, which was steadily eroded through the late 1960s and the 1970s, recovered somewhat during the 1980s, though not to the 1966-67 level. Post-1991, however, it continued to improve and peaked in 1993-94 at 13 per cent above its level in 1966-67 and almost double its level in 1980-81. Since then it has reduced sharply and, if present trends continue, by 1995-96 it will be back more or less to the 1966-67 level and not very much higher than its level in 1990-91.

TABLE 8

BEHAVIOUR OF IMPORT PROTECTION AND EXPORT INCENTIVES

	1966-67	1980-81	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
World Price Index (Pf)	1.00	1.51	2.03	2.10	2.18	2.25	2.33	2.41	2.50
Domestic Price Index (Pd)	1.00	2.72	5.41	6.14	6.77	7.36	8.19	8.93	9.56
Exchange rate for Imports (Rs/$)	7.50	7.89	17.95	24.52	30.65	31.36	31.38	32.00	32.50
Average import tariff (%)	45%	110%	125%	105%	95%	70%	55%	40%	25%
Landed Price Index	1.00	2.30	7.55	9.72	11.97	11.05	10.43	9.95	9.33
Import Protection Index	1.00	0.85	1.40	1.58	1.77	1.50	1.27	1.11	0.98
Exchange Rate for Exports	7.50	7.89	17.95	24.52	28.95	31.36	31.38	32.00	32.50
CCS Rate	10%	10%	10%						
REP/EXIM scrip entitlement	15%	15%	15%	30%					
REP/EXIM scrip premium	25%	25%	25%	30%					
Export Earning Index	1.00	1.59	4.87	6.59	7.39	8.28	8.58	9.06	9.52
Export Incentive Index	1.00	0.59	0.90	1.07	1.09	1.13	1.05	1.01	1.00
Exp.Incentive /Imp. Protection	1.00	0.69	0.64	0.68	0.62	0.75	0.82	0.91	1.02

NOTES : World Price Index = Weighted average of GDP deflators of 10 major trading partner countries

Domestic Price Index = GDP deflator for India

Landed Price Index = Index of (1+t).e.Pf

Import Protection Index = LPI/Pd

Export Earning Index = Index of e.(1+CCS)(1+REP*premium).Pf

Export Incentive Index = EEI/Pd

1.28 Similarly, although the relative position of exports vis-a-vis import substitutes, as given by the ratio between the export incentive index and the import protection index, has improved substantially in 1993-94 and 1994-95, it continues to be 18 per cent below the level that prevailed in 1966-67. If present trends continue, by 1996-97 this ratio would more or less be at the level that prevailed in 1966-67, when India was nowhere near to being an export-oriented economy. In that case, neither the absolute nor the relative position of exportables could be regarded as having improved to any significant extent.

1.29 It is necessary to realise that the policy options available to the Government today for raising or even maintaining the absolute level of profitability of exports beyond what is determined by market forces are much more limited now than was the case earlier. As a part of the reform process, the Government has given up almost all discretionary export incentive devices such as the cash compensatory support (CCS) and the import replenishment licence (REP). The only discretionary instrument left, other than the general waiver of income tax on export profits [sections 80-HHC/HHE of the IT Act], is the special import licence (SIL), which too will rapidly lose its incentive value as import liberalisation progresses further in the coming years. The possibility of reintroducing these devices is also limited since they may be barred by the latest GATT convention, and also because they run contrary to the spirit of our economic reforms.

1.30 India's export growth in the long run will therefore necessarily have to be based on achieving competitive advantages through improved productivity and quality and on product and market diversification. Simultaneously active export promotion measures will have to be continued for the immediate future if undue risks are to be avoided. Besides these measures the only direct instrument presently available for active export promotion is the exchange rate, and therefore an active exchange rate policy may be inescapable in the short run.

1.31 In particular, steps will have to be taken to ensure that the export regime is made considerably more "user friendly", which will necessitate substantial changes in a number of areas, such as customs procedures and attitudes, warehouse and port/airport management methods, export promotion schemes like export processing zone and export-oriented unit (EPZ/EOU) and advance licences (AL/VABAL). Some progress has been made in this front by the Export-Import Policy (1992-97) and the various amendments which have been made to it from time to time. The highlights of the April 1995 Trade Policy announcements are :

i) Export Promotion Capital Goods (EPCG) scheme enlarged.

ii) Advance Licence scheme expanded and liberalised.

iii) Rationalisation of schemes covering export-oriented units and export processing zones, electronic hardware and software technology parks.

iv) Advance Customs Clearance Permit abolished.

v) Components, spares, parts of consumer durables freely importable.

vi) List of freely importable goods (OGL) expanded.

vii) Single window clearance for applications for setting up joint ventures or wholly-owned subsidiaries abroad.

1.32 In addition to these measures, considerable attention will also have to be paid to rapidly expanding export infrastructure, which is already becoming a constraint. Waiting time in ports, for example, have increased significantly over the past two years. Problems are also apparent in the infrastructure necessary for specific export products such as high-speed data communication links for software exports and cold chains for the export of horticultural products.

1.33 The relative position of exportables to importables on the other hand appears to be moving in the right direction as the planned reduction in trade barriers progresses. However, care needs to be taken that this process of import liberalisation does not lead to excessively high growth of imports during the transition phase. It has been estimated that under normal circumstances a growth rate of GDP of 6 per cent will require import growth of about 11 per cent. If, however, custom duty rates decrease by about 10 per cent per year and there is an appreciation of the real exchange rate of around 5 per cent, the consequent lowering of the relative price of imports may well lead to import growth at rates above 20 per cent if the price elasticity of demand is as low as 0.6. Such behaviour is already in evidence in 1994-95, when imports have been growing at almost 22 per cent. If this process continues for the next two years, India's import bill would be almost $42 billion by 1996-97. Even if exports continue to grow at the target rate of 18 per cent per year, which in itself is quite optimistic, the trade deficit will rise from the current level of about $3 billion to $6 billion in 1996-97, which was the level that prevailed in 1990-91. Exchange rate management again appears to be a major, if not the only available, instrument to forestall such a possibility.

1.34 The role of the exchange rate goes beyond just the trade issue. One of the primary reason for the low current account deficits during the past two years has been the spurt in the inward remittances, which have gone up from the $2.5 billion level that had persisted for a long period to over $4 billion in 1994-95. This has been ascribed to a shift in remittances from the havala route to legal channels. The principal reason why this shift has taken place is that the gross overvaluation of the rupee that existed in the past has been corrected thereby leading to a dramatic decline in the havala premium. This process has also been supported by the growing confidence in the strength of the Indian economy. If, however, the exchange rate gets misaligned, the havala premium may go up again and if expectation builds up for exchange rate depreciation, the flow of remittances may suffer a serious set back, putting substantial pressure on the current account balance.

1.35 It needs to be reemphasised that the exchange rate has now become much more central to management of the external sector than it has ever been before since the Government is committed to removing or reducing all other forms of trade intervention. The introduction of current account convertibility undoubtedly contributes to imposing a certain degree of discipline in the exchange rate policy of the Government, in addition to being a major support for market-oriented reforms. However, the market exchange rate is determined not only by current account transactions but also by financial flows, and the large inflows of foreign portfolio investments has put a strong upward pressure on the exchange rate, despite a continuing current account deficit. Although the Government has managed to maintain a constant parity between the rupee and the dollar through foreign exchange market intervention, the real exchange rate has in fact appreciated quite significantly in the past two years. The problems that are likely to arise if this trend continues have been discussed above.

1.36 The substantial increase in foreign inflows on the capital account are indicators of the international confidence in our economic potential and policy management, and as such can be regarded as a major success of our reform measures. But the inflow of foreign funds does not become inflow of foreign savings until it increases the net inflow of goods and services. Otherwise it adds to foreign exchange reserves, which undoubtedly contributes to the confidence in the country's external account viability. But it also creates problems in the management of the interest rate and money supply. As regards servicing of these foreign inflows, the advantages of foreign direct investments (FDI) over foreign borrowings are quite clear, in that the former needs to be serviced only when the investments start to yield returns. As regards foreign portfolio investments (FPI), the relatively high average returns to investment, including capital gains, in India compared to international interest rates can make them a more expensive source of funds for the country than foreign borrwings, without the advantage of the stability of direct investments. Such funds tend to be more volatile and less predictable than borrowings, which have well defined repayment schedules. Indeed, the most worrisome feature of foreign portfolio investments, which has been documented in the case of a number of other countries, is that it tends to behave pro-cyclically, ie. it flows in when the economy is performing well and flows out when the economy is in a downturn. Such behaviour makes the task of macro-management that much more difficult. It may therefore be necessary to maintain some amount of control, by using price-related market-based instruments, on their inflows and outflows at the initial stage of our reform process.

4. The Fiscal Balance

1.37 The decade of the 1980s was characterised by Government revenue expenditures outstripping revenue receipts consistently on an increasing trend. By 1990-91 the fiscal deficit of the Central Government had risen to the order of 8.4 per cent of GDP. This was financed by increased borrowings both at home and abroad. The external debt problem faced by the country in 1990-91 was largely the outcome of this behaviour. In addition, the domestic debt contracted by the government to bridge the deficit led to a rapid increase of about 20 per cent per annum in the interest payment liabilitites over the 1985-90 period. It was clear that no stabilisation effort could be sustained unless the deficit was brought down to reasonable levels and contained. The strategy for achieving this objective was based on three planks : (a) increasing tax revenues; (b) reducing revenue expenditures, particularly subsidies, both open and hidden; and (c) reducing the need for public investments in infrastructure through encouraging greater private sector participation. In order to impose fiscal discipline on itself, in September 1994 the Government entered into an agreement with the Reserve Bank of India to the effect that money finance of the deficit will be gradually brought down to NIL by 1997-98.

1.38 A comprehensive reform of both the direct and indirect tax systems in India formed the cornerstone of the economic reforms programme. This was based on the Report of the Tax Reforms Committee set up by the Government in 1991. An essential element of the tax reform package was predicated on the desirability and need to bring down the average level of customs duty from above 100 per cent in 1990-91 to about 25 per cent within a reasonable period of time. The fall in revenues, if import volumes did not increase correspondingly and simultaneously, on this account would have to be made up from other sources.

1.39 The main philosophy guiding tax reforms in the sphere of direct taxes was to choose moderate rates on a wider base and to ensure better tax administration. The approach appears to have paid dividends with a substantially higher collection of direct taxes in the last three years. The number of personal income tax assessees has also increased significantly during the past year. However, there continues to be substantial scope for higher revenues via tighter administration. The total number of personal income tax assessees comprises less than one percentage point of the population, and the total collection of direct taxes, personal and corporation combined, is only about 2.8 per cent of GDP as against the average of around 5.5 per cent for developing countries. There also appears to be scope for taxing fringe benefits and further widening the ambit of presumptive taxes, which have so far yielded low revenues. Further, exempting financial assets from the ambit of wealth tax can be questioned since such exemptions militate against the canon of horizontal equity.

1.40 In the sphere of indirect taxes, the complex system of high and multiple rates, with numerous exemptions, and different rates being applicable for the same good for different uses and users had resulted in administrative abuse, mounting litigation and uncertain allocative impact. It had also narrowed the tax base, made the system inelastic, while creating serious economic distortions. The reform proposals in this sphere have aimed at simplifying and rationalising the structure and continuing the process of moving towards moderate rates of taxation. This approach appears to have yielded improved results. Even in the case of customs duties, the efforts at unifying rates on similar products and pruning of notifications, including end-use exemptions, has led to a situation where the reduction in the average customs revenue collection rate has been about 34 per cent as against 40 per cent reduction in the average nominal duty rates between 1990-91 and 1994-95.

1.41 Despite the improved elasticity of tax revenues in the post-reforms period, the absolute growth in revenues has been disappointing. Tax collections had increased at an average rate of 16.5 per cent per annum between 1980-81 and 1990-91. Since then, it has slipped drastically to only 8.2 per cent in the 1991-94 period. In 1994-95, however, it has again picked up sharply by 19.3 per cent. Despite this revival, the tax revenue to GDP ratio will be almost one percentage point below the level obtaining in 1990-91.

1.42 This pattern highlights the importance of the manufacturing sector to the Government's fiscal viability, since most of these changes can be ascribed to the growth performance of this sector alone. It needs to be borne in mind that it is the manufacturing sector which contributes almost all of Union

Excise and Customs duties, and most of the Corporation tax. Indeed, it is this sector which directly or indirectly contributes almost 70 per cent of the Central Government's tax revenues despite accounting for only about 28 per cent of GDP. The dependence of the state government revenues on the manufacturing sector is only slightly less than that of the Centre. Therefore, in the longer run, the financial health of the government, both Centre and State, is closely linked to the growth performance of the manufacturing sector, unless deliberate efforts are made to reduce the level of fiscal dependence.

1.43 Efforts at containing Government expenditures too have borne fruit, with the total expenditure of the Centre being reduced from 20 per cent of GDP on an average during the 1980s to about 18 per cent in the post-reform period. The bulk of this 2 percentage point reduction is on account of capital expenditures, which has gone down from 6.1 per cent of GDP to 4.4 per cent, ie. by 1.7 percentage points. As a consequence, the share of capital expenditure in the total expenditure has declined sharply from around 30 per cent to 24 per cent. As far as revenue expenditures are concerned, it needs to be noted that the only component that has increased is interest payments, which has gone up from 4 per cent of GDP to 4.6 per cent. Other revenue expenditures have come down from 9.9 per cent of GDP to 8.9 per cent. Thus, the 6 percentage point decline in the share of capital expenditures in the total is matched by an almost corresponding increase in interest payments, with other revenue expenditures remaining more or less constant at 49 per cent of the total expenditure. This behaviour is reflected in the fact that while the fiscal deficit to GDP ratio has declined relative to 1990-91, the revenue deficit has gone up sharply.

1.44 The rapid increase in the interest payments is a matter of serious concern. If it is not brought under control, the Government will have to reduce all other forms of expenditure much more rapidly than may be desirable in order to achieve the target fiscal deficit to GDP ratio. It is therefore important to examine the underlying causes behind the burgeoning interest payments. In this context, two observations need to be made. First, the spurt in interest liabilities has taken place only since 1993-94. The first two years after reforms had witnessed a remarkable slowing down of the rate of growth interest payments. Second, the reported interest liabilities of the Government actually understates the extent of the growth that has taken place in reality. The reason for this is that the reported figures are on a cash basis, and not on accruals. Therefore, the recent increase in the issue of zero coupon government bonds of about Rs. 3000 crores face value gets reflected in the stock of public debt but not in the interest liability.

1.45 Despite the deferring of interest liabilities through greater recourse to zero coupon bonds, the average interest rate on public debt has increased sharply from 8.0 per cent in 1990-91 to 9.3 per cent in 1994-95. The bulk of this increase is on account of the average interest rate on internal liabilities which went up by 0.7 percentage points in 1993-94 alone. The decision to shift from fixed yields on government securities to market determined yields on all new issues in order to reduce the burden on the banking sector, has led to a sharp increase in the interest rate on new government debt, which have risen from 11 per cent in 1989-90 and 1990-91 to 13.2 per cent in 1993-94. This has been further compounded, particularly for state governments, by the reduction in the statutory liquidity ratio (SLR) from 38 per cent to 29.5 per cent by 1994-95. The Public Sector Undertakings also have had to face problems arising out of the increased costs of borrowings in the context of reduced budgetary support.

1.46 The average interest rate is likely to rise further for the next few years as older lower cost debt is retired and replaced by the higher interest bearing new debt and as the SLR is brought down to the target level of 25 per cent by 1996-97. This process is likely to continue until the average interest rate on government debt becomes equal to the market rate, unlike in the past when the government paid substantially lower interest on its debt than the market rate. Therefore, unless the market rate itself comes down by about 4 percentage points, the debt servicing burden will continue to increase on this count alone.

1.47 The second principal cause for the rapid increase in interest payments is the substantial increase in net government borrowings in the past two years. This figure has gone up from about Rs.33,000 crores during 1990-91 to above Rs.49,000 crores in 1993-94 and further to Rs.55,000 crores in 1994-95, after having declined mildly in 1991-92 and 1992-93. The main reason for this sharp increase in borrowings is the decision by the Government to reduce the extent of money finance of the fiscal deficit in order to control inflationary pressures. Thus, although the fiscal deficit in nominal terms rose by Rs.20,100 crores in 1993-94 over 1992-93, government borrowings rose by Rs.21,700 crores. The figures are even more striking for 1994-95, when the fiscal deficit rose by only Rs.800 crores, but borrowings rose by Rs.5,700 crores.

1.48 The level of public borrowings would have been even higher but for the receipts from the sale of public sector equity, which has averaged a little above Rs.3500 crores per year in the last two years. There has been some criticism of the use of these receipts to hold down the fiscal deficit rather than utilising them for retiring public debt. However, in view of the fact that new government debt is considerably more expensive than the old, it appears logical to use these funds to reduce current borrowing requirements instead of retiring lower cost prior debt.

1.49 The need to contain money finance of the Government's fiscal deficit has been actuated primarily by the need to contain the increase in reserve money and over-all money supply in the context of a massive increase in the liquidity in the Indian economy arising out of foreign portfolio inflows, as well as the need to prevent a nominal appreciation of the rupee in order to protect the export performance. It appears therefore that the increase in private international liabilities has led to a corresponding increase in public domestic indebtedness, with the positive effect largely being the rapid build-up of foreign exchange reserves. The net outcome, however, is a permanent bulge in the government's interest liabilities which may have adverse repercussions on investments in the future.

5. Prices and Inflation

1.50 One of the main objectives of the stabilisation programme was to control the rate of inflation in the Indian economy, which was running at over 16 per cent at the time the policies were implemented. Although the rise in prices was initially contained, so that the inflation rate steadily came down to 7 per cent by the end of 1992-93, it started to increase again thereafter. Consequently, the average rate of inflation as measured by the wholesale price index of 10.7 per cent per annum in the post-reform period (1991-95) continues to be substantially h+gher than the 7.8 per cent average that was recorded in the pre-reform period (1985-91). This is a matter of some concern, since a stable price scenario is the cornerstone of the reform process.

1.51 An important, and disturbing, characteristic of price behaviour since 1990-91 is that food prices have increased at a much faster pace than prices in general. This may be seen in Table-9.

TABLE 9

Inflation Rates in Pre- and Post-Reform Periods

(per cent per annum)

	Pre-reform period 1985-86 to 1990-91	Post-reform period 1991-92 to 1993-94
All commodities	7.8	10.7
Food Grains	7.4	13.3
All Food articles	8.4	12.3

1.52 One of the principal causes of this pattern of inflation is that the Government effected substantial upward revision in the administered prices of food-grains, especially in the past two years. The increase in the Central Issue Price of rice and wheat of 25 per cent and 22 per cent respectively in 1993-94 was much higher than the corresponding increase in the previous year [Table-10]. These increases in the Central Issue Prices

TABLE 10

Increase in Procurement and Central Issue Prices

(Percent)

Item	1990-91	1991-92	1992-93	1993-94	1994-95
1	2	3	4	5	6
			Procurement Price		
1. Wheat	4.7	11.1	22.0	14.8	2.9
2. Paddy (Fine)	10.3	11.6	16.7	17.9	9.1
3. Paddy (Superfine)	9.8	11.1	16.0	20.7	8.6
			Minimum Support Price		
4. Pulses (Gram)	6.9	11.1	20.0	6.7	4.7
5. Oilseeds (G. Nut)	16.0	11.2	16.3	6.7	7.5
6. Cotton	8.8	12.1	15.1	12.5	11.1
7. Jute	8.5	17.2	6.7	12.5	4.4
			Central Issue Price		
8. Wheat	14.7	19.7	17.9	21.8	n.a.
9. Rice(Fine)	14.8	25.2	13.7	24.1	n.a
10. Rice (Super Fine)	13.9	23.8	13.1	25.1	n.a.
11. Sugar	16.2	13.1	20.3	9.0	n.a.

were necessitated on the one hand by the sharp increase in the Minimum Support Prices (MSP) of agricultural commodities, and by the need to reduce the subsidies in order to contain the fiscal deficit, on the other. The MSPs for agricultural commodities had to be substantially increased following reduction in the subsidies of all fertilizers in August 1991 and thereafter by decontrol of phosphatic and potassic fertilizers, with resultant increase in the prices of these two nutrients. Fertilizers account for a fairly significant component in the costs of cultivation. The average annual increase in the procurement price of wheat in the three years from 1990-91 to 1992-93 was about 11 per cent, but the increase in 1993-94 alone was 22 per cent. Similarly, the average annual increase in the procurement price of rice (Super fine variety) was about 12 per cent during 1990-93, but was about 21 per cent in 1993-94. Coupled with similar large increases in the minimum support price of pulses, these revisions in procurement prices of food-grains have put an upward pressure on the prices of primary articles and on the average inflation rate.

1.53 There is also evidence that commodities in which the Government either exercises control on trade and distribution or which have administered prices have shown sharper price rise during the period 1991-94 [Table-11]. Thus the prices of Sugar, khandsari & gur and of cotton textiles have gone up by 16 per cent and 10.7 per cent respectively post-reforms as compared 7.2 per cent and 7.3 per cent pre-reforms. Prices in the Fuel, Power & Light group too have accelerated from 7 per cent in 1985-91 to 14.2 per cent in 1991-94. It appears therefore that much of the inflationary pressures during this period emanated directly or indirectly from the Government's actions, particularly those directed towards reducing the extent of subsidies, both open and hidden, in the Indian economic system.

1.54 The upsurge of inflation in 1994-95, however, does not appear to fall into this pattern, and is therefore a matter of greater concern since it may be a harbinger of things to come. In particular, the rate of price increase of food-grains has decelerated from 18.7 per cent in 1993-94 to 8.1 per cent in 1994-95, and that of administered items from 15.4 per cent to 2.6 per cent. This decline has been more than made up by sharp increases in non-foodgrain food articles, such as fruits, milk, eggs, meat and fish, which has gone up from -8.8 per cent in 1993-94 to 18.4 per cent, and in non-food manufactured products, which has increased from 8.2 per cent to 11.1 per cent. Thus it appears that those products which are

TABLE 11

Rise in Whole Sale Prices in the Pre-Reform and Post-Reform Periods

Item Group	Weight	Growth Rate 1990-91 / 1984-85 (% Per Annum)	Growth Rate 1993-94 / 1990-91 (% Per Annum)
All Commodities	100.00	7.2	10.7
I. Primary Articles	32.30	6.6	10.7
A. Food Articles	17.39	7.3	10.6
(a) Rice	3.69	6.6	14.3
(b) Wheat	2.25	7.6	13.7
B. Non-Food Articles	10.08	7.6	8.6
C. Minerals	4.83	0.6	7.1
II. Fuel, Power & Light	10.66	7.0	14.2
III. Manufactured Products	57.04	7.6	9.9
1. Sugar Khandsari & Gur	4.06	7.2	16.0
2. Cotton Textiles	6.09	7.3	10.7

Note: Growth is based on average index of whole sale price of the commodity for the year.

more sensitive to aggregate demand and supply factors have experienced higher inflation in 1994-95 than in 1993-94.

1.55 This behaviour of prices needs to be seen in the context of the over-all macro-economic environment. It is well-known that the inflationary impact of excess aggregate demand varies from sector to sector depending upon the degree of supply constraint faced by it. Thus for the tradeable goods sectors, particularly if the domestic prices are at or near the border prices, increased demand will be reflected more in increased imports or decreased export supplies, and therefore worsening balance of trade, than in price increases. Similarly, sectors which have relatively large unutilised capacities will also display higher output response than price rise. It is only sectors which are non-tradeable, either in nature or through policy constraints, and are near full capacity that will tend to show high price response. The substantial liberalisation of imports, particularly as far as quantitative restrictions are concerned, in the past four years and the considerable excess capacities that have existed in the industrial sector due to recessionary conditions had to necessarily increase the supply responsiveness of the Indian economy in 1994-95. This, coupled with a stable nominal exchange rate and lowering of indirect tax rates, should have mitigated the inflationary pressures to a large extent. The rapid rise in imports and the high rate of growth of industrial production in 1994-95 seems to suggest that this mechanism was in operation, but was not sufficient to neutralise the inflationary behaviour of the supply-constrained sectors.

1.56 This particular inflationary episode, although not excessively high at about 10 per cent, is a cause for concern since it implies that the demand pattern existing in India is such that shortages tend to develop in certain major sectors with rapid growth in national income. Unless urgent corrective steps are taken to first identify these sectors and second to enhance production or reduce whatever trade barriers remain in them, sustained growth of the Indian economy will continue to be associated with rising inflation. Merely reducing the fiscal deficit or controlling monetary expansion will not be enough, since rapid growth of the Indian economy may have to be associated with a certain degree of excess real aggregate demand, at least in the near future, unless the domestic savings rate can be increased substantially.

1.57 Finally, there is no doubt that much of the inflationary pressures in 1994-95 have emanated from the sharp rise in the monetary aggregates due to foreign portfolio inflows during 1993-94 and 1994-95 and the inability of the Indian economy to productively utilise them. In the longer run it would be necessary to devise strategies for coping with similar scenarios. One point that needs to be seriously considered is that when some inflation is inevitable for reasons beyond the control of the government, that should not preclude the need to raise such administered prices which are necessary to correct the relative price distortions and reduce the fiscal burden of the government. The experience of 1993-94 suggest that some deliberate and well-deserved price adjustments may hold down price increases in other supply-constrained sectors, and thus for the same over-all level of inflation, the possibility of future inflation control may be improved.

6. Employment Trends

1.58 Data from the National Sample Survey (NSSO) rounds for 1977-78 and 1987-88 show that employment had grown during the 10 year period 1978-88 at an average rate of about 2 per cent per annum. Comprehensive data from the full round of NSSO on employment are not available yet for the subsequent period. Estimates of employment growth have, therefore, been made using GDP growth and an assessment of sectoral employment elasticities based on available data on sub-sectoral composition of growth rates of output in different sectors of the economy.

1.59 On the basis of the estimates for 1992-93, 1993-94 and 1994-95 of the growth rates of GDP made by CSO, it is estimated that employment would have grown by about 18.8 million in the first three years of the Plan period taken together, yielding an average of 2.03 per cent per annum for 1992-95. Thus, employment during 1992-95 is estimated to have grown at about the same rate as in the decade 1978-88.

1.60 Although employment growth was better in 1992-95 than during 1985-92, when the average rate of growth was only 1.78 per cent (equivalent to a net annual addition of about 5 million per year), it has been substantially lower than the Eighth Plan targets of an average employment growth rate of 2.6 to 2.8 per cent per annum. Consequently the growth in employment opportunities of 6 million in each of the three years 1992-95 have fallen short of the target envisaged in the Plan by about 2.5 million each year. It has also been smaller than the estimated growth of labour force during the period. Therefore, the level of unemployment in the Indian economy, which was estimated at 17 million in 1992, is likely to have increased to 19 million in 1994.

1.61 The non-attainment of the employment targets is primarily an outcome of the slower rate of growth of the economy than had been planned. On the positive side, the pattern of growth witnessed in the first three years of the Plan appears to have been favourable to faster employment growth. There has been a noticeable shift in favour of sectors and sub-sectors which are more employment-intensive in comparison to the growth pattern experienced in the preceding 10 year period. In particular, growth in agriculture, trade, transport and services has buoyed up the employment growth in face of a slippage in the over-all GDP growth performance.

1.62 It should be noted, however, that a substantial share of the growth in estimated employment during this period, amounting to almost 9 million out of the 18.8 million (48 per cent), is accounted for by the agricultural sector alone, which not only accounts for 63 per cent of employment in India but also, as has been already noted, grew faster than the Plan target. This performance has been permitted by 7 good monsoons in a row. Such a fortunate conjuncture cannot be expected to hold in the longer run. Since agriculture is expected to contribute significantly to employment growth in large parts of the country in the immediate future, measures to ensure the sustainability of agricultural employment need to be implemented. In particular, the steady decline in public investments in agriculture for the past decade, which has increased the vulnerability of agricultural growth, and hence growth in agricultural employment, to vagaries of the weather, needs to be reversed. Public investments in strengthening irrigation and other rural infrastructure in backward areas suitably dovetailed with rural employment programmes should reduce dependence of agriculture on rainfall and ensure reasonable growth for the sector. The proposals for enhancing rural credit in the current year's budget should contribute to this process.

7. The Incidence of Poverty

1.63 Estimates of the incidence of poverty in India are also prepared at intervals of five years when the NSS quinquennial surveys on consumer expenditure become available. The last available estimates pertain to 1987-88. Planning Commission, following the methodology used during the Sixth and Seventh Plans, estimated that 29.9 per cent of the population lived in absolute poverty in 1987-88. The Expert Group on Poverty Estimates, however, suggested a revision in the methodology, and on the basis of the revised methodology estimated that 39.3 per cent of the population, equivalent to 313 million people, were below the poverty line : 39.06 per cent in rural areas and 40.12 per cent in urban areas. The survey results of the 50th Round (1992-93) are under process, and not yet available.

1.64 However, NSS "thin sample" results are available for the period 1988-89 to 1992. These have been used to estimate the incidence of poverty at the national level. These estimates have been made by both the Official and the Expert Group methods. It should be noted, however, that these estimates are only approximates as the sample sizes are relatively small. In addition it should also be mentioned that the estimates by the Official method are somewhat more robust than those by the Expert Group method since the latter relies heavily on state level estimates which could not be derived due to the smallness of the sample. The poverty estimates are presented in Table-12.

1.65 As may be seen, the poverty estimates from the thin rounds using the official methodology indicate a substantial reduction in poverty since 1987-88. Some of this decline may, however, be attributed to the adjustment factor that isused to correct the discrepancy between the total consumption given by the NSS estimates and that of the CSO. This factor increased substantially between the full NSS round of 1987-88 and the subsequent "thin" rounds. Although the poverty incidence increases somewhat in 1991-92 and 1992-93, it remains substantially lower than in 1987-88. The Expert Group method, however, while having a similar pattern, indicates that the poverty incidence in 1992-93 is not substantively different from that in 1987-88 despite having declined quite significantly in the intervening years. Much of this behaviour can be explained by the negative growth of agriculture in 1991-92 and the large increases in food prices that had occurred during this period, which affects the poor disproportionately. With the revival of agricultural growth since 1992-93, poverty may be expected to have declined.

TABLE 12

INCIDENCE OF POVERTY

(per cent)

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
OFFICIAL						
Rural	33.4	22.5	20.3	19.7	20.5	22.9
Urban	20.1	14.2	13.3	10.8	12.9	13.0
Combined	29.9	20.4	18.5	17.4	18.5	20.3
EXPERT GROUP						
Rural	39.1	39.2	33.7	35.0	40.0	41.7
Urban	40.1	38.4	36.0	37.0	37.6	37.8
Combined	39.3	39.0	34.3	35.6	39.4	40.7

1.66 The importance of agriculture to both employment creation and poverty reduction underscores the need to maintain and even accelerate agricultural growth. While targetted anti-poverty programmes certainly ameliorate the condition of the poor; they cannot provide a long-run substitute for growth. Therefore, the need to increase agricultural investments, particularly public investments, and to provide the education and training necessary for the poor to take advantage of the opportunities thus created, cannotbeoveremphasised.

8. Regional Balance

1.67 Balanced regional development has been a fundamental objective of India's development strategy since the very beginning. Despite considerable efforts made by the Governmnt over the years in furthering this end through various devices such as devolution of resources, directed location of industries, special incentives for backward area development, etc:, there continues to exist wide disparities between the states. Although the state-wise income data for most of the States is not yet available for 1993-94, the figures for the first two years after reforms (1991-92 and 1992-93) indicate that the disparities may have widened even further [Table-13]. On one hand, despite the general decline in the growth rate of GDP post-1991, Gujarat, Karnataka, Kerala, Meghalaya, Assam and Jammu & Kashmir posted increases in the growth rates of their respective state GDPs. On the other hand, three states - Bihar, Uttar Pradesh and Madhya Pradesh - which were already among the bottom five, experienced an even sharper deceleration in growth than the national average.

1.68 The wide disparity between regions is underscored by the state-wise distribution of investible resources by the organised financial sector [Table-14]. As can be seen, the bottom seven major states, ranked by the per capita state domestic product, which account for about 50 per cent of the population, received only 20 per cent of commercial bank credit and 24 per cent of credit from All India Financial Institutions. It

TABLE 13

Growth of Net State Domestic Product

(Percent per annum)

Rank	States Ranked by Per Capita NSDP	Pre-Reform 1985-86 to 1990-91	Post-Reform 1991-92 to 1993-94
0	1	2	3
1.	Bihar	4.4	-2.3
2.	Uttar Pradesh	5.3	1.2
3.	Orissa	4.6	4.3
4.	Jammu & Kashmir	1.2	3.9
5.	Madhya Pradesh	7.5	-2.5
6.	Assam	4.1	6.2
7.	Rajasthan	9.5	1.5
8.	Meghalaya	7.2	9.5
9.	Kerala	5.0	6.9
10.	Tamil Nadu	5.4	4.1
11.	West Bengal	5.4	5.1
12.	Karnataka	4.5	7.2
13.	Andhra Pradesh	5.5	0.2
14.	Gujarat	4.7	5.4
15.	Goa	7.5	1.8
16.	Haryana	8.5	3.4
17.	Maharashtra	7.7	2.7
18.	Punjab	5.3	4.5
	All India	5.9	2.2

TABLE 14

CUMULATIVE STATEWISE DISTRIBUTION OF CREDIT BY ORGANISED FINANCIAL SECTOR

	per capita SDP (Rs.)	Commercial Banks			All India Fin. Inst.		
		Rs.cres	percent	per capita	Rs. cres	percent	per capita
MAJOR STATES							
Bihar	2886	4535	2.9%	525	2245	2.4%	260
Orissa	3816	2436	1.6%	769	2310	2.5%	729
Uttar Pradesh	4001	11033	7.1%	793	8005	8.5%	575
Jammu & Kashmir	4051	1245	0.8%	1617	452	0.5%	587
Madhya Pradesh	4383	6142	4.0%	928	4846	5.2%	732
Rajasthan	4402	4247	2.8%	965	4066	4.3%	924
Assam	4594	1311	0.8%	585	647	0.7%	289
Kerala	4607	6413	4.2%	2204	1967	2.1%	676
West Bengal	5284	12961	8.4%	1903	4664	5.0%	685
Himachal Pradesh	5355	625	0.4%	1201	973	1.0%	1872
Andhra Pradesh	5529	11854	7.7%	1783	7810	8.3%	1174
Tamil Nadu	5817	18393	11.9%	3290	9151	9.7%	1637
Karnataka	5898	10728	7.0%	2384	5720	6.1%	1271
Gujarat	6306	8868	5.7%	2147	12495	13.3%	3025
Maharashtr	7997	43705	28.3%	5539	22296	23.7%	2826
Haryana	8722	2991	1.9%	1813	2526	2.7%	1531
Goa	9667	598	0.4%	4980	756	0.8%	6298
Punjab	9769	6245	4.0%	3076	2978	3.2%	1467
All Major States		154329		1870	93907		1138
OTHER STATES & UTs							
Arunachal Pradesh		30	0.0%	329	18	0.0%	202
Manipur		91	0.1%	506	36	0.0%	201
Mizoram		24	0.0%	344	29	0.0%	419
Tripura		197	0.1%	704	28	0.0%	101
Meghalaya		84	0.1%	467	79	0.1%	438
Nagaland		98	0.1%	813	42	0.0%	348
Sikkim		28	0.0%	700	30	0.0%	753
Union Territories		25137	16.3%	22050	3149	3.4%	2762

should be further noted that since these figures are cumulative to date (1993-94), they reflect in part the effects of government direction of investment and credit, which had consistently attempted to reduce the disparities. Even within the top eleven states there are significant variations, with one state - Maharashtra - receiving over 20 per cent of all credit, and two states - Punjab and Haryana - receiving less than the per capita average. The situation of the smaller states is particularly serious in that they receive only about 30 per cent of the national average on a per capita basis.

1.69 During the period 1989-90 and 1993-94, the share of the bottom seven states in the distribution of credit has declined by about three percentage points, indicating the likelihood of growing inter-regional disparities in the future if this trend continues. The pattern could change in the future only with

TABLE 15

Important Socio-Economic Indicators

	Birth Rate 1993	Death Rate 1993	Infant Morta-lity 1993	Couple Prote-ction 1993	Life Expect-ancy 1986-91	Female Literacy 1991	Mean Age at Marr-iage (F) 1991	Percentage of households (1991) with				%age below poverty 1987-88
								Pucca houses	Toilet facility	Electr-icity	Drinking water	
1 Andhra Pradesh	24.1	8.4	64.0	45.3	62.2	33.7	17.3	38.4	54.6	46.3	55.1	31.7
2 Bihar	32.1	10.6	70.0	24.7	57.0	23.1	16.6	30.2	56.5	12.6	58.8	40.8
3 Gujarat	28.0	8.1	58.0	57.0	61.5	48.5	19.5	56.9	65.7	65.9	69.8	18.4
4 Harayana	30.6	7.8	65.0	55.9	62.0	40.9	17.8	50.1	64.3	70.4	74.3	11.6
5 Karnataka	25.5	8.0	67.0	48.2	63.3	44.3	19.2	42.6	62.5	52.5	71.7	32.1
6 Kerala	17.3	6.0	13.0	55.4	73.8	86.9	21.8	56.0	72.7	48.4	18.9	17.0
7 Madhya Pradesh	33.4	12.6	106.0	38.8	54.7	28.4	16.6	30.5	53.0	43.3	53.4	36.7
8 Maharashtra	25.0	7.2	50.0	55.3	64.3	50.5	18.8	52.2	64.5	40.7	68.5	29.2
9 Orissa	27.2	12.2	110.0	40.2	55.2	34.4	19.1	18.7	49.3	17.8	39.1	44.7
10 Punjab	26.3	7.9	55.0	73.6	65.3	49.7	21.1	77.0	73.2	60.9	92.7	7.2
11 Rajasthan	33.6	9.0	82.0	29.5	58.7	20.8	16.1	56.1	62.3	20.5	59.0	24.4
12 Tamil Nadu	19.2	8.0	56.0	57.3	60.8	52.3	20.3	45.5	57.5	37.2	67.4	32.8
13 Uttar Pradesh	36.0	11.4	93.0	33.7	49.6	26.0	16.7	41.0	66.5	12.9	62.2	35.1
14 West Bengal	25.6	7.3	58.0	34.1	59.5	47.1	19.2	32.6	78.8	21.1	82.0	27.6
INDIA	28.5	9.2	74.0	43.5	59.1	39.4	18.3	41.6	63.9	42.4	62.3	29.9

active government intervention. The nature of intervention will have to be reoriented towards the logic of the economic reforms so that the role of the government in directing the location of industrial investments does not conflict with the activities of the private sector in the interest of efficiency.

1.70 The regional disparities in per capita incomes also finds reflection in the indicators of social development [Table-15]. The poorer states - particularly Bihar, Uttar Pradesh and Madhya Pradesh - have highly adverse indicators of social development and well-being. Life expectancy, female literacy and mean age of females at marriage are low, while fertility rates, infant mortality and incidence of poverty are high in these states. Housing conditions, drinking water, sanitation and household electricity supply are also consistently inferior.

1.71 Although these states need to increase investment for development much more than other states, their Plan investments have fallen sharply in the past five years, thus further jeopardising their prospects for growth and improvement in the human conditions [Table-16]. In the years 1991-92 through 1993-94, the short-fall in achieving Annual Plan Outlays of the low income states has been increasing from year to year. For instance, Bihar's shortfall in Annual Plan Outlay increased from 30 per cent in 1990-91 to 67 per cent in 1993-94; Uttar Pradesh from 5 per cent to 31 per cent and Madhya Pradesh from 11 per cent to 16 per cent during the same period.

TABLE 16

Real State Plan Expenditures - Selected States

(Percent Change)

S. No.	State	88-89	89-90	90-91	91-92	92-93	93-94	94-95
0	1	2	3	4	5	6	7	8
	All States	0.6	2.3	-1.7	-2.7	-0.8	4.4	6.7
1.	Bihar	-1.7	-0.8	-16.9	-28.5	1.7	-39.8	8.1
2.	Madhya Pradesh	-1.5	3.0	-8.6	-7.0	0.1	3.5	2.7
3.	Rajasthan	0.8	4.4	10.3	6.1	8.5	14.3	26.6
4.	Uttar Pradesh	5.4	0.8	-1.0	1.2	-13.3	-13.3	6.7

Note: 1. GDP Deflator has been used to convert plan expenditure from current prices to constant prices

9. INVESTMENTS AND SAVINGS

1.72 It may recalled [Table 2] that the Eighth Plan had visualised a significant step up in the rate of investments in the Indian economy. The data available for the first two years

TABLE 17

INVESTMENT RATES (percentage of GDP)

	89-90	90-91	91-92	92-93	93-94
1. Gross Fixed Capital Formation	22.5	23.2	22.2	21.5	20.9
of which :Public Sector	9.6	9.4	9.5	8.5	8.4
2.Gross Domestic Capital Formation	25.0	27.1	23.6	22.0	20.4
of which : Public Sector	10.0	9.7	9.2	8.9	8.9

of the Plan, however, indicates that the expectation has not been realised. The trends in over-all investments in the country are given in Table 17 .

1.73 As may be seen, the investment rate peaked in 1990-91 and has steadily declined thereafter. This trend is particularly of concern since the process of restructuring the Indian economy as visualised in the design of the reform programme is critically dependant upon the level and growth of investments in the economy. One of the basic objectives of reforms was to create conditions such that on one hand there would be a constant pressure on all productive enterprises to become more efficient, and on the other hand to direct investments into areas where the country had competitive advantage. It was expected that in this process some existing capacities would be rendered non-viable, but that rapid growth in other sectors would more than take up the slack. The slow down in investments will tend to retard this process.

1.74 The decline in the rate of capital formation by the private sector has been particularly sharp, going from 17.4 per cent of GDP in 1990-91 to 11.5 per cent in 1993-94. Most of this decline, however, has been due to the reduction in inventory and stock holdings, which accounts for 4.5 percentage points of the total decline of 6 percentage points. Even so, the 1.5 percentage point reduction in the rate of fixed capital formation is a matter of concern.

1.75 The inflow of foreign direct investments (FDI), though highly encouraging by past standards, also have not entirely lived up to expectations. While the total volume of approvals have been very impressive, the actual inflows have been relatively tardy. The behaviour of FDI is given in Table-18 .

1.76 The relatively poor performance of private sector investments seems to indicate that there may still be some uncertainty in the minds of potential investors regarding the progress of economic reforms and the behaviour of the Indian economy in the immediate future. It is extremely important that these doubts be resolved in the shortest possible time. As has already been indicated [Table 8], the extent of protection to Indian industry continues to be relatively high, with the import protection index in 1994-95 being 49 per cent higher than in 1980-81 and 27 per cent higher than in 1966-67. Therefore the full effect of foreign competition on Indian industry is yet to be felt. The recent indications of improved productivity in Indian industry is more the result of domestic competition arising from the new Industrial Policy, particularly delicencing, than from foreign competition. By 1996-97, however, if present trends continue, competition from imports is likely to become fairly intense. A certain degree of attrition of existing capacities may well occur, and if the investment rate does not pick up sufficiently to make up for this possibility, the growth rate of the economy may suffer.

TABLE 18

FOREIGN DIRECT INVESTMENTS

(US$ billion)

	1991	1992	1993	1994	Total
Approvals	0.2	1.3	2.8	2.9	7.2
Actual Inflows	0.2	0.2	0.6	0.9	1.9
Percent realisation	66%	17%	20%	33%	26%

1.77 Although the decline in the rate of capital formation by the public sector has been less than that of the private sector at about 1 percentage point between 1990-91 and 1993-94, the decline has been much sharper in government investments which has gone down by 1.7 percentage points. The difference has been made up primarily by investments of the public sector enterprises. The decline in government investments has serious implications for some of the critical infrastructure sectors such as roads, ports, power generation, etc:. Although efforts are underway at attracting greater private sector investments in these key infrastructural areas, the progress on this front has been slow. If in the interim, investments in the pipeline drop, it may prove to be a serious constraint in the medium-run.

1.78 While there is no doubt that greater private sector participation in infrastructural development is the right direction to follow in the long-run, there are two serious problems in the short- and medium-run. First, for most infrastructural sectors major legislative and procedural changes are required in order to bring in the private sector in any meaningful way. Such changes are of necessity time consuming, and it does not appear likely that too much progress can be achieved in the next two to three years. Second, and more importantly, it needs to be recognised that infrastructural projects by their very nature tend to have long pay-back periods. This is particularly true in the Indian context, given the low average ability to pay. This causes a problem regarding the viability of such projects in terms of the expected returns to the private investors. In the immediate future therefore it is unlikely that very much private investments would be forthcoming unless the government devises methods by which the viability of such projects is enhanced. This needs to be done expeditiously.

1.79 However, the problem of regional imbalance is likely to become even more acute as the trend towards greater private sector provision of infrastructure gains momentum. With the dismantling of the licensing regime and of directed investment location, economic forces will naturally play the principal role in determining the future location of industries. While this is undoubtedly desirable for efficiency, it does raise serious equity issues. It is not unreasonable to assume that private infrastructural investments will have a shorter time horizon for pay-back than public investments have had. In such a case, the bulk of such investments may take place in locations which are relatively more developed and therefore hold better promise for high capacity utilisation. This in turn will tend to attract more industrial investments to the same locations simply because of superior infrastructural availability. Thus a virtuous cycle of infrastructural development and industrial growth will be set off in these locations. However, the net result may be a growing disparity between these favoured locations and the rest of the country, which will have arisen not from any intrinsic superiority but due to certain historically determined and government directed investment patterns. This is not merely an inter-state issue, since growing regional disparities even within a state can cause serious problems. In this context, public investments may have to be relied upon to ensure that adequate infrastructure is created in the backward areas in order to provide the pre-conditions for private investments in the future, and to ensure that disparities do not widen too much.

1.80 The other area of concern is investments in agriculture. Gross investments in real terms in this sector has stagnated right through the 1980s and 1990s at about Rs. 4,600 crores per annum in 1980-81 prices. There has been an absolute decline in public investments of about Rs.700 crores between 1980-81 and 1992-93, which has barely been made up by an increase in private investments. The share of this sector in total gross capital formation in the economy, however, has declined sharply from 18 per cent in 1980-81 to only 9 per cent in 1992-93. Whether such rates of capital formation in agriculture can sustain output growth rates of above 3 per cent per annum needs to be considered seriously.

1.81 The Eighth Plan had also visualised a step up in domestic savings for financing the investment needs of the country, and a lesser reliance on foreign savings as reflected

TABLE 19

GROSS DOMESTIC SAVINGS RATES

(percentage of GDP)

	89-90	90-91	91-92	92-93	93-94
1. Households	18.1	20.0	17.8	15.5	15.9
2. Private corporate	2.6	2.7	3.2	3.0	4.0
3. Public	1.6	1.0	2.1	1.5	0.2
TOTAL	22.3	23.7	23.1	20.0	20.2

in the current account balance. The behaviour of the domestic savings rate is presented in Table 19.

1.82 As may be seen, the domestic savings rate peaked in 1990-91 and has declined sharply thereafter. This decline has been due primarily to a sharp reduction in household savings of about 4 percentage points. Public savings had improved significantly in 1991-92 and 1992-93, but received a serious set-back in 1993-94. Corporate savings, on the other hand, has grown steadily. While the factors leading to a decline in public savings has been discussed in earlier paragraphs, the decline in household savings is a major cause for concern.

1.83 As far as foreign savings are concerned, the Eighth Plan visualised that these would amount to about 1.6 per cent of GDP. However, foreign savings may be defined in two ways. First, there is the inflow of real resources from the rest of the world, which is captured by the Current Account Deficit (CAD). This is the sense in which the term has been used in the Eighth Plan document. Second, there is the flow of financial savings from abroad, which includes all capital account items excluding exceptional finance. The behaviour of these various measures are presented in Table 20.

1.84 As may be seen, the current account deficit in the first three years of the Plan (1992-95) has been well below the target. This is primarily a reflection of the inadequacy of investment demand during this period as has been discussed before. The more interesting issue arises with the inflow of net foreign savings, which has surged significantly. The difference between this figure and the current account deficit reflects the existence of excess financial savings in the economic system. If these excess financial savings have to be absorbed, either investments have to be increased or domestic savings reduced through higher consumption.

TABLE 20

INFLOW OF FOREIGN SAVINGS

(percentage of GDP)

	89-90	90-91	91-92	92-93	93-94	94-95
1. Current Account Deficit	2.5	3.2	0.4	1.8	0.3	0.4
2. Net Foreign Financial Savings	2.2	2.2	1.4	1.6	3.0	2.6
3. Exceptional Finance	0.0	0.6	0.5	0.6	0.7	0.0

1.85 The danger of the such behaviour lies in that since savings and consumption behaviour of households is conditioned to a large part by habits, if such a situation of excess foreign savings persists for too long, then domestic savings may stand permanently reduced. Thus when investment picks up again to the target levels, there may be substantial worsening of the current account deficit. In order to prevent such an eventuality, it is imperative that the investment rate be raised quickly. Since private investments have a dynamic of its own, and there is no indication that they are constrained by the availability of savings at present, the only alternative appears to be to raise public investments in the short-run.

CHAPTER 2
RESOURCES POSITION

Reforms Programme

2.1 The Eighth Five Year Plan (1992-97) was launched soon after the process of economic reforms was initiated in July, 1991. The stabilisation and structural adjustment measures that constituted the economic reforms programme marked a significant watershed in the management of the country's economy. By early 1991 a serious fiscal crisis had emerged owing to the growing imbalance between revenue receipts and revenue expenditure especially after the middle of the 1980s, leading the Government to engage in large measures of borrowing even to meet the current expenditure. Side by side, there was also a balance of payments crisis that emerged in early 1991. While the immediate stimulus to the process of economic reforms was to simultaneously address both these problems, it may be noted that the process of economic liberalisation in some measure had already been initiated since the early 1980s. The ongoing reform process may thus as such be viewed as part of a continuum.

2.2 In order to redress the imbalance in the fiscal and foreign trade sectors a number of measures were introduced as part of the reform programme. The rupee was devalued to provide a competitive edge to our exports, and foreign trade was liberalised with import duties brought down significantly. In the fiscal sector, while tax revenues were sought to be increased via a comprehensive process of tax reform, the need to compress government expenditure, particularly non essential revenue expenditure, was thought to be of paramount importance, so as to ensure a lower fiscal deficit which had reached the unacceptably high annual average of 8.2% of GDPduring the Seventh Plan (1985-90) years.

Focus on "human development"

2.3 The resource mobilisation exercises of the Eighth Five Year Plan were carried out keeping in view the broad objective of the Plan which recognised "human development" to be at the core of all development effort. The Plan envisages a higher growth and substantial improvement in the social sectors that have a direct bearing on the standard of living, education and health of the people. In keeping with this objective, more than one fourth (26.1%) of the overall public sector plan outlay approved for the Eighth Plan has been allocated to the social sector (including Rural Development) as against the corresponding share of 22.5%of overall approved outlay in the Seventh and 19.9% in the Sixth Plans. Among the other explicit objectives were generating employment and alleviating poverty. Even though the key element of the economic reform process was to allow market forces to generate a higher growth potential one has to recognise that there are large areas such as primary education, rural health, provision of drinking water, child welfare etc. where market signals are unlikely to lead to socially optimal allocation of resources. Therefore the State has to intervene, via the planning process, to channelise reosurces into these vital areas. In the original formulation of the Eighth Plan nearly 82% of the total budgetary support to the Central Ministries was earmarked for the social, infrastructure and agricultural sectors, as compared to 70% in the Seventh Plan.

Public Sector Outlay

2.4 The public sector outlay for the Eighth Plan (1992-97) has been placed at Rs.434,100 crore at 1991-92 prices, of which the investment component amounts Rs.361,000 crore, with the balance being in the nature of current outlays. The public sector investment of Rs.361,000 crore accounts for 45.2 per cent of the total domestic investment of Rs.7,98,000 crore envisaged in the Eighth Plan, as against the corresponding share of 47.8 per cent targetted in the Seventh Plan. The relatively lower share in the Eighth Plan allows a larger role for the private sector.

2.5 The share of States in the public sector outlay in the Eighth Plan works out to 41.5%. During 1992-95 the States' share turned out to be lower at 35%. The share of States in public sector Plan outlay has gone down from about 51% during the Fifth Plan to 41% in the Sixth Plan. However, it rose to 48% in the Seventh Plan.

2.6 Of the total Plan Outlay for the Eighth Plan, the budgetary support has been pojected to be about 43.4%. The budget support envisaged for the Central Plan is 41.8% of the outlay while budget support (Central assistance) for States works out to 43.6% of the approved State Plan outlay. However, during the first three years of the Eighth Plan while the budgetary support for the Central Plan was of the order of 40.7%, the Central assistance to State Plans, was as much as 56.1% of outlay. This implies that the States' effort towards fulfilling the targetted outlay was substantially below the level projected for the Plan.

2.7 An in depth review of financial targets and achievements is essential for a realistic appraisal of the feasibility of achieving physical targets. Shortfalls in plan expenditure tend to reflect shortfalls in the achievement of physical targets, which are discussed in the sector-specific chapters of this document. This Chapter seeks to review the resource position of both the Centre and States in the light of Plan expenditure during the first three years of the Eighth plan (1992-95) vis-a-vis the approved public sector outlay for the Eighth Plan (1992-97). In order to ascertain the magnitude of the tasks in terms of overall plan outlay commensurate with approved outlay during the remaining period of the Eighth Plan and identify the Sectors requiring significant step up in plan outlays, plan expenditure during 1992-95 is analysed both in overall terms and by Heads of Development such as Rural Development, Education, Health, etc. as per the classification in the Plan/Budget documents. This is followed by an assessment of resource scenario for plan financing, which forms the basis for the forecast of resource position and the likely gap between resource availability and resource requirements during the remaining period (1995-96 and 1996-97) of the Eighth Plan.

Plan Expenditure

2.8 The figures (Annex2.1) reveal that as against the overall approved Eighth Plan Outlay of Rs. 4,34,100 crore (at 1991-92 prices), the overall plan expenditure in real terms during the first three years (1992-95) amounted to Rs. 2,27,955 crore or about 52.8 per cent of the approved outlay. The expected level of plan expenditure in pro-rata terms for the first three years amounts to 60 per cent of the approved outlay. This meant that there has been a shortfall of Rs. 32505 crore at 1991-92 prices, or around seven percentage points. For the purpose of comparison, the figures of outlay and expenditure for the Sixth and Seventh Plans are also given in Annex. 2.1. The figures reveal that in plan expenditure during the comparable period of the Seventh Plan was 55.1% while that in the Sixth Plan was 45.3% of the total plan outlays.

2.9 At the disaggregated level the figures reveal more serious shortfall in the state sector. As against the approved Eighth Plan outlay of Rs. 1,79,985 crore, the plan expenditure (including area programmes) during 1992-95 amounted to only Rs. 80,575 crore or about 45 per cent of the approved outlay. In pro-rata terms, the shortfall was of the order of Rs. 27,416 crore, or 15 percentage points. In the case of the Central Sector, plan expenditure during the corresponding period amounted to Rs. 143528 crore, or about 58 per cent of the approved Eighth Plan outlay of Rs. 2,47,865 crore. This meant that the shortfall in the central sector at Rs. 5191 crore or less than two percentage points in pro- rata terms was much less serious than that in the state sector. This large gap in plan performance between the States and Centre has brought about a reduction in the relative share of States in public sector plan outlay from 41.5 per cent envisaged in the Eighth Plan to 35.3 per cent during the first three years of the plan. As regards Union Territories, the plan expenditure amounting to Rs.3,852 crore during 1992-95 accounted for about 62% of the approved outlay of Rs. 6,250 crore, thereby exceeding the pro-rata share by Rs. 102 crore or about two percentage points.

2.10 Analysis of the trends in plan expenditure by heads of development has revealed serious shortfalls in infrastructure and social sectors. The figures (Annex 2.2 and 2.3) show that even in the case of the Central Sector, where the overall shortfall in plan expendture was marginal, there were large slippages in the Social Sector (including Rural Development). In the case of the central sector, the approved outlay on social sector amounted to Rs. 58,615 crore (23.6 per cent of total Central Plan Outlay) whereas the corresponding amount for States was Rs. 51,802 crore (28.8 per cent of total State Plan Outlay). In pro-rata, terms the shortfall was of the order of Rs. 8188 crore or 14 percentage points in the Central Sector and Rs. 6,355 crore, or about 12 percentage points in the case of States.

2.11 In the case of infrastructure sector (Annex. 2.4 and 2.5) overall shortfall in plan expenditure was witnessed only in the State Sector. While expenditure during 1992-95 accounted for about 64 per cent of the approved plan outlay of Rs. 1,32,869 crore (53.6 per cent of total Central Plan outlay) in the Central Sector, the corresponding proportion was only about 44 per cent of the approved outlay of Rs. 60,926 crore (33.8 per cent of total States Plan outlay) in the State Sector. However, even in the case of the Centre, there was shortfall in certain sub-sectors, notable among them being Power, Roads & Bridges and Ports.

2.12 In regard to other sectors also shortfalls in Plan expenditure vis-a-vis the prorata expenditure of 60 per cent of approved outlay were noticed in the case of both the Centre and States. These sectors include Agriculture & Allied Activities and Irrigation and Flood Control. In the case Centre, expenditure during 1992-95 accounted for only 5 per cent of the Eighth Plan outlay. The corresponding shortfall in the State sector was more because the expenditure during 1992-95 accounted for only 45 per cent of the approved outlay for Eighth Plan. In the case of both Centre and States shortfalls of equal magnitude (41% as against 60%) were noticed in respect of irrigation and flood control also.

Resource Mobilisation

2.13 The projected financing pattern for the Eighth Plan outlay may be seen from Annex.2.6. As per this, domestic resources comprising Balance from Current Revenues (BCR), resources of public enterprises and borrowings (including miscellaneous capital receipts) account for 88.8 per cent of the approved Eighth Plan outlay of Rs. 4,34,100 crore. BCR accounts for about 8 per cent of aggregate resources for financing this outlay, while contribution of public enterprises accounts for 34 per cent of the same. Borrowings, including market borrowings, small savings, provident funds and miscellaneous capital receipts (MCR) constitute 46.6 per cent of aggregate resources for the plan. Net inflow of capital (external aid) from abroad contributes 6.6 per cent of the approved plan outlay. The resource gap accounting for the remaining 4.6 per cent of the approved outlay is projected to be filled by deficit financing. The positive BCR in the projected financing pattern for the Eighth Plan is based on fairly optimistic assumptions about growth in the revenue and control of non-plan revenue expenditure during 1992-97. The projected growth rates for direct and indirect taxes for this period are 9.9% and 8.5% per annum respectively. As regards non- plan revenue expenditure, the two important components, viz. interest payments and subsidies have been projected to increase at 12.2% and 2.0% per annum.

Balance from Current Revenues

2.14 The emerging resource scenario indicates serious deviations from the projected financing pattern. As against an average positive BCR of Rs. 4,404 crore per annum projected for the Eighth Plan in respect of the Centre including Union Territories, the observed BCR as per the revised estimates had been negative in all the three years of the Plan. The deviation in BCR from projections brought about by the combined impact of decline in current revenues and increase in non-plan revenue expenditure necessitated greater dependence on borrowings for financing the plan. Similar deviations from projections for similar reasons were noticed in respect of the BCR of states also. The deterioration in BCR and the consequent increase in the dependence on borrowings during the first three years of the Eighth Plan can be seen from Annex.2.7.

2.15 For the Eighth Plan, the BCR was expected to contribute 6.6 per cent of the aggregate resources and 11.5 per cent of the Plan outlay of the Central sector including Union Territories. During the Fifth Five Year Plan, the contribution of BCR was 41.6 per cent of aggregate plan outlay of the Centre. After that it has been declining steadily and during the Sixth and Seventh Plans the share of BCR went down to 19.9 per cent and 0.7 per cent respectively. This has come about essentially because during the period covering these plans, non-plan revenue expenditure has progressively outstepped current tax and non-tax revenues leading to the BCR turning negative. Whereas the comibed BCR of Centre and States was supposed to raise nearly 8 per cent of aggregate resources over the Eighth Plan period amounting to Rs. 35,005 crore at 1991-92 prices, actual showing on BCR during 1992-95 was of the order of - Rs. 33,876 crore. If the target of BCR is to be met during the plan period a sum of Rs. 63,744 crore has to be collected under this head from the Centre and the States put together during 1995-97 comprising 31.5 per cent of resource effort during the remaining two years of the Eighth Plan. A BCR figure of this magnitude would appear to be daunting.

Resources of Public Sector Enterprises

2.16 Plan outlay of the Central Public Sector Enterprises (CPSEs) accounts for 70 to 75 per cent of the total central plan outlay. In pursuance of the policy intitiated in the 1980s, the dependence of CPSEs on budgetary support has registered significant reduction from around 50 per cent of their plan outlay at the commencement of the Seventh Plan (1985-86) to around 15 per cent in the third year (1994-95) of the Eighth Plan. This has been made possible through greater dependence by CPSEs on Internal and Extra Budgetary Resources (IEBR). In pro-rata terms, generation of internal resources comprising retained profits and depreciation provision contributed 85 per cent and 92 per cent of the Eighth Plan projections for 1992-93 and 1993-94 respectively. The corresponding proportion for 1994-95 exceeded the pro-rata level. Mobilisation of funds from the market through bonds constituted only about 15 per cent of the pro-rata amount in 1992-93 but improved to account for around 70 per cent and 73 per cent in 1993-94 and 1994-95 respectively. Resource mobilisation through external commercial borrowing and the category 'others' comprising intercorporate transfers, public deposits, etc. exceeded the pro-rata levels during each of the first three years of the Eighth Plan.

2.17 However, the growing dependence of CPSEs on borrowings to finance plan outlays has not been matched by higher levels of productivity and profits in all cases. As per the survey of public enterprises released by the Deptt. of Public Enterprises (1993-94), 106 out of 240 operating enterprises could not earn enough revenues to meet the provisions for depreciation and deferred revenue expenditure during 1993-94. The cash losses suffered by them amounted to Rs.4038 crores in 1993-94 as against Rs.2608 crore in 1992-93. The units suffering from major cash losses belonged to fertilisers (Rs.714 crores), consumer-goods (Rs.613 crores), textiles (Rs.606 crores) and heavy engineering (Rs.473 crores). The growing dependence on borrowings also eroded the profits of the relatively better off enterprises. During 1993-94, they had to set apart about 65 per cent of their profits for the purpose of interest payments. As a result, their pre-tax profits constituted only around 35 per cent of their gross profits in the same year. It is also significant to note that the petroleum sector contributed nearly 90 per cent of the total net profits generated in 1993-94. A number of enterprises have accummulated huge losses thereby making their networth negative. As per the amendment to the Sick Industrial Companies (Special Provision) Act, 1985 effected in 1991, sick public sector enterprises are referred to the Board for Industrial and Financial Reconstruction (BIFR).

2.18 As part of the industrial policy announced in 1991 Government have initiated partial disinvestment of the Government equity holding in public enterprises with effect from 1991-92. the disinvestment effected in 1991-92 constituted 8 per cent of Government holding in 30 public enterprises at a total value of Rs.3038 crores. The proceeds from disinvestment to the extent of 5 per cent of equity holding in 16 enterprises effected in 1992-93 amounted to Rs.1912 crores. In this context, the recommendations made by the Rangarajan Committee on disinvestment of shares in public enterprises assume relevance. The Committee recommended the target level of ownership at 51 per cent in the case of all units reserved for the public sector, 26 per cent in the case of enterprises having a dominant market share or otherwise important for strategic reasons, and zero level in other cases. The main difficulty facing PSUs in raising resources from the market either through sale of equity of borrowing through bonds/debentures is their inherent inability to compete with the private sector on equal terms. In order to further reduce and,if possible, eliminate dependence on budgetary support, it is necessary for CPSEs to operate on commercial basis and raise resources from the market through a sound combination of equity and debt. Since PSUs have to compete with private sector, they should be able to adapt quickly to legal, procedural and accounting requirements of the capital market. They should also be able to pay dividends to share holders. During 1993-94 only 67 out of 240 operating enterprises surveyed by DOP paid dividends, which amounted to Rs.1014 crores or 1.82 per cent of the share capital.

2.19 As for the State Level Public Sector Enterprises which made negative contribution towards plan financing the root cause of the problem continues to lie in the poor performance of the State Transport Corporations and the State Electricity Boards. The problem is more acute in the case of SEBs which incurred commercial losses to the tune of Rs.

6,332 crore in 1994-95 against Rs. 4,995 crore and Rs. 4,358 crore in 1993-94 and 1992-93 respectively. The inability of SEBs to raise tariff commensurate with the economic cost of electricity generation and distribution also adversely affect financing of plan projects.

Borrowings and Miscellaneous Capital Receipts

2.20 The projected financing pattern envisages 35.4 per cent of Centre's aggregate resources from borrowings (including MCR). The corresponding proportion in respect of States is 83.3 per cent. The period 1992-95, however, witnessed much higher dependence on borrowings by both Centre and States. While borrowings during this period accounted for 59.2 per cent of aggregate resources in respect of Centre, the corresponding proportion in the case of States worked out to 116.7 per cent. The combined dependence of Centre and States on borrowings during 1992-95 accounted for 67.5 per cent as against the projected level of 46.6 per cent of aggregate resources. It should be pointed out here that an increased reliance on borrowings for financing the Plan would increase the debt service burden which would in turn result in a squeeze on resources for the Plan in subsequent years.

Net Capital Inflow from Abroad

2.21 The net capital inflow from abroad comprising only external aid (on net basis, i.e after repayments) accounts for 8.6 per cent of the aggregate resouces in respect of Centre. As against the envisaged level of 8.6 per cent, net inflow of capital from abroad accounted for only 4.0% of Centre's aggregate resources during 1992-95.

Deficit Financing

2.22 The budgetary deficit projected for the Eighth Plan amounts to Rs.20,000 crores at 1991-92 prices. The projected financing pattern for the Eighth Plan does not indicate the estimated fiscal deficit during the plan period (1992-97). However, the estimated borrowing requirements of the Central Government, including the borrowings by the Central Public Sector Enterprises (CPSEs) amount to Rs.1,,60,055 crores. When this is added to the projecte budgetary deficit, the total amount rises to Rs.1,80,055 crores which accounts for 72.6 per cent of the approved Eighth Plan oultay in respect of the Centre. The borrowing requirement in respect of the States projected for the Eighth Plan amounts to Rs.84,500 crores. These figures however cannot be considered as equivalent to Gross Fiscal Deficit (GFD) which represents the difference between total Government expenditure and the sum of revenue receipts and non-debt capital receipts. In the case of the Centre the magnitude of projected borrowing includes non-debt capital receipts, whereas in the case of States the projected borrowing does not include a part of Central Assistance for State Plans given by way of loans.

2.23 GFD, however, can be viewed as the difference between the sum of revenue deficit, capital outlay and net lending on the one hand and disinvestment of equity holdings of the Government in Public Sector Enteprises on the other. The trends in the composition of GFD for Centre as well as States during the first three years of the Eighth Plan may be seen from the following table:

Table 1

(Rs. in crore)

	Amount		
	1992-93 (Actuals)	1993-94 (RE)	1994-95 (BE)
Centre			
1. Revenue Deficit	18,574	34,058	32,727
2. Capital Outlay	13,619	13,229	14,123
3. Net lending	9,941	13,764	12,065
4. Disinvestment	1,961	2,500	4,000
GFD (1+2+3-4)	40,173	58,551	54,915
States			
1. Revenue Deficit	5,114	6,055	7,948
2. Capital Outlay	10,655	12,187	14,781
3. Net lending	5,123	5,070	6,592
4. Disinvestment	0	0	0
GFD (1+2+3-4)	20,892	23,312	29,321

2.24 The figures given above reveal that there has been a significant increase in the proportion of revenue deficit in GFD in respect of the Centre. Revenue deficit of the Centre consituted 46.2% of GFD in 1992-93 but rose to 58.2% and 59.6% in 1993-94 (RE) and 1994-95 (BE) respectively. As regards capital outlay, there was a substantial decrease in its share from 33.9% of GFD in 1992-93 to 22.6% in 1993-94 (RE) but rose to 25.7% in 1994-95 (BE). During the corresponding period the proportion of revenue deficit of the States in their GFD rose only marginally from 24.5 per cent in 1992-93 to 26.0 per cent in 1993-94 (RE) and 27.1 per cent in 1994-95 (BE). As regards capital outlay, the corresponding period witnessed a marginal increase from 51.0 per cent of GFD in 1992-93 to 52.3 per cent in 1993-94 (RE). This however declined to 50.4% in 1994-95 (BE). The substantial increase in revenue deficit in the case of the Centre during the first three years of the Eighth Plan was largely the result of significant increase in the burden of non-plan revenue expenditure on account of heavy interest payments.

Budgetary Support to Plan

2.25 The budgetary support to the Eighth Plan at 1991-92 prices amounts to Rs. 1,88,475 crore, or 43.4 per cent of the approved Eighth Plan outlay. The remaining 56.6 per cent comes from the Internal and Extra Budgetary Resources (IEBR) of CPSEs for their plans and own resources of States for financing their plans.

2.26 As mentioned in the preface to the Eighth Five Year Plan (Vol. I) budgetary support is a crucial factor in the determination of outlays of sectors which do not have any access to internal resources or borrowings. Thus sectors like education, health, family welfare, agriculture etc. depend almost exclusively on budgetary support for financing their plan outlays. Even in the case of sectors like power, railways, coal etc. in the infrastructure sector, where the public enterprises generate interal resources and have recourse to borrowings, a minimum budgetary support is necessary to protect the plan outlays of these sectors. As brought out in para 2.4, plan expenditure in key sub-sectors of the infrastructure like power and roads fell far short of the pro-rata level of 60 per cent of the approved outlay during 1992-95, and higher oultay on those sectors during 1995-97 presupposes more budgetary support.

2.27 The budgetary support to Central Plan (including Union Territories) amounts to Rs.1,09,975 crore, which accounts for 58.3 per cent of the total budgetary support in the Eighth Plan. The budgetary support to Central Plan, excluding Union Territories, amounts to Rs. 1,03,725 crore and accounts for 41.8 per cent of the total Central Plan outlay. Bulk of this budgetary support goes to the social sector (including Rural Development) which accounts for 51.8 per cent (Rs.53,678 crores) of total budgetary support to Central Plan, followed by infrastructure sector (21.7 per cent or Rs.22,487 crores) and Agriculture & Allied Activities (10.5 per cent or Rs.10,894 crores). Within the Social Sector, Rural Development accounts for 45.0 per cent of the total budgetary support for Social Sector,followed by Education (13.9%), Family Welfare (12.1%) and Water Supply and Sanitation (10.7%). As regards infrastructure sector, power accounts for maximum share of 39.8 per cent of the total budgetary support to infrastructure followed by Railways (23.9%), Surface Transport (13.0%) and Coal (11.6%).

2.28 The budgetary support to States goes in the form of Central Assistance for State Plans, which consist of : formula- based Normal Central Assistance; Additional Central Assistance for Externally Aided Projects; Special Central Assistance for Area Programmes; and Transferred Centrally Sponsored Schemes. The share of budgetary support for State Plans envisaged in the Eighth Plan accounts for 41.7 per cent of the total budgetary support to the Eighth Plan. However, during the first three years of the Eighth Plan, the share of States in the overall budgetary support to the Eighth Plan (42.4%) was higher than that during the comparable period of the Seventh (33.4%) and the Sixth (33.2%) Plans. The proportion of formula-based Normal Central Assistance accounted for 53.5% of States Plan Outlay in 1992-95.

2.29 In the case of Union Territories the budgetary support envisaged in the Eighth Plan amounts to Rs.6,250 crore, or 3.3 per cent of the total budgetary support to the Eighth Plan.

2.30 During 1992-95, the budgetary support to Central Plan amounted to Rs. 58,930 crore, which accounts for 56.8 per cent of the approved Eighth Plan budgetary support for Central Plan. In pro-rata terms this meant a shortfall in utilisation of budgetary support to the extent of Rs.3,302 crore at 1991-92 prices and Rs.4,746 crore at current prices. In the case of States, the Central Assistance for their Plans amounted to Rs.45,221 crore, or 57.6 per cent of the Central Assistance for State Plan envisaged in the Eighth Plan, thereby indicating a shortfall of the order of Rs.1,879 crore at 1991-92 prices and Rs.2,698 crore at current prices.

2.31 External aid constitutes a significant proportion of budgetary support to public sector plan. External aid generally accounts for around 20% of the budgetary support to Central as well as State Plans (Central assistance). One major area of concern in regard to external aid has been the significant amount of the undrawn balance, which stood at Rs.26824 crore as on March 31, 1995. The trends in the utilisation of external aid separately for Centre and States can be seen from the figures given in Annex. 8. There has been an improvement in the pace of utilisation of external aid in the State sector as a result of promotional measures taken by the Government of India, namely, release of 100% aid for all sectors and release of advance additional Central Assistance at the beginning of the year to the extent of 25% of the expected annual disbursement of aid. However, problems relating to land acquisition for projects, paucity of counterpart funds to meet domestic component of total cost, etc. affect the absorptive capacity of both Centre and State Governments which in turn slow down the pace of utilisation of foreign aid.

Plan of CPSEs

2.32 The Plan outlays of CPSEs account for about 70-75% of the total Central Plan Outlay. Part of the budgetary support to Central Plan goes towards the financing of plan outlays of CPSEs. This now forms 20 - 25 per cent of the total budgetary support to Central Plan. The budgetary support is extended to CPSEs by way of both equity and loan. Equity component generally accounts for 55 to 60 per cent of the total budgetary support to CPSEs. Though the stated aim is to eliminate the dependance of CPSEs on budgetary support, the need to continue budgetary support persists because (i) CPSEs in infrastructure like power, transport, etc. are unable to recover the economic cost of rendering the goods/services produced by them, and (ii) there is a felt need for helping sick units with minimum necessary plan support.

Prospects for 1995-97

2.33 Analysis of plan expenditure has revealed severe shortfalls in plan expenditure in the State Sector. As regards the Central Sector, inspite of relatively less severe shortfalls in overall terms, serious shortfalls occurred in the social sector, certain key infrastructure sectors and in some other important sectors like agriculture and irrigation, which depend either exclusively or signficantly on budgetary support. In the case of both Centre and States there were noticeable shortfalls in Agriculture & Allied Activities as well as in Irrigation & Flood Control. In order to make good these shortfalls it is necessary to step up plan outlays signficantly during the remaining period of Eighth Plan.

2.34 The overall resource requirement, which takes into account the shortfall in plan expenditure during the first three years as well as the pro-rata outlay for the last two years, amounts to Rs.206145 crore at 1991-92 prices. The resources for financing plan outlays of the CPSEs which form part of the central Plan will come from the Internal and Extra Budgetary Resources of the Central Public Sector Enterprises for the Plan of CPSEs and from States' own resources for thier plans. While profit making/resource rich CPSEs would be able to meet the approved outlay, other CPSEs, especially those in the infastructure sector will not be able to protect their approved outlay in the absence of more budgetary support. Similarly, the plan outlays in respect of Ministries/Departments in the social sector require considerable step up in their plan outlays to enable them to make good the shortfall in the last two years of the Eighth Plan. Thus, budgetary resources would be required on a substantially larger scale during the last two years of the plan. This in turn pre-supposes more favourable Balance from Current Revenues which can be secured through mor revenue collection and/or reduction in non-plan revenue expenditure.

2.35 Since budgetary support available for plan is a residual amount (difference between revenue and capital receipts on the one hand and non-plan expenditure on the other), more budgetary resources for the plan of the Centre as well as the States can come through only in two ways : (a) higher residual amount either through more revenue and/or less non-plan expenditure, and (b) higher fiscal deficit to allow for larger amount of capital receipts. The prospects in this regard are discussed in the following paragraphs.

2.36 The Central budgetary support for the fourth year (1995- 96) of the Eighth Five Year Plan has already been fixed at Rs.48,500 crore (B.E), which is higher than that in 1994-95 (BE) only by 4.3% in nominal terms. Of the aggregate amount of Rs.48.500 crore (B.E.) for 1995-96, total budgetary support for the Central Plan has been fixed at Rs.28,994 crore while total Central assistance for State and UT Plans has been fixed at Rs.19,506 crore. Revenue expenditure is expected to comprise about 60% of total Plan expenditure in 1995-96, up from about 57% in 1993-94.

2.37 In assessing the resource availability question for the Annual Plan of 1996-97, i.e. the final year of the Eighth Plan, the most important issue would be that of forecasting the tax revenues in respect of the four major central taxes viz., Income Tax, Corporation Tax, Union Excise and Customs Duties. The buoyancies of the major Central taxes have been computed, as detailed in Annex. 10, and have been applied to the respective bases to arrive at the projected tax revenues during 1996-97. It may be pointed out here that the Tenth Finance Commission (TFC) Report (p.168) has also made separate estimates of buoyancy of the major Central taxes. The period of analysis of those estimates is 1983-84 to 1992-93 whereas our period of analysis is 1980-81 to 1994-95. Our buoyancy estimates and those of the TFC in respect of the direct taxes are fairly close. For income tax and coporation tax we have the figures of 1.14 and 1.28 as against the TFC figures of 1.103 and 1.310. In respect of Union excise duties our buoyancy estimates are marginally lower (0.98 as against the TFC estimate of 1.013) which is mainly due to some rate reduction and rationalisation of the excise duty structure. As regards customs duties our estimate of 0.72 is significantly lower as compared to the figure of 1.389 in the TFC report. This is owing to two factors viz, (i) while the TFC has regressed Customs duties on GDP, we have chosen the value of imports as the explanatory variable and (ii) there has been a continuing across the board reduction in import tariffs after 1992-93, the terminal year of the TFC analysis. For purposes of tax projections it is assumed that during 1995-96 GDP grows at a rate of 5.6%, with an inflation rate of 9%. For the terminal year of the Plan i.e. 1996-97, a GDP growth rate of 6%, with an inflation rate of 7%, is projected.

2.38 The remaining Central taxes which include, among others, Interest Tax, Expenditure Tax, Wealth Tax, Gift Tax, etc. constitute only a small fraction, about 2.5%, of the gross tax revenue of the Centre. These have been assumed to grow at the same rate as nominal GDP. Of the gross tax revenues available to the Centre, a part of it, 77.5% of personal income tax and 47.5% of Union Excise duties, constitutes States' share as per the Tenth Finance Commission (TFC) dispensation. To the balance amount must be added the non-tax revenue to arrive at the total revenue receipts available with the Centre. Non-tax revenue has also been assumed to grow pari passu with nominal GDP.

Non-Plan Expenditure

2.39 The three principal items of non-plan expenditure are interest, defence and subsidies. Interest payments and defence expenditures in 1996-97 are projected at Rs.58,000 crore and Rs.29.000 crore, representing increases over 1995-96 B.E. figures of 11.5% and 13.7% respectively. As regards subsidies, a perusal of the data from 1985-86 reveals that while the average growth of subsidies during 1985-89 was at a rate of 23%, the growth rate has been arrested significantly during 1990-95. It may not be unreasonable to expect that barring some unforeseen events subsidies in 1996-97 will not go beyond Rs.11,300 crore, growing at the same rate as observed over the last four years taken as a whole. As regards other non-plan expenditure (NPE) the major items are postal deficits, exchange loss under FCNR accounts scheme, general services, social services, economic services, non-plan grants to states and UTs, non-plan loans to states and UTs, non plan capital outlay and non plan loans to public enterprises . The projections of the non-plan grants to States have been carried out as per the recommendations of the Tenth Finance Commission.

2.40 Finally a critical question pertains to the extent of fiscal deficit that the Government may like to aim at for the year 1996-97. Controlling aggregate expenditure has been a major plank of the Government's post reform policy of bringing down fiscal deficits. Given the compulsion on the current expenditure side, this has however had the unfortunate impact of bringing about cuts in capital expenditure, particularly in infrastructure and the social sectors. There is wide consensus that a much more appropriate objective would be to ensure that the revenue deficit be curbed. This would bring about fiscal compression in a more desirable manner in that it would be carried out without cutting down on capital expenditure on infrastructure and the core sectors. The table below presents the fiscal and revenue deficits as a percentage of GDP from 1990-91 onwards. In this context it is worth mentioning that the principal reason for the revenue deficit being high is the substantial amount of interest payments on accumulated debts. If one were to focus on primary deficit, i.e. fiscal deficit less interest payments, there has in fact been a significant compression starting 1991-92 barring a year of sharp increase during 1993-94. However, despite the reduction in primary deficit, the revenue deficit continues to be high essentially on account of a burgeoning growth of non plan expenditure without a commensurate growth of tax and non tax revenues. The need of the hour, therefore, clearly is to put a sharp curb on the growth of non plan revenue expenditure.

Table 2

Year	Fiscal Deficit (% of GDP)	Revenue Deficit (% of GDP)	Primary Deficit (% of GDP)
1990-91	8.3	3.5	4.3
1991-92	5.9	2.6	1.6
1992-93	5.7	2.6	1.3
1993-94	7.4	4.3	3.0
1994-95 (R.E)	6.6	3.7	1.9
1995-96 (B.E)	5.5	3.4	0.5

2.41 One disconcerting feature of the Plan expenditure is the growing revenue component arising mostly from the implementation of a large number of staff-oriented schemes. In the Central Sector, the revenue component constituted about one-third of the total plan expenditure on the eve of the Seventh Plan but rose to nearly 60 per cent in 1994-95. This calls for a critical review of schemes so as to facilitate identification of steps aimed at containing growth in the revenue component of Plan expenditure by substantial reduction in the multiplicity of schemes. Such a review may also be helpful in initiating action aimed at achieving not only economy in expenditure but improvement in productivity. A similar review is equally necessary in the State sector.

2.42 An examination of the Tax : GDP ratio (see table below) at the All India level from the period 1985-86 reveals that while the ratio had reached 17.10 per cent in 1987-88 and was 17.01 per cent in 1989-90, it has systematically come down in the post reform years from 16.76 per cent in 1991-92 to 15.5% as in 1994-95 (R.E). As regards Central taxes as a percentage of GDP, while the ratio had reached 11.3 per cent in 1989-90 it has steadily climbed down to about 9.9 per cent during the past two years. This has no doubt come about principally on account of accross the board reduction in Customs Duties as well as reductions in the rates of Union Excise Duties. Assuming that the Central revenue mobilisation effort in the terminal year of the Plan were to be increased by one percentage point to 10.9 per cent, which would still be well below the levels achieved in the years preceding economic reform, the additional tax mobilisation would be well in excess of Rs.10,000 crores.

Table 3

Tax : GDP Ratios

	Total Tax Revenue (All India)	Central Taxes Gross
1985-86	16.50	10.93
1986-87	16.91	11.21
1987-88	17.10	11.30
1988-89	16.91	11.24
1989-90	17.01	11.30
1990-91	16.49	10.82
1991-92	16.76	10.94
1992-93	16.24	10.62
1993-94	15.50	9.63
1994-95 R.E)	15.50	9.87
1995-96 (B.E)	--	9.92

2.43 There is wide consensus that a substantially higher mobilisation of direct tax revenues is imperative as part of the fiscal restructuring programme. This view also forms the core of the recommendations of the Tax Reforms Committee which reported in 1992. Now that the rate schedule in respect of personal income tax has been reduced to the top marginal rate of 40 per cent, as suggested both by tax theory as well as actual experience in several countries, what needs now to be done is to widen the tax base by bringing into the tax net all the potential income tax assessees such as professionals, shop keepers and traders who are outside the tax net. The experience with presumptive tax on income has not been particularly salutary as yet. This is not for lack of potential in this area. Better organisation and tighter enforcement would undoubtedly yield substantially higher revenues. One ought to seriously consider taxing fringe benefits. In the sphere of corporate taxes it is seen that a large number of corporate entities, even though showing substantial profits and giving regular dividends, are in the zero tax paying category. A number of fiscal scholars are of the view that one may introduce a "gross assets tax" as a minimum tax on business to garner resources for such companies. Such a tax has already been imposed in Mexico and Argentina. A minimum tax would serve as a check against avoidance of tax through manipulation of accounts. Some other important avenues of taxation are taxation of services which constitute a large and growing sector of the economy, tax deduction at source (TDS) on dividends, agricultural taxation, and taxation of urban property. In addition to all of the above there is considerable scope for resource mobilisation by upward revision of user charges in respect of electricity tariff, irrigation rates as well as charges for services provided by Government hospitals.

Resource Requirement for 1996-97

2.44 Keeping in view the projections of revenues and non-plan expenditure detailed in the paras above, and assuming alternative levels of fiscal deficit (5.1% & 5.5% of GDP), the extent of Central budgetary support available for the Plan have been worked out to be in the range of Rs.50988 crore to Rs.63,561 crore for the terminal year of the Plan. These are detailed in Annex. 11. The salient features of this resource exercise may be enumerated here. This resource exercise was carried out by a Subgroup on Financial Resources which was constituted by the Working Group on Mid-Term Appraisal of the Financial Resources for the Eighth Five Year Plan. The Subgroup had representation from the Planning Commission (PC) and the Ministry of Finance (MOF). There was a unanimity in the Subgroup as regards the projections of revenue receipts. The differences between the Planning Commission and the MOF lay in the projections of subsidies and non-plan expenditure. Whereas MOF has projected subsidies for the year 1996-97 to be a figure of Rs.12,400 crores, the Planning Commission has projected a sum of Rs.11,305 crores, which is based on the trend observed during the post reform years. Similarly, for the other non plan expenditure (NPE), as discussed in para 2.35, the figure projected by MOF, at Rs.42,600 crore, is considerably higher than Rs.35,875 crores as projected by the Planning Commission. Given the above scenario, the amount of Central budgetary suport available for the Plan would depend critically upon the extent of fiscal deficit that we choose to have. If for example, the fiscal deficit is to be pegged at 5.1% of GDP for the year 1996-97 the amount of Central budgetary support available for the Plan would be of the order of Rs.50988 crores as per the MOF projections of subsidies and other NPE, whereas the amount would be Rs.58808 crores as per the Planning Commission projections of the above variables. Similarly, if the extent of fiscal deficit were to be stepped up to 5.5 per cent of GDP then the amount of Central budgetary support available for the Annual Plan of 1996-97 would be Rs.55741 crore as per MOF projections and Rs.63561 crore as per the projections of the Planning Commission.

2.45 A number of alternative scenarios have been examined by the Planning Commission regarding the requirement of resources that would form the Central budgetary support for the Annual Plan of 1996-97. The first scenario is where there is a step up of budgetary support of 10% in 1996-97 over 1995-96 in nominal terms. The requirement of Central budgetary support for the Annual Plan of 1996-97 works out to Rs.53350 crore. In the second scenario we examine the question as to how much of resources would be required in 1996-97 so that the original targets of the Eighth Plan were to be fulfilled. The amount of Central budgetary support required would work out to Rs.69,908 crores. Finally, in the third scenario, we examined the assessment of the Advisers of the Planning Commission regarding the minimal amounts of funds required in their respective sectors. This amount comes to Rs.60468 crores for 1996-97. Thus it may be argued that a figure of a minimum of Rs.60,000 crores may be regarded as being the absolute minimum for the terminal year of the Eighth Plan if one would want to protect the Plan size particularly in the social and infrastructural sectors, as well as in agriculture and rural development. Given the scenarios of revenue projection and expected non-Plan expenditure discussed above, it is felt that such an amount can be fully financed, even with a 5.1% fiscal deficit ratio to GDP, if the trend of non-Plan expenditure of the last four years can be sustained in the fifth year or if there is some improvement in tax administration and tapping of new tax sources, to raise the Central Tax : GDP ratio in 1996-97 coming closer to what we had achieved in 1989-90. If none of these can be done, in order to protect the minimum Plan expenditure, it may be necessary to raise the fiscal deficit to 5.5% of GDP which would still be much lower than what has been observed in the recent past.

2.46 It would be pertinent to examine at this point the extent of Central budgetary support for the Annual Plan during the Eighth Plan period (Table 4). It is clear that there has been a significant decline in the Central budgetary support for the Plan as a fraction of GDP during the Eighth Plan years as compared to the Sixth and Seventh Plan years. After averaging at more than 5 per cent of GDP in the first three years of the Eighth Plan there has been a significant dip of Central budgetary support to 4.6 per cent of GDP during 1995-96. It is imperative to reverse this trend in the final year of the Eighth Plan so that there is no curtailment in the Plan allocation, particularly in the social sector as well as in the infrastructure sector.

Table 4

Year	Central Budgetary Support for the Plan as % of GDP	Average	
1980-81	6.6	)	
1981-92	6.4	)	
1982-83	6.7	6.7)	VIth Plan
1983-84	6.8	)	
1984-85	7.2	)	
1985-86	7.6	)	
1986-87	8.8	)	
1987-88	7.3	7.2)	VIIth Plan
1988-89	6.6	)	
1989-90	6.0	)	
1990-91	5.3	)	Annual
1991-92	5.0	5.15)	Plan
1992-93	5.2	)	First 4
1993-94	5.5	5.15)	years of
1994-95	5.3	)	VIIIth
1995-96 (BE)	4.6	)	Plan

2.47 If India has to enter into a phase of sustained growth of GDP of 6% or more in the years to come it cannot be gainsaid that substantially higher amounts of allocations have to be made for the infrastructure and social sectors. Fiscal compression should never mean a compression of expenditure in these vital areas, and it should in fact be focussed instead at drastically curbing inessential revenue expenditure. The fact that the revenue deficit is in the range of 3.4% of GDP in 1995-96 (B.E) means that we still have a long way to go to bring this about. It should be pointed out that too tight a squeeze on fiscal deficit may be counterproductive if it impairs the growth prospects of the economy. If all other avenues of resource augmentation are found unavailing, such as higher revenue growth or further compression of current expenditure some relaxation of the fiscal deficit target might be more conducive to stability on a sustainable basis if that helps strengthen the badly deficient social and economic infrastructure of the country.

2.48 A crucial question centres on two important components of fiscal deficit, viz, RBI financing of the budget deficit via money creation, and market borrowings. As per the understanding reached by the Ministry of Finance with the RBI, the budget deficit is to be limited to Rs.4,000 crore in 1996-97, before being phased out altogether. As a consequence the extent of borrowing has been growing, and at rates of interest which have been increasing since the latter are now largely market determined as per explicit Government policy. This implies that interest payments which are considerable at present, constituting 51.6% of revenue receipts of the Central Government in 1995-96 (B.E), are going to continue to be the major claimant of the Centre's revenue receipts in the years to come, thereby constraining expenditure on infrastructure and the social sector.

Savings and Investment

2.49 The Seventh Plan achieved a growth rate of GDP of 5.8 per cent per annum against a target of 5.5 per cent. The target set for the Eighth Five Year Plan was 5.6 per cent. This was based on the assumption of an incremental capital outpur ratio of 4.1 and an average domestic savings ratio of 21.6 per cent. With the assumed current account deficit of 1.6 per cent, the average rate of investment was to be around 23.2 per cent.

2.50 Of the total investment of Rs.7,98,000 crore domestic savings were to comprise Rs.7,43,000 crore, or about 93 per cent, with the rest being sourced from the rest of the world. Of the total domestic savings, 81.4% were to be mobilised in the household sector, with the remaining 18.6% divided almost equally between the public sector and the private corporate sector.

2.51 As per the quick estimates of the CSO, Gross Domestic Savings (GDS) at current prices in 1993-94 amounted to 20.2 per cent of GDP at market prices as aginast 20 per cent in 1992-93. Thus in both these years there has been a shortfall from the original target of 21.6 per cent for the Eighth Plan. In 1993-94 as compared to 1992-93 there has been a growth of savings in the household and private corporate sectors while there has been a drop in GDS in the public sector. The savings of the household sector went up by 15.1 per cent from Rs.1,06,938 crore in 1992-93 to Rs.1,25,396 crore in 1993-94 and that of the private corporate sector by 49.7 per cent from Rs.20,804 crore in 1992-93 to Rs.31,153 crore in 1993-94. The decline in the public sector savings is essentially due to an increase in the dissaving of the Government Administrative Department from (-) Rs.13,608 crore in 1992-93 to (-) Rs.29,631 crore in 1993-94.

Progress in resource mobilisation at State level:1992-97

2.52 The aggregate Plan outlay for all States in the Eighth Plan 1992-97 was fixed at Rs.1,79,985 crore at 1991-92 prices. This outlay was to be financed through Balance from Current Revenue (BCR) including Additional Resource Mobilisation (ARM) and Opening Balance of Rs.12,985 crore, contribution from State Level Public Enterprises (SLPE) of Rs.4,000 crore, borrowing and other Miscellaneous Capital Receipts of Rs.84,500 crore and Central Assistance for State Plans of Rs.78,500 crore. The BCR considered included only that of 15 Non-Special Category States as the negative BCR of 10 Special Category States was ignored at the time of Plan finalisation. The market borrowings and miscellaneous capital receipts included drawings from States own Provident Fund, Loans against net collection from Small Savings, Debentures/Bonds, Open Market Borrowings (SLR based), Negotiated Loans and "other" finances from financial institutions like LIC/GIC, NABARD, REC and IDBI.

2.53 The actual mobilisation during 1992-95 on the basis of information made available by the States as actuals for 1992-93, pre-actuals for 1993-94 and latest estimates of resources for 1994-95 indicate that the resource mobilisation fell far short of the projections at the time of the Eighth Five Year Plan (1992-97). The States could mobilise only Rs.74,429 crore, i.e. about 41.4% of the resources projected for the Eighth Five Year Plan. Substantial shortfalls were noticed in the BCR and Contribution of State Level Public Enterprises. As against Rs.12,985 crore anticipated as Balance from Current Revenues, the BCR of all the States was negative (including Opening Balance and ARM Commitments) Rs.8008 crore for the first three years. The States' resources from BCR came down mainly because of the States'inability to raise additional resources through tax and non-tax measures and also due to their inability to contain non-plan revenue expenditure. Similarly, as against a positive contribution of Rs.4000 crore for SLPEs in 5 years, the contribution was negative Rs.1,420 crore in the first 3 years. There has been also been pro rata shortfall in borrowing and miscellaneous capital receipts to the extent of about Rs.13,000 crore mainly because of shortfalls in net collections of small savings in the first two years of the Eighth Five Year Plan. However, the central assistance for State plans, including area programmes, has been almost in line with the pro rata assistance for State Plans. Mobilisation of resources in the first three years may be seen at Annex.2.12.

2.54 The Plan resources for the year 1995-96 at 1991-92 prices have been estimated at Rs.32,790 crores (excluding Area Programmes) comprising Rs.1,620 crore from BCR (assuming that all the commitments by the Chief Ministers at the Deputy Chairman-level meeting would be coming from BCR and including Opening Balance)), Rs.627 crore as contribution from SLPEs, Rs.14,201 crore as borrowings and other miscellaneous capital receipts and Rs.16,342 crore as Central Assistance for State Plans. A sum of Rs.1,516 crore (Rs.2137 crores at current prices) has been allocated for area programmes. Thus, including the area programmes, the resources available for the States in 1995-96 would be Rs.34,306 crore. Presuming that the resources for the Annual Plan 1996-97 would be maintained at 1995-96 level in real terms, the total resources likely to be realised during 1992-97 would be of the order of Rs.1,43,000 crore i.e. about 80% of the Eighth Five Year Plan approved outlay. Based on the experience during the first 3 years of the Eighth Five Year Plan, the actual resources likely to be mobilised by the States in 1995-97 may fall short of the Annual Plan estimates at least by 10% and thus, the estimated resources for 1995-97 are likely to fall by about Rs.6,550 crore. Taking this conservative scenario, the total resources for the Eighth Five Year Plan could come down to about Rs.1,36,500 crore, which is only 76% of the projected resources for the Eighth Five Year Plan. Thus, taking the 1995-96 financing pattern of the States and assuming that this would be really achieved, the shortfall in resources would be around Rs.37,000 crore and taking the likely realisation of the committed level of resources in 1995-96 and the same level in 1996-97 shortfall will be about Rs.43,500 crore. In the scenario of Rs.37,000 crore, the BCR would be estimated at (-) Rs. 4,768 crore in the 5 year period as against the original estimate of Rs.12,985 crore and the contribution from SLPEs at negative Rs.166 crore as against a positive contribution of Rs.4,000 crore. As indicated earlier, the resources are likely to fall below the projections in 1995-97 and fall in resources of Rs.6,500 crore from the estimated level would be substantially in BCR and contribution of SLPEs only and thus both would be highly negative at the end of the Eighth Five Year Plan. This would show that the resources from BCR and contribution from SLPEs would fall substantially from the estimated level of Rs.16,985 crore to a negative of about Rs.11,000 crore showing a deterioration of about Rs.28,000 crore under these two heads. In the above scenario indicating shortfall in resources between Rs.37,000 crore to Rs.43,500 crore, inflation rate in 1995-96 has been assumed at 7 per cent per annum. At a higher rate of inflation in 1995-96, the resources gap may deteriorate further.

2.55 Annex.2.13 indicates the performance of the States in the first 3 years vis a vis. their outlays for the Eighth Five Year Plan. It was only Maharashtra and Arunachal Pradesh which could mobilise more than 60% of the resources projected for respective States for their Eighth Five Year Plan during the first 3 years. Andhra Pradesh, Goa, Karnataka and Tamil Nadu have mobilised resources between 50 to 60 per cent of their Eighth Five Year Plan projections during the first three years. Gujarat, Kerala, Madhya Pradesh, Mizoram and Sikkim could mobilise between 40 to 50 per cent of their Eighth Plan projections during the first 3 years. The performance of rest of the States during the first three years of the Plan was less than 40 per cent of their Eighth Five Year Plan projections.

2.56 One of the important areas where shortfall in resource has been observed is Balance from Current Revenues (including ARM commitments and Opening Balance with the RBI). The performance of States vary widely in this respect. The States of Goa, Gujarat, Haryana, Karnataka and Maharashtra had positive BCRs in the first three years of the Eighth Five Year Plan period. Madhya Pradesh had also a marginal positive BCR in three year period, though it had a negative BCR in the second and third years. An important observation in this regard is that BCR has been steadily declining from the first year of the Eighth Five Year Plan. All the ten Special Category States had negative BCRs in all years except Arunachal Pradesh with a small positive BCR in 1992-93. Among non-Special Category States negative BCRs were predominant in the first three years in the case of Uttar Pradesh, Bihar, West Bengal, Punjab and Kerala.

2.57 The performance of State level public enterprises also has not been quite satisfactory. The negative contribution of SEBs of some of the non-Special Category States (excluding positive contributions) was of the order of about Rs.2800 crores in the three years period 1992-95. The major contributors in this regard are Gujarat, Punjab and Haryana. At the same time the State Electricity Boards and Road Transport Corporations taken together made substantial positive contribution in the case of Maharashtra, Tamil Nadu, Karnataka, Kerala, Rajasthan and Orissa. Quite a few Special Category States had their electricity and road transport operations departmentally conducted. However, those States like Jammu and Kashmir, Assam etc. which had separate electricity and Road Transport Corporations also incurred heavy losses and ended up with substantial negative contribution.

2.58 In the case of externally aided projects, the participation of the States varied very much. It has been noticed that the assistance for externally aided projects was utilised largely by a few States namely, Maharashtra, Andhra Pradesh, Tamil Nadu, Karnataka and Uttar Pradesh. States like Bihar, Goa and Madhya Pradesh and Special-Category States had very little participation in the utilisation of funds for externally aided projects. Inspite of the promotional measures taken by the Central Government like passing on the assistance to the extent of 100 per cent to the States and also advance releases have not changed the situation in any significant way.

2.59 In resource mobilisation, the Central support to the State Plans has taken a predominant position in the case of a number of States. The Central support included the allocations for Open Market Borrowing (SLR based), Negotiated Loans from financial institutions, Plan Revenue Deficit Grant provided by the Ninth Finance Commission (for the first 3 years), Normal Central Assistance (formula based) for State Plans, Additional Central Assistance for Externally Aided Projects and specific assistance in the form of plan loan etc. A large number of states have received Central support of more than 100 per cent of their Plan outlay/resources as can be seen from Annex. 14. This clearly indicates that a part of the Central support is being utilised by the States for financing their non-plan current revenue expenditure.

Progress in Resource Mobilisation of the Union Territories: 1992-97

2.60 The Eighth Plan outlay for the Union Territories was fixed at Rs.6,250 crore at 1991-92 prices. During the first three years of the Plan (i.e. 1992-95) they have utilised resources to the tune of Rs.3,868.67 crore at constant prices, which forms 61.90% of the total Eighth Plan outlay. Except Chandigarh and Lakshadweep, all other UTs have utilised more than 60% of the total Plan outlays. Chandigarh could utilise only 48.42% whereas Lakshadweep utilised 51.72% of their allocation of the Eighth Plan during the first three years. For 1995-96 a sum of Rs.1632 crore has been provided at 1991-92 prices. Presuming that the terminal year's i.e. 1996-97, outlay is kept at least at the level of 1995-96 in real terms, the total expenditure during Eighth Plan is anticipated to be Rs.7,132.67 crore at 1991-92 prices which would be 114.12% of the original outlay. Details are given in Annex.2.15. All the UTs except Chandigarh and Lakshadweep are expected to utilise resources exceeding the original outlay. In the case of Chandigarh it may be only 83.88% whereas Lakshadweep may utilise 97.34% of the outlay.

Measures needed to boost State Resources

2.61 It has already been mentioned in paragraph 2.54 above that a resource gap of Rs.37,000 crore to Rs.43,500 crore at the States' level would emerge at the end of the Eighth Five Year Plan at current projections of resource mobilisation. It is most unlikely that the States would be able to bridge this gap fully during the remaining period of the Plan. However, the States can make an attempt to reduce this gap by taking the following measures.

2.61.1 Taking effective steps to fully meet the Additional Resources Mobilisation (ARM) commitments made while finalising the Annual Plan 1995-96. The ARM commitments made by 25 States for 1995-96 Plan through improved BCR, surpluses of SLPEs, impounding of Dearness Allowance liabilities and various other measures work out to about Rs.6350 crore at 1991-92 prices.

2.61.2 BCR commitments for 1995-96 continue to contain large negative contributions from State Irrigation Departments. Through revision of irrigation rates and improved collections, annual losses amounting to about Rs.650 crore (i.e. Rs.460 crore at 1991-92 prices) can be made up. In two years (1995-97), the BCR improvement would be about Rs. 920 crore at 1991-92 prices.

2.61.3 Improving the financial performance of State level Public Enterprises. At present the State Electricity Boards and Road Transport Corporations in many States are running at losses which result in a negative contribution for public sector enterprises as a whole. If all the SEBs and RTCs presently making a negative contribution towards resources mobilisation are brought at least to somewhat better level of efficiencyso that their contribution is brought to zero level, an amount of about Rs.1,150 crore (about Rs.800 crore at 1991-92 prices) can be realised during 1995-96.

2.61.4 The above measures can help the States to exceed the Plan targets finalised for 1995-96. If similar efforts are made for 1996-97, the shortfall in resources can be contained at Rs.33,500 crore for the entire Plan of the States.

Variation in States' tax mobilisation

2.62 It may be pointed out that there is considerable variation in the tax mobilisation effort amongst the States. Annex. 16 presents the ratios, in percentage terms, of per capita tax revenue to per capita SDP in respect of the 25 States. While Kerala tops the list with per capita tax revenue accounting for 10.76 per cent of per capita SDP, followed by Gujarat with 10.10 per cent, substanitally lower revenue mobilisation effort is witnessed for certain major states like Bihar (4.64%), Orissa (5.06%) and Uttar Pradesh (5.72%). The lowest ratios are recorded for Arunachal Pradesh (0.6%) and Mizoram (1.03%).

Conclusions

2.63 In assessing the availability and requirement of resources for the remaining two years of the Eighth Plan the following conclusions emerge:

2.63.1 The balance from current revenues (BCRs) of both the Centre and the States has been in the negative region during 1992-95. This is against the target of 8% of aggregate resources for the Plan to be raised via this source. Substantial effort needs to be made to redress this imbalance. This may be achieved via simultaneous efforts to garner increased tax revenues while curbing non essential revenue expenditure.

2.63.2 The contribution of PSUs in the State sector towards the Plan resources has been well below the target set out originally in the Plan.

2.63.3 Due to the shortfall in the above two heads, borrowings and miscellaneous capital receipts have had to be stepped up significantly. But this would entail a severe interest burden in the years to come, especially because Government borrowings are now increasingly at market rates of interest. This also raises serious questions regarding the sustainability of debt.

2.63.4 During 1992-95 there has been an overall shortfall in Plan expenditure of about around 7 percentage points in pro-rata terms. The shortfall in the State sector is quite pronounced, whereas the expenditure for the central sector has been nearer the target. The performance during the corresponding period of the Seventh Plan was better but the first three years of the Sixth Plan witnessed more serious shortfalls.

2.63.5 As regards investment in the social sector there have been serious shortfalls in outlay in both the central and state sectors. Since this sector relies almost exclusively on budgetary support, there are likely to be severe constraints unless the budgetary imbalance is removed. In the infrastructure sector there have been serious shortfalls in several key areas, viz, power, road transport and ports. The shortfalls in the State sectors have been more acute.

2.63.6 Even though in the past year there has been a buoyant growth in tax revenues, non-plan revenue expenditure, especially interest payments and subsidies, have surged, resulting in lower central budgetary support for the Plan in real terms. Budgetary support for the Plan has reduced from 5.8% of GDP in 1993-94 to 5.1% of GDP in 1994-95 and it is estimated to go down to 4.6% in 1995-96 (BE).

2.63.7 With gross domestic savings at current prices amounting to 20 and 20.2% of GDP respectively in the first two years of the Plan as against the Eighth Plan target of an annual average of 21.6%, and with the borrowing requirement of the Government going up significantly, the upward pressure on interest rates is likely to persist. The debt servicing burden in subsequent years, is therefore bound to be substantially high.

2.63.8 Too tight a squeeze on fiscal defict may be counter productive if it impairs the growth prospects of the economy. If all other avenues of resource augmentation have been exhausted, such as higher revenue growth or further compression of current expenditure, some relaxation of the fiscal deficit might be necessary to strengthen the badly deficient social and economic infrastructure of the country.

2.63.9 After a careful examination of the resources position both from the points of view of additional tax and non tax revenue mobilisation as well as expenditure compression it is seen that an amount of Rs.60000 crores should be feasible as the Central budgetary support for the terminal year (1996-97) of the Eighth Plan. It may be added that this amount should also be regarded as desirable so as to protect particularly the social and economic infrastructure of the economy as per the original projections of the Eighth Plan.

Annex 2.1

PLAN PERFORMANCE DURING THE FIRST THREE YEARS OF THE VIIIth, VIIth AND VIth PLAN

VIII PLAN(1992-97) (Rs. Crores)

SECTOR	OUTLAY	PRORATA(60%) for 1992-95	EXPENDITURE (1992-95) Amount	% to VIII Plan Outlay
1	2	3	4	5
CENTRE	247865	148719	143528	57.9
STATES	179985	107991	80575	44.8
UTs	6250	3750	3852	61.6
TOTAL	434100	260460	227955	52.5

VII PLAN(1985-90)		PRORATA(60%) for 1985-88	EXPENDITURE (1985-88) Amount	% to VII Plan Outlay
CENTRE	95534	57320	56923	59.6
STATES	80698	48419	40376	50.0
UTs	3768	2261	1825	48.4
TOTAL	180000	108000	99124	55.1

VI PLAN(1980-85)		PRORATA(60%) for 1980-83	EXPENDITURE (1980-83) Amount	% to VI Plan Outlay
CENTRE	47250	28350	22296	47.2
STATES	48600	29160	21016	43.2
UTs	1650	990	821	49.8
TOTAL	97500	58500	44133	45.3

Note: The figure of outlay and expenditure are at base-year prices in respect of each of the three Five Year Plans covered in this statement.

Annex 2.2

SHORTFALL IN PLAN EXPENDITURE AND PROTECTION OF PLAN OUTLAY IN SOCIAL SECTOR DURING THE 8TH PLAN (CENTRE)

(Rs.Crores)

Sector	VIII Plan Outlay	Prorata Outlay (60% of VIII Plan Outlay at constant prices)	Expenditure (1992-95 at constant prices)	% w.r.t. VIII Plan Outlay	Shortfall during 1992-95 at constant (1991-92) prices	Required Outlay (1995-97) to meet VIIIth Plan target (current prices)
1.Rural Development	24170	14502	11187	46.3	3315	19297
2.Med.&Pub.Health	1800	1080	1242	69.0	-162	829
3.Family Welfare	6500	3900	3079	47.4	821	5085
4.Education	7443	4466	3168	42.6	1298	6355
5.Water Supply & Sanitation	5968	3581	1903	31.9	1678	6043
6.Housing	1691	1015	979	57.9	36	1059
7.Welfare of SCs/STs	2549	1529	1491	58.5	38	1572
8.Social Security & Welfare	2373	1424	1581	66.6	-157	1178
9.Other	6121	3673	2352	38.4	1321	5603
Total	58615	35170	26982	46.0	8188	47020

Notes: Expenditure figures for 1992-95 are based on Actuals for 1992-93, RE for 1993-94 and BE for 1994-95. Required outlay at current prices has been worked out by adding the shortfall in each case to the prorata outlay(40% of approved VIIIth Plan Outlay). The amount thus obtained in each case has been adjusted for price rise by multiplying half the amount by the relevant factor for 1995-96 and the remaining half by the factor for 1996-97.

Year	Inflation(%)
1992-93	9.5
1993-94	8.4
1994-95	11.0
1995-96	9.0
1996-97	7.0

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Annex 2.3

SHORTFALL IN PLAN EXPENDITURE AND PROTECTION OF PLAN OUTLAY IN SOCIAL SECTOR DURING THE 8TH PLAN (STATES) (Rs.Crores)

Sector	VIII Plan Outlay	Prorata Outlay (60% of VIII Plan Outlay at constant prices)	Expenditure (1992-95 at at constant prices)	% w.r.t. VIII Plan Outlay	Shortfall during 1992-95 at constant (1991-92 prices)	Required Outlay (1995-97) to meet VIIIth Plan target (current prices)
1.Rural Development	10213	6128	5544	54.3	584	6941
2.Med.& Pub.Health	5308	3185	2226	41.9	959	4581
3.Family Welfare	0	0	0		0	0
4.Education	11412	6847	4945	43.3	1902	9612
5.Water Supply & Sanitation	9847	5908	4752	48.3	1156	7572
6.Housing	3409	2045	1687	49.5	358	2558
7.Welfare of SCs/STs	3051	1831	1509	49.5	322	2293
8.Social Security & Welfare	1468	881	682	46.5	199	1169
9.Other	7094	4256	3380	47.6	876	5520
Total	51802	31081	24725	47.7	6356	40245

Notes: Expenditure figures for 1992-95 are based on Actuals for 1992-93, RE for 1993-94 and BE for 1994-95. Required Outlay at current prices has been worked out by adding the shortfall in each case to the prorata outlay(40% of approved VIIIth Plan Outlay). The amount thus obtained in each case has been adjusted for price rise by multiplying half the amount by the relevant factor for 1995-96 and the remaining half by the factor for 1996-97.

Year	Inflation(%)
1992-93	9.5
1993-94	8.4
1994-95	11.0
1995-96	9.0
1996-97	7.0

Annex 2.4

SHORTFALL IN PLAN EXPENDITURE AND PROTECTION OF PLAN OUTLAY IN INFRASTRUCTURE SECTOR DURING THE 8TH PLAN (CENTRE)

(Rs.Crores)

Sector	VIII Plan Outlay	Prorata Outlay (60% of VIII Plan Outlay at constant prices)	Expenditure (1992-95 at constant prices)	% w.r.t. VIII Plan Outlay	Shortfall during 1992-95 at constan (1991-92) prices	Required Outlay (1995-97) to meet VIIIth Plan target (current prices)
1.Coal & Lignite	10507	6304	6047	57.6	257	6629
2. Power	31181	18709	14743	47.3	3966	24433
3. Petroleum	24000	14400	22161	92.3	-7761	2733
4.NCSE	1107	664	473	42.7	191	942
5. Roads & Bridges	2600	1560	1452	55.8	108	1706
6. Road Transport	264	158	58	22.0	100	306
7. Shipping	3400	2040	2222	65.4	-182	1751
8. Ports	3273	1964	1159	35.4	805	3142
9. Postal Services	325	195	182	56.0	13	213
10. Railways	27202	16321	16417	60.4	-96	16030
11. Civil Aviation	3998	2399	3761	94.1	-1362	352
12. Telecom	23946	14368	14540	60.7	-172	13981
13. Others*	1066	640	1124	105.4	-484	-86
Total	132869	79721	84339	63.5	-4618	72133

* "Others" include ... ation Services, Inland Water Transport and Other Transport Services.

N... 5 are based on Actuals for 1992-93,RE for 1993-94 and BE for 1994-95. ...es has been worked out by adding the shortfall in each case to the ...IIth Plan Outlay). The amount thus obtained in each case has been ...ying half the amount by the relevant factor for 1995-96 ...r for 1996-97.

Annex 2.5

SHORTFALL IN PLAN EXPENDITURE AND PROTECTION OF PLAN OUTLAY IN INFRASTRUCTURE SECTOR DURING THE 8TH PLAN (STATES)

(Rs.Crores)

Sector	VIII Plan Outlay	Prorata Outlay (60% of VIII Plan Outlay at constant prices)	Expenditure (1992-95 at constant prices)	% w.r.t. VIII Plan Outlay	Shortfall during 1992-95 at constant (1991-92) prices	Required Outlay (1995-97) to meet VIIIth Plan target (current prices)
1. Power	46962	28177	19903	42.4	8274	40219
2. NCSE	330	198	116	35.2	82	318
3. Roads & Bridges	9516	5710	4953	52.0	757	6782
4. Road Transport	3799	2279	1591	41.9	688	3281
5. Ports	261	157	127	48.6	30	199
6. Railways	0	0	0		0	0
7. Civil Aviation	45	27	23	50.8	4	33
8. Telecom	0	0	2		-2	-3
9. Other Communication Services	13	8	5	40.6	3	11
Total	60926	36556	26721	43.9	9834	50840

Notes: Expenditure figures for 1992-95 are based on Actuals for 1992-93, RE for 1993-94 and BE for 1994-95. Required outlay at current prices has been worked out by adding the shortfall in each case to the prorata outlay(40% of approved VIIIth Plan Outlay). The amount thus obtained in each case has been adjusted for price rise by multiplying half the amount by the relevant factor for 1995-96 and the remaining half by the factor for 1996-97.

Year	Inflation(%)
1992-93	9.5
1993-94	8.4
1994-95	11.0
1995-96	9.0
1996-97	7.0

Annex 2.6

PROJECTED FINANCING PATTERN OF
EIGHTH PLAN (1992-97) OUTLAY

(Rs. Crores at 1991-92 prices)

Items	Centre (including UTs)	States	Total
A. Domestic Resources			
1. BCR	22020 (6.6)	12985 (12.8)	35005 (8.1)
2. PSEs	144140 (43.3)	4000 (3.9)	148140 (34.1)
3. Borrowings including MCR	117755 (35.4)	84500 (83.3)	202255 (46.6)
Total A	283915 (85.4)	101485	385400 (88.8)
B. Net Capital inflow from abroad	28700 (8.6)	0	28700 (6.6)
C. Deficit Financing	20000 (6.0)	0	20000 (4.6)
D. Aggregate Resources	332615 (100.0)	101485 (100.0)	434100 (100.0)
E. Assistance for State Plans	-78500	78500	0
F. Approved Outlay	254115	179985	434100

Note: Figures in brackets indicate percentage to aggregate resources.

Annex 2.7

FINANCING PATTERN OF PLAN OUTLAY FOR CENTRE
(including Union Territories)

(Rs. Crores)

	1992-93(RE)	1993-94(RE)	1994-95(RE)	1995-96(BE)
I. Domestic Resources				
1. BCR incl. ARM	-2494	-15713	-13370	-14796
2. Contribution of PSEs	20048	26068	28171	35241
3. Borrowings and Miscellaneous (net) Capital Receipts (MCR)	32766	53494	57926	60692
3.1 Market Borrowings(net)	3670	3700	3700	3700
3.2 Long & Med. Term Borr.	0	13992	17000	19000
3.3 Bonds/Deb. by Pub. Sec. Enter.	6291	6237	7234	8354
3.4 Small Savings	5500	6000	14000	8000
3.5 Provident Funds	1500	1700	1900	2000
3.6 Miscellaneous Capital Receipts(net)	15805	21865	14092	19638
Total I (1 to 3)	50320	63849	72727	81137
II Net Inflow from abroad	9280	9273	10100	11870
III Deficit Financing	7202	9060	6000	5000
IV Agg. Resources(I+II+III)	66802	82182	88827	98007
V Asst. for State Plans	-14028	-17510	-17138	-18378
VI Plan Grants to States under Article275 (1)	-1780	-2217	-2680	0
VII Outlay/Resources for the Centre's (incl.UTs) Plan	50994	62455 (62848)	69009 (69963)	79629 (81150)

Note: Delhi became the National Capital Territory with effect from December 1, 1993.
Delhi is now a Union Territory with Legislature.
This table is based on the figures given in the relevant Union Budget Documents, 1994-95 and 1995-96, and, as such, the figures of outlay/resources shown in the last four coloumns include only the Central Assistance for the Union Territory Plans, which is not always equal to the outlay in the case of Union Territories with Legislature (Delhi and Pondichery). The corresponding figures inclusive of full outlay in respect of these Union Territories are therefore given in brackets.

Annex 2.8

Allocation and Utilisation of External Aid

(Rs.Crores)

	Agency	1992-93			1993-94			1994-95		
		Allocation	Utilisation	%	Allocation	Utilisation	%	Allocation	Utilisation	%
A	Centre	6589	6496	98.6	6224	6674	107.2	6013	5696	94.7
	States									
	1 Andhra Pradesh	601	711	118.3	653	589	90.2	507	456	89.9
	2 Assam	0	0	0.0	0	0	0.0	0	0	0.0
	3 Bihar	24	37	154.2	61	4	6.6	62	43	69.4
	4 Gujarat	216	448	207.4	102	104	102.0	44	65	147.7
	5 Haryana	12	9	75.0	40	17	42.5	37	45	121.6
	6 Himachal Pradesh	20	25	125.0	0	0	0.0	1	2	200.0
	7 Karnataka	394	242	61.4	318	264	83.0	377	260	69.0
	8 Kerala	114	61	53.5	226	95	42.0	138	109	79.0
	9 Madhya Pradesh	40	27	67.5	51	19	37.3	26	16	61.5
	10 Maharashtra	506	487	96.2	503	528	105.0	721	626	86.8
	11 Orissa	111	90	81.1	118	92	78.0	147	108	73.5
	12 Punjab	43	45	104.7	62	31	50.0	90	73	81.1
	14 Rajasthan	58	30	51.7	140	66	47.1	171	126	73.7
	15 Tamil Nadu	353	385	109.1	427	398	93.2	684	605	88.5
	16 Uttar Pradesh	345	376	109.0	371	439	118.3	296	209	70.6
	17 West Bengal	190	91	47.9	96	73	76.0	131	73	55.7
B	States:Total	3027	3064	101.2	3168	2719	85.8	3432	2816	82.1
C	Multistates	564	677	120.0	763	728	95.4	929	963	103.7
D	Grand Total	10180	10237	100.6	10155	10121	99.7	10374	9475	91.3

Source: Aid Accounts And Audit Division, DEA, Ministry Of Finance

Annex 2.9

Plan Outlays of Central Public Sector Enterprises(CPSEs)

(Rs. Crores)

Year	Internal Resources	Bonds	External Commercial Borrowing	Others	Budget Support	Of which Equity	Plan Outlay of CPSEs	Share (%)of Budget Support in Plan Outlay of CPSEs	Share (%) of CPSEs' Plan Outlay in Central Plan Outlay
1	2	3	4	5	6	7	8	9	10
1991-92	12007	5722	1854	2919	6920	4185	29422	23.5	73.2
1992-93	16129	6291	3746	3919	6576	4173	36661	17.9	73.7
1993-94	18853	6237	4136	7215	7451	3379	43892	17.0	71.4
1994-95	24153	7234	4977	4017	8205	4592	48586	16.9	71.1
1995-96	28867	8354	6260	6374	7013	3389	56868	12.3	72.1

Notes:(1)Figures for 1991-92 to 1994-95 are Revised Estimates,and those for 1995-96 Budget Estimates.
(2)Coloumn 7 shows Budget Support in the form of equity, which is included in coloumn 6.

BUOYANCIES OF MAJOR CENTRAL TAXES (1980-81 TO 1994-95)

Tax	With Respect to	Buoyancy
Income Tax	GDP	1.14
Corporation Tax	GDP	1.28
Union Excise	GDP	0.98
Customs Duties	Imports	0.72

ANNEX 2.11

ALTERNATIVE SCENARIOS FOR RESOURCE AVAILABILITY IN 1996-97

	1994-95 (RE)	1995-96 (BE)	Estimate (1996-97) Alt I	Estimate (1996-97) Alt II	Estimate (1996-97) Alt III	Estimate (1996-97) Alt IV
REVENUE RECEIPTS						
Incom Tax	11000	13500	15564	15564	15564	15564
Corporation Tax	13250	15500	18159	18159	18159	18159
Total Direct Tax	24250	29000	33723	33723	33723	33723
Customs	26450	29500	34173	34173	34173	34173
Union Excise	36900	42780	48398	48398	48398	48398
Total Indirect Tax	63350	72280	82571	82571	82571	82571
Other Taxes	2231	2482	2815	2815	2815	2815
Gross Tax Revenue	89831	103762	119107	119107	119107	119107
State's Tax Share	24843	29388	33436	33436	33436	33436
Net Tax to Centre (A)	64988	74374	85671	85671	85671	85671
Net Non-Tax Share (B)	23782	26413	29952	29952	29952	29952
CAPITAL RECEIPTS						
Loan Recovery	6700	6730	6760	6760	6760	6760
Disinvestment	5237	7000	10000	10000	10000	10000
Fiscal Deficit	61565	57634	60604	60604	65357	65357
Total Capital Receipts(C)	73502	71364	77364	77364	82117	82117
TOTAL RECEIPTS (A+B+C)	162272	172151	192988	192988	197740	197740
NON-PLAN EXPENDITURE						
Interest	44000	52000	58000	58000	58000	58000
Defence	23544	25500	29000	29000	29000	29000
Subsidies	10826	10965	12400	11305	12400	11305
Other NPE	35141	35186	42600	35875	42600	35875
TOTAL NON-PLAN EXP.	113511	123651	142000	134180	142000	134180
AVAILABLE FOR PLAN	48761	48500	50988	58808	55741	63561
GDP at CPM	927360	1047890	1188307	1188307	1188307	1188307
Gross Fiscal Deficit	61565	57634	60604	60604	65357	65357
GFD/GDP	6.6%	5.5%	5.1%	5.1%	5.5%	5.5%
Revenue Deficit	34132	35541	37952	35872	40986	38906
	3.7%	3.4%	3.2%	3.0%	3.4%	3.3%

Annex 2.12

Progress in Resource Mobilisation, 1992-97 (at 1991-92 prices)

Item	1992-97 AP	1992-95 Spl Cat States	1992-95 Non-Spl States	1992-95 Total	1995-96 Spl Cat. States	1995-96 Non-Spl State	1995-96 Total
1	2	3	4	5	6	7	8
1. Balance from Current Revenue including Additional Resources Mobilised & Opening Balance	12985	-5691	-2317	-8008	-86	1706	1620
2. Contribution from State Level Public Enterprises	4000	-691	-729	-1420	-154	781	627
3. Borrowings & Miscellaneous Capital Receipts	84500	1011	36320	37331	605	13596	14201
4. Assistance for State Plans (excluding Area Programmes)	74000	10179	33749	43928	3398	12944	16342
TOTAL (1 to 4)	175485	4808	67023	71831	3763	29027	32790
5. Area Programmes	4500			2598			1516
6. Grand Total (4+5)	179985	4808	67023	74429	3763	29027	34306

Annex 2.12 Concld.

Progress in Resource Mobilisation, 1992-97 (at 1991-92 prices)

(Rs. in crores)

Item	1996-97			1992-97			Difference
	Spl Cat. States	Non-Spl States	Total	Spl Cat. States	Non-Spl States	Total	(14-2)
1	9	10	11	12	13	14	15
1. Balance from Current Revenue s including Additional Resource Mobilised & Opening Balance	-86	1706	1620	-5863	1095	-4768	-17753
2. Contribution from State Level Public Enterprises	-154	781	627	-999	833	-166	-4166
3. Borrowings & Miscellaneous Capital Receipts	605	13596	14201	2221	63512	65733	-18767
4. Assistance for State Plans (excluding Area Programmes)	3398	12944	16342	16975	59637	76612	2612
TOTAL (1 to 4)	3763	29027	32790	12334	125077	137411	-38074
5. Area Programmes			1516			5630	1130
6. Grand Total (4+5)	3763	29027	34306	12334	125077	143041	-36944

Annex 2.13

Progress of Resources Mobilisation 1992-95
(At constant Prices)

(Percentage)

STATES	Realised	Targeted @
Above 60 % performance		
1. Arunachal Pradesh *	65.07	62.53
2. Maharashtra	62.75	50.91
Between 50% to 60 %		
3. Andhra Pradesh	59.67	44.68
4. Tamil Nadu	58.42	53.49
5. Goa	52.62	55.27
6. Karnataka	51.83	55.14
Between 40% to 50% performance		
7. Kerala	46.84	48.21
8. Mizoram *	46.76	60.23
9. Madhya Pradesh	44.12	56.76
10. Sikkim *	40.80	55.27
11. Gujrat	40.44	45.32
Less than 40% performance		
12. Manipur *	39.84	57.98
13. Rajasthan	39.48	39.74
14. Punjab	38.99	53.62
15. Meghalaya *	38.24	65.11
16. Uttar Pradesh	37.16	49.49
17. Haryana	34.99	40.54
18. Tripura *	34.35	66.72
19. Assam *	30.41	54.47
20. West Bengal	28.17	39.99
21. Orissa	25.50	39.85
22. Nagaland *	18.93	60.11
23. Himachal Pradesh *	16.15	56.31
24. Bihar	15.77	44.39
25. Jammu & Kashmir *	8.04	55.28

* Special Category States

@ As projected in the Annual Plan Financing Pattern 1992-95

Central Support as % of Total Plan Resources 1992-95

1. States having percentage of more than 100%

Bihar	204.05
Punjab	112.32
Uttar Pradesh	114.71
West Bengal	116.37
Assam	199.20
Himachal Pradesh	331.69
Jammu & Kashmir	889.67
Manipur	152.25
Meghalaya	147.76
Mizoram	141.25
Nagaland	394.34
Sikkim	139.72
Tripura	163.19

2. States having percentage between 75% to 100%

Andhra Pradesh	79.78
Kerala	90.80
Madhya Pradesh	74.37
Orissa	99.09
Arunachal Pradesh	99.22

3. States having percentage between 50% to 75%

Haryana	55.06
Rajasthan	67.30
Tamil Nadu	69.11

4. States having percentage below 50%

Goa	42.46
Gujarat	47.24
Karnataka	41.61
Maharashtra	32.06

Annex 2.15

PROGRSS IN RESOURCES MOBILISATION DURING 8th FIVE YEAR PLAN, 1992-97

UNION TERRITORIES

(Rs. in Crores)

Union Territories	1992-97	1992-93 (Actual)		1993-94 (Actual)		1994-95 (Revised)		1992-95	
		Current	Constant	Current	Constant	Current	Constant	Current	Constant
1	2	3	4	5	6	7	8	9	10
1. A & S ISLAND	685.00	125.83	114.91	154.13	129.85	199.49	151.36	479.45	396.12
2. CHANDIGARH	400.00	65.32	59.65	79.83	67.25	88.00	66.77	233.15	193.67
3. DADRA & NAGAR HAVELI	80.00	18.16	16.58	23.96	20.19	25.99	19.72	68.11	56.49
4. DAMAN & DIU	65.00	14.45	13.20	15.64	13.18	25.22	19.14	55.31	45.51
5. DELHI *	4500.00	911.07	832.03	980.00	825.61	1560.00	1183.61	3451.07	2841.25
6. LAKSHADWEEP	120.00	19.32	17.64	23.30	19.63	32.67	24.79	75.29	62.06
7. PONDICHERRY *	400.00	87.77	80.16	108.00	90.99	135.00	102.43	330.77	273.57
TOTAL	6250.00	1241.92	1134.17	1384.86	1166.69	2066.37	1567.81	4693.15	3868.67

* UTs with legislation.

Annex 2.15 Concld.

PROGRSS IN RESOURCES MOBILISATION DURING 8th FIVE YEAR PLAN, 1992-97

UNION TERRITORIES

(Rs. in Crores)

Union Territories	% of 8th Plan	1995-96 Current	Constant		1996-97 Constant		1992-97 Constant			% of outlays
1	11	12	13		14		15			16
1. A & S ISLAND	57.83	215.00	152.48	149.72	152.48	149.72	701.08	695.56	10.56	102.35
2. CHANDIGARH	48.42	100.00	70.92	69.64	70.92	69.64	335.52	332.95	-67.05	83.88
3. DADRA & NAGAR HAVELI	70.61	29.00	20.57	20.19	20.57	20.19	97.62	96.88	16.88	122.03
4. DAMAN & DIU	70.01	23.00	16.31	16.02	16.31	16.02	78.13	77.54	12.54	120.20
5. DELHI *	63.14	1720.00	1219.86	1197.77	1219.86	1197.77	5280.97	5236.79	736.79	117.35
6. LAKSHADWEEP	51.72	38.60	27.38	26.88	27.38	26.88	116.81	115.82	-4.18	97.34
7. PONDICHERRY *	68.39	175.52	124.48	122.23	124.48	122.23	522.53	518.03	118.03	130.63
TOTAL	61.90	2301.12	1632.00	1602.45	1632.00	1602.45	7132.67	7073.57	823.57	114.12

* UTs with legislation.

2383 PC/96—6A

Tax Revenue as percentage of State Domestic Product (Average for the triennium 1987-90)

State	Per Cap. SDP (Rs.)	Per Cap. Tax Rev. (Rs.)	Tax Rev/ SDP (%)
	1.	2.	3.
Andhra Pradesh	3455	333	9.64
Arunachal Pradesh	4670	28	0.60
Assam	3195	135	4.23
Bihar	2135	99	4.64
Goa	7364	575	7.81
Gujrat	4602	465	10.10
Haryana	5284	507	9.60
Himachal Pradesh	3618	244	6.74
Jammu & Kashmir	3534	184	5.21
Karnataka	3810	388	10.18
Kerala	3532	380	10.76
Madhya Pradesh	3299	215	6.52
Maharashtra	5369	511	9.52
Manipur	3449	69	2.00
Meghalaya	3328	157	4.72
Mizoram	4094	42	1.03
Nagaland	3929	153	3.89
Orissa	2945	149	5.06
Punjab	6996	544	7.78
Rajasthan	3092	218	7.05
Sikkim	4846	256	5.28
Tamil Nadu	4093	385	9.41
Tripura	3163	69	2.18
Uttar Pradesh	2867	164	5.72
West Bengal	3750	265	7.07
ALL STATES	3621	283	7.83

Source Tenth Finance Commission Report

2383 PC/96—6B

CHAPTER 3

EMPLOYMENT AND POVERTY ALLEVIATION

Section 1

Approach to employment generation and poverty alleviation

3.1 The Eighth Five Year Plan envisages a three-pronged approach to employment generation and poverty alleviation : a high rate of growth of the economy; an employment-oriented growth structure; and special employment programmes. The first two ensure an increasing volume of economic activity with larger and more productive utilisation of human and capital resources, leading to enhancement of employment and income opportunities. The special programmes are aimed at supplementing the employment generating and poverty alleviating impact of the growth process with particular focus on enhancement of income levels of specific target groups consisting of the poor and the unemployed by assisting them directly with assets, skills and employment opportunities.

3.2 Non-availability of estimates based on comprehensive surveys prevents a direct assessment of trends in poverty, employment and unemployment during the first three years of the Plan. The last such survey by NSSO from which detailed information is available related to 1987-88. The limited 'thin' sample based surveys subsequently undertaken by NSSO, to which reference is made later on, also related to the years preceding the Plan, the last one relating to 1992. Results of the detailed survey undertaken during 1993-94 are not yet available. An assessment of the experience of the first three years of the Eighth Plan (1992-95) would, therefore, have to be based on indirect evidence and estimates, particularly on the estimated rates of growth of the economy and its composition in terms of its distributional and employment effects and the reach and effectiveness of the special programmes in alleviating unemployment and poverty among the target groups.

3.3 During the first three years of the Plan, the rate of growth of the economy has been about 4.6 per cent per annum, which implies a rate of growth of 2.4 per cent in per capita terms. This is lower than the growth experienced over the preceding ten-year period as well as the rate envisaged in the Plan. It is, however, seen that the composition of growth has somewhat changed in favour of sectors with higher employment intensity, so that employment growth during 1992-95 (2.03 per cent per annum) has, in fact, shown some improvement over that experienced during the Seventh Plan (1.78 per cent per annum) and the period 1990-92(1.50 per cent per annum). While the growth of the agriculture sector, averaging at around 3 per cent per annum, the employment growth mostly taking place in the agriculture and unorganised sectors of the economy and the substantial expansion of special programmes particularly of rural employment expanding substantially may have had a positive effect on poverty alleviation, a faster increase in the prices and declining availability of essential commodities, particularly foodgrains, would have had an opposite effect. Analysis of the functional relationship between incidence of poverty and alternative sets of explanatory variables shows that the set of explanatory variables, per capita GDP(in agriculture in the case of rural poverty and in manufacturing, electricity and construction in the case of urban poverty) and relative prices of foodgrains give the best and consistent results and also enable estimates of incidence being made for recent years. These results are summarised in Table 3.1. Estimates based on official methodology show that incidence of poverty in 1994-95 is likely to have been lower than in the year preceding the start of the Eighth Plan, i.e. 1991-92. The decline is seen to be sharper in urban than in rural areas. Estimates using Expert Group methodology, however, show a marginal increase in incidence of poverty in 1994-95, as compared to 1991-92, because of a slight increase in rural poverty whereas urban poverty is seen to have declined.

Section 2

Employment : Perspective and Estimates for 1992-2002

3.4 The employment strategy for the Eighth Plan was formulated as part of a ten-year perspective of achieving near- full employment at the end of the ten-year period 1992-2002. Open unemployment at the beginning of the

Table 3.1
Trends in Incidence of Poverty 1987-88 to 1994-95

(Per cent)

	Based on NSS Data						Based on functional relationship	
	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	93-94	94-95
	Official Methodology							
Rural	33.4	22.5	20.3	19.7	20.5	22.9	19.9	19.3
Urban	20.1	14.2	13.3	10.8	12.9	13.0	13.2	9.5
Combined	29.9	20.4	18.5	17.4	18.5	20.3	18.1	16.6
	Expert Group Methodology							
Rural	39.1	39.2	33.7	35.0	40.0	41.7	39.7	40.7
Urban	40.1	38.4	36.0	37.0	37.6	37.8	37.8	36.6
Combined	39.3	39.0	34.3	35.6	39.4	40.7	39.2	39.6

Eighth Plan was estimated as 1.7 crore out of a labour force of 31.9 crore. The educated accounted for about 40 per cent of the unemployed. In addition, 60 lakhs of the workforce of 30.2 crore were estimated to be severely underemployed in as much as they were without work for at least half of the reference week. A backlog of unemployment of 2.3 crore at the outset of the Plan was, therefore, assumed for planning purposes. Additions to labour force during the Eighth Plan period and the period 1997-2002 were estimated to be 3.6 crore and 3.5 crore, respectively, taking due note of likely trends in growth and age structure of population and labour force participation rates. This implied that the task of achieving a near full employment situation by the year 2002 would call for creation of about 9.4 crore additional employment opportunities, or that employment would have to grow at the average annual rate of 2.7 per cent, during the period 1992-2002. Further, as the incidence of poverty was much higher than the incidence of unemployment, implying that a large mass of the employed worked at low levels of income, it was emphasised that employment augmentation of the employed in terms of levels of income and productivity, besides employment expansion of the order indicated earlier, would form an essential ingredient of employment and poverty alleviation strategy.

3.5 The estimate of backlog of unemployment at the beginning of the Eighth Plan was based on data available from the 43rd Round Comprehensive Survey on Employment and Unemployment conducted in July 1987 - June 1988 by NSSO and estimates of additions to labour force and an assessment of the employment growth during the period 1987-88 to 1991-92. Since then, data on employment for 1991 became available from the 1991 Census and data on employment as well as unemployment from the "thin" sample surveys of the 45th (July 1989 - June 1990), 46th (July 1990 - June 1991), 47th (July - December 1991) and 48th (January - December 1992) Rounds of NSSO. It is pertinent to briefly examine these data and see if they warrant any revision in the estimates of backlog in 1992.

3.6 According to the Census 1991, employment in terms of Main Workers, registered an average annual growth of 2.37 per cent during 1981-91. [State-wise and sector-wise rates of employment growth are given in Annex. 3.1]. To a certain extent, this figure may represent an overestimate of employment growth because of a better coverage of women as workers as a result of the "probing" questions asked in 1991 Census. On the other hand, the number of Main Workers in 1991 according to the Census is lower than the usual principal status workers in 1987-88 according to NSS. It thus seems that the Census 1981 as well as 1991 underestimate the number of workers, particularly female workers, in spite of the special efforts made in the 1991 Census. Estimates of labour force and unemployment according to 1991 Census are not yet available.

3.7 The NSS estimates on the basis of the "thin" sample during 1989-90, 1990-91, 1991 (July - December) and 1992 (January - December) suggest an unusually high rate of growth of labour force during this period, about 89 lakh per annum as against 53 lakh per annum during 1983-88. They also suggest an unusually high rate of employment growth of 3.4 per cent or over one crore per year. As a result, unemployment rate during this period is estimated to be only around 2.8 per cent against 4.8 per cent in 1987-88 and the number of weekly status unemployed in July, 1992 would be only 86 lakh as against the backlog of 1.7 crore in March 1992 as estimated in the Plan earlier. Preliminary indications derived from the first sub-round (July - September, 1993) of the 50th Round (1993-94) full scale survey, however, suggest that unemployment rates during 1993-94 could be well above 4 per cent and the total number of unemployed could be around 1.7 crore, closer to the estimates made by Planning Commission of around 1.8 crore in March 1993, on the basis of the estimated backlog of 1.7 crore in March 1992 and estimates of growth of labour force and employment during 1992-94. In view of the limitations of the Census estimates and certain unusual and rather implausible features of the "thin" sample estimates on the one hand, and preliminary indications that the estimates of the full scale NSS survey for 1993-94 are likely to turn out to be in line with estimates made by the Planning Commission, it has not been considered necessary to revise at this stage estimates made earlier and the ten-year perspective set in the Plan document.

Employment Strategy of the Eighth Plan

3.8 The Plan sought to adopt a decentralised and diversified strategy of faster growth of employment-intensive sectors, sub- sectors and activities to achieve the desired levels of growth of employment corresponding to the rate of growth of 5.6 per cent per annum, on an average, envisaged for the economy in the Plan. The main elements of the strategy, which have also been endorsed by the NDC Committee on Employment, were as follows :

(i) A faster and geographically diversified growth of agriculture, so that the hitherto lagging regions have a larger share in agricultural growth; and diversification of agriculture into high value, more labour-intensive crops like vegetable and fruits, particularly in the agriculturally better developed regions;

(ii) Development of infrastructure and marketing arrangements for agro-based and allied activities like dairy, poultry, fishery and sericulture to accelerate growth of these sectors;

(iii) An expanded programme of development and utilisation of wastelands for crop cultivation and forestry;

(iv) Development of an appropriate support and policy framework for the growth of non-agricultural, particularly manufacturing activities, in rural areas, including rural towns;

(v) Greater attention to the needs of the small and decentralised manufacturing sector as a major source of industrial growth, particularly in the production of consumption goods and manufactured exports;

(vi) Large scale programmes of construction of infrastructure and residential accommodation, the latter to be encouraged particularly in the private sector through appropriate land, financial and fiscal policies;

(vii) Strengthening of basic health and education facilities, particularly in the rural areas;

(viii) Facilities for faster growth of the services and informal sector activities through greater ease of entry and suitable support systems;

(ix) Identification and relaxation of legislative and policy measures found to restrict growth of employment;

(x) Greater flexibility in special employment programmes and their integration with sectoral development with a view to ensuring their contribution to growth and sustainable employment; and

(xi) Revamping of training systems to introduce greater flexibility and responsiveness to labour market trends, and larger involvement of users of the system's output, and to provide opportunities for upgradation of skills of the employed workers and also, for the development of entrepreneurship for the actual and potential self- employed.

3.9 With the goal of near full employment expected to be achieved only over a period of time, and the likely slower growth of employment in the initial years of the Plan due to the stabilisation programme, the Plan also envisaged that continuation and expansion of special employment programmes was necessary. The NDC Committee on Employment had suggested that wage employment programmes should be linked to rural infrastructure development and to integrated development of small and medium towns. The Committee also suggested that a limited employment guarantee be introduced in selected areas. At the same time, the Plan as well as the NDC Committee on Employment stressed the importance of accelerating employment growth through the development process itself since special employment programmes, howsoever important they are, could only supplement employment generation resulting from the development process.

3.10 The employment strategy adopted in the Plan was to result in employment growth of 2.6 per cent to 2.8 per cent per annum corresponding to an average annual rate of growth of 5.6 per cent with its sectoral composition as envisaged in the Plan. In other words, additional employment opportunities of the order of 85 lakh per annum, on an average, was envisaged during the Eighth Plan period. A continuation of the strategy during the subsequent five year period 1997-2002 is expected to lead to the generation of 95 lakh additional employment opportunities per year, on an average, during the period and to reduce unemployment to negligible levels by 2002.

Review of Developments during 1992-95

3.11 Achievement of the rate of employment growth as envisaged in the Plan, is primarily dependent on the growth rate and the sectoral and sub-sectoral pattern of growth of the economy which is further influenced by macro-economic and sectoral policies. Major policy changes have taken place in the Indian economy during the past four years. Stabilisation policies for containing fiscal and current account deficits are inherently contractionary in nature and tend to depress output growth as well as employment growth. This apprehension had duly been noted in the discussion on employment prospects in the Eighth Plan document. Stabilisation measures are nevertheless an essential part of the policies of structural adjustment and economic reforms which aim at leading the economy to a higher growth path. It is, however, important to note that the slow down of economic growth which was rather sharp during 1991-92 and also resulted in only a small growth of employment during that year, was soon reversed, as the economic restructuring and reform process was put in place simultaneously with the stabilisation process. The growth rate of the economy has averaged to 4.6 per cent per annum during the first three years of the Plan though it still falls short of the 5.6 per cent envisaged in the Plan.

3.12 Besides the rate of growth, the Plan also emphasised the need to enhance the employment orientation of growth through strategies and polices relating to various sectors as listed in the preceding sub-section. It is, therefore, pertinent to briefly review the major developments and policy and programme initiatives in this direction.

3.13 A regionally and cropwise diversified agricultural growth is among the major elements of the strategy envisaged for an employment oriented growth in the Eighth Plan. The triennial rate of growth of foodgrains production during the period 1992-95 was 4.66 per cent per annum. Analysis of the triennial rate of growth of States shows that foodgrains production in Bihar, Gujarat, Karnataka, Madhya Pradesh and Maharashtra, which have high employment elasticities in agriculture, has registered growth rates higher than the national rate. Fruit and vegetable production, which is highly employment intensive, has expanded considerably. Area under fruit crops is estimated to have increased by 11.5 per cent and production by 15.1 per cent during 1992-93. Vegetable production rose by 21.2 per cent in the same period.

3.14 Certain policy and programme initiatives in the small scale and decentralised industry sector have also been introduced which are expected to have accelerated the growth of this sector and made significant contribution to employment generation, as envisaged in the Plan. Capital participation upto 24 per cent by large and medium industrial houses in small scale units permitted by the 1991 industrial policy for small scale units, the package of measures announced by the Reserve Bank of India for ensuring adequate and timely credit for village and small industries, enactment to provide for payment of interest on delayed payments to small scale units and ancillaries, and the scheme for setting up Integrated Infrastructural Development Centres (IIDCs) for development of roads, telecommunication, water supply and banks to overcome infrastructural bottlenecks faced by small scale units in backward areas are among these initiatives. This sector, which contributes to about three-fifths of the output and four-fifths of the employment in manufacturing, has recorded a faster rate of growth of output than the registered sector in the first two years of the Plan. Within the decentralised sector, the small scale sub-sector has performed much better in terms of output and export growth, despite a sizeable part of small scale industrial units being sick for various reasons. The faster growth of automobile industry during 1994-95, following the delicensing of the industry, would also have a given a further boost to the growth of the small scale sector in view of the industry's backward linkages with the sector.

3.15 Regulatory and taxation regimes for the transport sector and the hotels and restaurants subsector of the trade sector were liberalised during the last few years. Financial and business services have not only registered a relatively faster growth but have also improved their employment content over the last three years. However, expansion of health services and education services have fallen short of targets. Public expenditure (actual or budgeted) in medical and health services and in education services in the first three years of the Plan, was only 48% and 43% respectively of the outlays envisaged in the Plan for these sectors. As for revamping of the educational and training system, a few steps have been taken in the direction of upgrading the quality of technical education and enhancing their relevance to the labour market through (i) World Bank aided projects for Engineering Colleges, Polytechnics and Industrial Training Institutes (ITIs) and (ii) MOUs signed with industry associations in several States for collaborative efforts in planning of courses in ITIs.

3.16 The performance of the construction sector, which was not satisfactory in the first two years of the Plan, appears to have improved in the third year and the GDP growth in 1994-95 is estimated at 4%. Programmes relating to construction of rural roads connecting villages with population exceeding 1,000 construction of additional rooms in primary schools with enrolment exceeding 100 under Operation Blackboard and performance in respect of provision of house sites and construction assistance to landless agricultural labour have also progressed well. However, there has been a shortfall in the provision of public sector resources for housing: only 53% of the Plan outlay has been budgeted for in the first three years. The climate for private sector housing is also still not very favourable.

3.17 Developments during 1992-94 have thus generally been in line with the strategy envisaged in the Plan, although action remains to be initiated in respect of some of the elements of the strategy. The pattern of growth during the first three years of the Plan is also observed to be in line with the employment- oriented composition of growth as envisaged in the Plan. There is a noticeable shift in favour of sectors and sub-sectors identified as ones with higher employment content, as compared to the growth pattern experienced during the preceding ten year period -- 1981-82 to 1991-92. Among the major sectors a faster growth of agriculture, trade, transport and services is expected to lead to higher growth of employment in the aggregate and the growth of these sectors has been relatively faster even in a low growth scenario during 1992-95. A more significant change towards a better employment orientation of growth can be seen in the sub-sectoral composition of growth during the first two years of the Plan for which data at a somewhat more disaggregated levels are available. For example, the registered sub-sector of the manufacturing sector experienced a significantly higher growth during the 1980s. However, during 1992-94, growth has been much faster in the unregistered sector. In the trade sector, both the segments - trade and hotels and restaurants - have shown relatively higher growth and in transport sector, transport by means other than railways, of which road transport forms a major part, have grown relatively faster. In the services sector, financial and business services have shown a better growth than public administration and defence. All these sub- sectors have a relatively higher employment intensity of growth. As a result, employment growth during 1992-95 has been somewhat better, despite a lower rate of GDP growth, than in the preceding five or seven year period, as indicated by the estimates presented in the following paragraphs.

Estimates of Employment Growth 1992-95

3.18 Estimates of additional employment generated in the first three years of the Plan have been made on the basis of Provisional Estimates of GDP for 1992-93, Quick Estimates of GDP for 1993-94 and Advance Estimates of GDP for 1994-95 released by the Central Statistical Organisation and estimates of employment elasticities made in the Planning Commission. According to these, additional employment opportunities of the order of 187.8 lakh are estimated to have been generated during the first three years of the Plan, implying an average rate of employment

Table 3.2

Estimates of Employment : 1992-95

(Lakh)

Industry/Sector (with NIC code)		Employment End of March 1992	Additional Employment 1992-93	1993-94	1994-95	Employment End of March 1995
(1)		(2)	(3)	(4)	(5)	(6)
0	Agriculture, Forestry & Fishing	1914.5	42.4	22.0	25.9	2004.8
1	Mining & Quarrying	26.4	0.3	0.8	1.0	28.5
2&3	Manufact-uring	331.1	6.2	7.3	16.5	361.1
4	Electricity, Gas and Water	10.7	0.3	0.2	0.3	11.4
5	Construction	128.5	0.6	1.5	5.2	135.8
6	Trade,Hotels & Restaurants	232.4	7.5	6.6	X	X
7	Transport, Storage & Communication	84.7	2.3	2.6	X	X
(6+ 7)	Trade and Transport	317.1	9.8	9.3	13.8	350.0
8	Financing, Insurance, Real Estate & Business Services	24.1	0.4	1.2	1.1	26.8
9	Community, Social & Personal Services	264.9	5.8	7.8	8.1	286.6
Total :		3017.3	65.8	50.2	71.8	3205.1

X Not estimated due to non-availability of the required break-up in Advance Estimates of GDP, 1994-95.

growth of 2.03 per cent per annum. Sector-wise and year-wise estimates are given below. More details are given in Table 3.2.

3.19 The following features of the employment situation as it has evolved over the first three years of the Plan need to be noted :

(i) The average annual rate of growth of employment in the first three years of the Plan has been higher (2.03 per cent) than the average annual rate of growth of employment during the preceding seven years 1985-92 (1.78 per cent); and the net annual additional employment opportunities have also been larger during the period 1992-95 (63 lakh) than during 1985-92 (50 lakh).

(ii) The employment content of growth has increased in the first three years of the Plan, and the declining trend in employment intensity has been reversed. Employment elasticity declined from 0.54 during 1978-83 to 0.38 during 1983-88, but is estimated to be 0.44 during 1992-95. Improvement in employment intensity has been due to a faster growth of (a) agriculture in relatively backward areas; (b) unorganised manufacturing sector; (c) trade and transport sectors; and (d) the services sector, during this period.

(iii) About 48 per cent of the additional employment is estimated to have taken place in agriculture and allied sectors. It needs to be recognised that the relationship between GDP growth and employment growth in agriculture is rather uncertain for, first, GDP growth cannot necessarily be attributed to larger labour use and second, given the predominantly self-employment mode of employment in the sector, a certain part of the workforce of agricultural households may form part of employment in this sector irrespective of production and GDP changes. To some extent, this problem has been sought to be taken care of by using trend rather than actual annual rates of growth to arrive at annual estimates of employment growth in agriculture. Further, due account has been taken of the changes in the regional composition of agricultural growth as employment elasticities are found to vary significantly across different States.

(iv) The second largest contributor to employment growth (of about 18 per cent) is the trade and transport sector. For the first two years separate estimates are available for the two sub-sectors - trade and transport, which suggests that trade, which is the major sub-sector, played the dominant role in employment generation, but transport sector has also shown sufficient employment growth.

(v) The next major contribution (about 16 per cent) to employment growth has been from manufacturing sector. A significant shift has taken place in the share of the unregistered sector in the growth of manufacturing GDP in which employment elasticity is observed to be much higher (0.7 to 0.8) than in the registered sector (0.15) in the past. Analysis of data available for subsectors of manufacturing for the first two years shows that manufacturing groups with higher employment elasticity within the registered sector have shown much faster growth than those with low employment elasticity. This reflects a reversal of the trends during the 1980s. The small scale sector has accounted for 70 percent of the growth in manufacturing employment, thereby raising its share in employment from 39 percent in 1992 to 40 percent in 1994.

(vi) Community, social and personal services have made another significant contribution (of about 11.5 per cent) in the additional employment generated.

(vii) Construction has, however, shown a slower growth in employment in spite of unit elasticity due to slower GDP growth in this sector.

(viii) These estimates also suggest that on the margin significant changes are underway in the employment structure as suggested by the following figures of initial and incremental share of different sectors in total employment:

(ix) Estimates of employment growth derived above may not include most of the employment of the wage employment variety generated under programmes like Jawahar Rojgar Yojana (JRY) except probably EAS, where a person can get guaranteed employment for 100 days in a year if he wants. For, employment elasticities used in the exercise relate to usual status employment, while employment generation under JRY is only of a short

Table 3.3
Manufacturing Employment : 1992-94

Sub-sector	End of March 1992	1993	1994	Annual Rate of Growth 1992-1993	1993-1994	1992-1994
	-------	lakh	-------	---percentages---		
Total Manufacturing	331.1	337.3	344.6	1.9	2.2	2.0
(1) Large & Medium	58.2	58.1	56.5	- 0.2	- 2.8	- 1.5
(2) Decentralised	272.9	279.2	288.1	2.3	3.2	2.7
(a) Modern	184.8	189.1	194.4	2.3	2.8	2.6
i. SSI	129.8	134.1	139.4	3.3	4.0	3.6
ii. Powerloom	55.0	55.0	55.0	0.0	0.0	0.0
(b) Traditional	88.1	90.1	93.7	2.3	4.0	3.1
i. Handloom	35.3	35.3	36.7	0.0	4.0	2.0
ii. Khadi	4.7	4.8	4.8	2.1	0.0	1.1
iii.Village Industry	12.0	12.2	12.3	1.7	0.8	1.2
iv. Coir Industry	1.8	1.8	1.8	0.0	0.0	0.0
v. Sericulture	18.2	18.3	18.7	0.5	2.2	1.4
vi. Handicrafts	16.1	17.7	19.4	9.9	9.6	9.8

Note : Figures of employment in the Traditional Sectors here are adjusted assuming that most of the reported workers in these sectors are employed only part-time and three workers reported employed, have employment equivalent to full time employment for one worker.

Table 3.4
Changes in Employment Structure : 1992-95

Sector	Employment share in 1992*	Share in increase in emp. during 1992-95
Agriculture & Allied Sectors	63.45	47.92
Mining & Quarrying	0.87	1.12
Manufacturing	10.97	15.97
Electricity, Gas and Water Supply	0.35	0.37
Construction	4.26	3.89
Trade & Transport	10.50	17.52
Financial, Insurance, Real Estate and Business Services	0.80	1.44
Community, Social & Personal Services	8.78	11.55

* end of March

term and supplementary nature and by itself will not convert an unemployed person into an employed one. Further, all the employment generated under JRY kind of programmes from year to year do not represent a net addition to employment, as employment generated under these programmes is not self-sustained from year to year and employment generated during one year terminates itself during that year and a similar quantum of employment has to be created during the next year to maintain that employment level. Persondays of employment generated under programmes like JRY should, therefore, be taken to be in addition to the above estimates of increase in "employment opportunities".

Employment Growth in the States

3.20 The need for a regionally differentiated employment strategy was specially stressed in the Eighth Plan. The subject was further examined in greater detail by the NDC Committee on employment in 1992. The Committee emphasised the fact that there is no unique employment strategy applicable to the entire country and recommended that the State Governments should formulate employment strategies appropriate to the characteristics and features of the employment and unemployment situation prevailing in individual States. Most States were found to fall in one of the two major groups and also possibly two smaller groups, all the four groups requiring somewhat different strategies :

(i) States like Himachal Pradesh, Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, Orissa, Andhra Pradesh, Karnataka and Maharashtra fall in one broad category where poverty levels are generally high, labour productivity in agriculture is low and incidence of open unemployment is low but that of visible under-employment is high. They require a strategy designed to augment employment in terms of productivity and incomes and promote occupational mobility through stimulation of agricultural growth, diversification of the economy and skill development.

(ii) In the other group are States like Haryana, Punjab, Kerala, Tamil Nadu and West Bengal with relatively high levels of labour productivity in agriculture as well as of open unemployment, especially educated unemployment. For them, diversification of the economy through faster expansion of the secondary and tertiary sectors of the economy should form the core element of employment strategy.

(iii) The hill States and the hilly regions form a separate category for which a strategy designed to reduce inaccessibility through transport development, diversification of agriculture into horticulture and afforestation as in Himachal Pradesh, promotion of low- weight and environmentally low-risk industries and tourism need to be stressed.

(iv) States facing problems of social and political unrest due to unemployment among youth required a special and urgent treatment of the unemployment problem as part of the long-term solution to problems of social unrest.

3.21 During the past two years, Planning Commission has pursued the matter of devising suitable State-specific employment strategies and programmes. An important element of this effort has been to advise the State Governments to review their employment experience and plans by organising seminars on employment situation in individual States. Seminars were organised by as many as 13 States and one seminar was organised jointly by States in the North Eastern region, leading to a number of recommendations, particularly in terms of identification of activities that need a special thrust in the development plans of individual States from the viewpoint of expansion of employment opportunities.

3.22 A direct estimate of employment growth in different states cannot be made due to non-availability of data. It is, however, possible to derive employment growth using growth in State Domestic Product (SDP) and State-specific employment elasticities as observed during 1981-91. Rates of employment growth during 1992-94 estimated on this basis for the States for which SDP estimates are available, are presented in Table 3.5.

3.23 It is clear that employment growth varied significantly among States. Kerala, Madhya Pradesh and Meghalaya have registered growth rates higher than the national growth rate. The growth rates for Maharashtra and Gujarat are also higher, but the estimates relate to only one year (1992-93). Further, the high rates of growth of SDP in Maharashtra and

Table 3.5
Growth of Employment in States (1992-94)

Sl. No.	Name of the State	Average Annual Growth rate (%)
1.	Andhra Pradesh	0.66
2.	Arunachal Pradesh	1.43
3.	Assam	2.11**
4.	Bihar	0.87**
5.	Goa	1.56
6.	Gujarat	6.55
7.	Haryana	1.03
8.	Karnataka	1.75
9.	Kerala	3.38*
10.	Madhya Pradesh	2.76
11.	Maharashtra	3.57**
12.	Meghalaya	3.05
13.	Nagaland	-0.99**
14.	Orissa	1.70
15.	Punjab	1.21
16.	Rajasthan	0.81
17.	Tamil Nadu	1.02**
18.	Uttar Pradesh	0.64**
19.	West Bengal	1.62
20.	India 1992-93	2.18
	1992-94	1.90
	1992-95	2.03

* during 1992-95
** during 1992-93

Gujarat during 1992-93 were primarily due to the decline in SDP during 1991-92. States which show a substantially lower employment growth during 1992-94 than the national rate are Andhra Pradesh, Haryana, Punjab, and Rajasthan.

Employment Prospects With Reference to the Eighth Plan and the Goal of Full Employment

3.24 Employment growth in the first three years of the Plan has been lower than the average annual rate of growth of 2.7 per cent envisaged in the Eighth Plan. The shortfall has primarily been due to the rate of growth of the economy (4.6 per cent) falling short of the average targetted rate of growth of the economy of 5.6 per cent. The rate of growth of employment needs to average at 3.64 per cent per annum during 1995-96 and 1996-97, if the employment objectives of the Plan are to be realised. In other words, about 120 lakh additional employment opportunities would have to be generated every year during these two years. Even if the employment elasticity observed in the first three years of the Plan (0.44) improves to 0.5 in the next two years, the economy would have to grow at the average rate of 7.3 per cent per annum during the period 1995-97. Sectoral composition of GDP growth which could lead to the desired level of employment intensity and employment growth are shown in Annex. 3.3. Overall rates of growth of the economy and of sectors with sizeable employment shares like Agriculture, Manufacturing, Trade and Transport and Services have to increase substantially relative to their levels during 1994-95, if employment targets of the Plan are to be met.

3.25 Assessments and forecasts offered by various organisations and individuals generally put the GDP growth rate during the next two years between 5 to 7 per cent. Prospects of employment generation during these two years and during the Plan period as a whole, with alternative growth rates between 5.5 and 6.5 per cent and alternative employment elasticities -- 0.44 as observed during 1992-95 and 0.50 -- show that the modest projection with a 5.5 per cent GDP growth and 0.44 elasticity, would generate additional employment opportunities of the order of 157.0 lakh during the period 1995-97 thereby leading to the generation of 344.5 lakh additional employment opportunities during the Eighth Plan. This would fall short of the 426 lakh envisaged in the Plan by 81.5 lakh, but would just about take care of the addition to labour force during the Plan period thus leaving the backlog of unemployment almost at about the same level as at the beginning of the Plan. The most optimistic projection, with 6.5 per cent GDP growth rate and 0.50 employment elasticity, would also result in a shortfall of about 26 lakh in the Eighth Plan target, but would imply a backlog of 120 lakh at the end of the Plan, 50 lakh lower than at the beginning. Enhancing sectoral and aggregate growth rates during the last two years of the Plan to the levels required to fulfill the plan targets of employment thus does not appear an easy task.

3.26 The goal of achieving near full employment by 2002, as set out in the Eighth Plan, would require that the rate of economic growth accelerates and the trend in improvement in employment elasticity is at least maintained, if not strengthened during the remaining two years of the Eighth Plan and the subsequent five year period. It is tentatively estimated that employment would need to grow at 3.1 per cent per annum, and with a 0.50 employment elasticity the economy would require to grow at an average annual rate of 6.2 per cent during the next seven years, in order to attain the goal of near full employment by 2002.

3.27 Current assessments of the prospects of growth in the Indian economy in the coming years suggest that a growth rate of over 6 per cent is not only feasible but could realistically be expected. The crucial question from the employment viewpoint is that of the employment intensity of such a level of growth. Would the composition of growth be such as to increase aggregate employment elasticity to around 0.5, from around 0.44, observed over the past three years, as well as during the period 1981-91? It must be recognised that the compulsions of raising productivity levels so as to improve efficiency and competitiveness may not permit an increase in employment elasticities at sub-sectoral levels; and, in fact, even a decline in employment elasticities could be expected in individual sub- sectors and product groups. An increase in employment content of aggregate growth could thus be expected primarily from a pattern of growth in which sectors with relatively higher employment intensity make an increasingly larger contribution, by growing faster than other sectors.

Sectoral Employment Prospects and Policies

(i) Agriculture

3.28 Employment performance of Agriculture strongly influences overall employment growth, because of its continuing predominant share in total employment. Two points, however, need to be noted in regard to employment growth in agriculture. First, agriculture cannot be expected to hold increasingly larger number of workers indefinitely and the share of this sector in total employment has to decline with decline in its share in GDP. Second, beyond a certain level of development, employment content of crop-output growth tends to decline as is observed in the low and declining employment elasticities in some of the agriculturally better developed States. It is, however, seen that development of agriculture in a large number of States in India is still at a stage where output growth leads to a substantial increase in employment. This is reflected in relatively high employment elasticity (between 0.60 to 0.98) in States like Madhya Pradesh, West Bengal, Andhra Pradesh, Kerala, Uttar Pradesh, Karnataka and Bihar. Thus in large parts of the country, agricultural growth would continue to significantly contribute to employment growth. However, public investment in agriculture has been stagnant or falling over the years and to a large extent private investment depends on public investment, particularly in infrastructure. It is necessary to increase public investment in agriculture especially for strengthening irrigation and other rural infrastructure in backward areas so that sustained agricultural growth and, therefore, acceleration of employment growth is facilitated. The rural employment programmes need to be more firmly oriented towards rural infrastructure development programme. Such efforts designed especially to reducing dependence of agricutlure on rainfall alongwith development and utilisation of dry-land technologies would also ensure a reasonable growth of agriculture. The proposals in the current year's budget for infrastructure development appropriately recognise the importance of minor and medium irrigation but this requires to be suitably dovetailed with rural employment programmes.

(ii) Rural non-farm sector

3.29 Rural non-farm sector which has accounted for a steadily rising share of the rural workforce (from about 15 per cent in 1978 to 22 per cent in 1987-88) has registered a rate of employment growth of around 5 per cent in the eighties. Employment in Manufacturing grew at an average annual rate of about 4 per cent while Construction, Trade and Transport registered higher rates of employment growth. An increasingly larger component of Rural Manufacturing now consists of non- traditional activities with reasonably high income elasticity of demand for their products. Substantial expansion and diversification of these activities is possible through promotional policies and efforts particularly in respect of infrastructure, improved access to credit, technological upgradation and training in entrepreneurial development and marketing support.

(iii) Manufacturing

3.30 The recent upturn in the growth of manufacturing output is likely to continue. The decentralised sector is also likely to maintain its share of manufacturing output and employment, and within this sector the small scale industry segment of manufacturing would continue to claim a sizeable share.

3.31 A better performance of the Small Scale sector as compared to the Large sector could be attributed to a large extent to the preferential treatment given to the former under the industrial policy. The policy to promote Small Scale Industry has consisted of several elements: product reservation, infrastructure support, directed and concessional credit, preferential treatment and price preference in government purchases, tax concessions, special assistance in procurement of equipment and material in short supply, etc. Some of them have probably become dysfunctional and redundant over the years while others are still crucial for the growth of this sector. It has, however, been also argued that some elements of the policy have engendered inefficiency, over capitalisation and sickness, and, are in any case, not in line with the new policy regime stressing upon efficiency and competition. There is , no doubt, that the policy requires to be rationalised so as to improve resource use efficiency in general and in the small scale sector in particular. The policy, therefore, needs to be more closely examined in terms of the relative effectiveness and efficiency of its different elements. Such of the elements of the small industry policy as are found to significantly contribute to the growth of this sector would need to continue in the interest of employment as sudden and complete withdrawal of all support measures is likely to lead to large-scale dislocation and drastic fall in output and employment levels in this sector. It would also be desirable that the concessions and preferential assistance are more closely related to the employment intensity of investment rather than merely based on the capital size as at present.

3.32 Consumer goods industries account for two-thirds of Manufacturing employment and a little over a one-third of GDP from Manufacturing. It includes a major part of the Small Scale sector. A large domestic demand for a variety of consumer products offer tremendous scope for expansion of output and more so of employment in this sector. Therefore, while recognising that import liberalisation would have a favourable impact on the efficiency of domestic production, opening up of the economy for import of consumer goods would need to be a gradual process as a swift and wide opening up of consumer goods imports is likely to have large scale and immediate adverse effect on employment. On the other hand, domestic decontrol and delicensing of some industries still under the licensing regime is expected to have favourable implications for their growth and employment generation, as has been the experience with delicensing of automobile industry. Decontrol of other industries, which have substantial forward and backward linkages, for example, electronics, can have similarly favourable implications for the growth of direct and indirect employment.

(iv) Exports

3.33 Exports have shown a significant growth over the past three years. To the extent several export items have relatively high employment elasticity and increase in exports induces higher growth of their output, export growth makes a significant net contribution to employment growth. Among the major export items which have relatively high employment elasticity and have also shown fast export growth are cashew, oil meals, marine products, leather footwear, transport equipment, electronic goods, gems and jewellery, readymade garments and handicrafts. A continued buoyancy in exports of these items will contribute to employment growth. Some of the subsectors which have high employment as well as export potential such as fruits and vegetables, processed foods and fish and fish preparations, still have low export intensity, which could be tremendously improved with adequate development of infrastructure and supporting facilities.

(v) Tourism

3.34 International and domestic tourism has significant linkages with a wide variety of activities, like Construction, Manufacturing including Handicrafts, Handloom and other traditional industries, Hotels and Restaurants, Transport, Trade and Services. Employment in tourism has experienced a growth at the rate of 5.9 percent per year over the Eighties and early Nineties. Studies made by the Department of Tourism also show that investment in the organised tourism sector is about Rs. 1000 crores per year and that this level of investment is capable of creating 2,60,000 jobs per year in the organised sector. With a view to realising the growth and employment potential of tourism, suitable policy changes in regard to transport, tourist accommodation and services need to be expeditiously made, particularly to encourage larger private sector investment and participation.

(vi) Construction Sector

3.35 With liberalisation of infrastructure building, it is expected that larger private investment would come up in the Construction sector, though, in a large part of this sector, particularly in rural roads, school and health centre buildings, etc., larger public sector investment would be necessary. In the Housing subsector of construction activity, the climate for private and household investment does not still seem very favourable. Reforms in the urban land control system and an appropriate tax incentive structure for individual and household savings and investment in housing seem essential to give a boost to housing. It may be noted that the employment effect of construction growth is very high not only because of its high employment elasticity, but also because of the highest employment multiplier effect it has among the major sectors of the economy.

(vii) Other Sectors

3.36 Transport and Trade sectors have performed relatively well during the first three years of the Plan averaging a GDP growth of 5.7 percent and employment growth of 3.4 percent. Regulatory and taxation regimes for the transport sector and hotels and restaurants segments of the trade sector would, need to be further suitably liberalised so as to enable them to grow faster than in the first three years of the Plan to meet the rising demand for these services which, with their relatively higher employment elasticities, would make a substantial contribution to the acceleration of employment growth. Similarly a continuation of the rising trend in the growth of financial and business services could be reasonably expected to result in an employment growth of over three percent in these activities in the coming years.

New Investments and Employment

3.37 With the liberalisation of industrial licensing and introduction of simplified procedures under the New Industrial Policy (NIP), there has been a spurt in approval of foreign investment proposals since August 1991. Between August 1991 and October 1994, a total of 5,149 foreign collaboration proposals and 2,544 proposals of foreign investment involving Rs. 23,900 crore have been approved. Over 80 percent of foreign investment proposals are in high priority sectors. About 42 percent of foreign direct investment approved till the end of 1993 have been in infrastructure, including hotels and tourism, a little over one-fourth have been in capital goods industries and the rest in services and consumer goods sectors (Annex. 3.4). The actual inflow of foreign investment during the period August 1991 and October 1994 has, however, been only Rs. 5,033 crore. During the same period, about 16,100 Industrial Entrepreneurs Memoranda (IEMs), involving an investment of Rs. 3,25,580 crore with an employment potential of about 30 lakh have been filed. Roughly half of the investment involved and 60 percent of the employment potential are in capital goods industries, about 31 percent of the investment and 23 percent of the employment potential is in consumer goods industries and about 5 to 6 per cent of the investment and an equal percentage of the employment potential are in infrastructure sectors (Annex. 3.4). About 40 percent of the investment proposed in IEMs is estimated to have been realised. This is likely to have resulted in the generation of about 12 lakh additional employment opportunities. It may be noted that the quantum of investment envisaged in the IEM does not represent total private investment as it does not include investment in Agriculture and Decentralised sectors and even in the Organised sector. IEMs are filed only in respect of industries where industrial licences or registration of industries with specified authorities was required earlier. Estimates of employment potential created by investment envisaged in IEM's thus underestimate employment potential likely to have been created by private investment. Much of this investment (FDI and domestic investment) being in core industries like infrastructure and capital goods industries would also lead to substantial indirect employment in the economy.

Full employment by 2002

3.38 On the basis of the above assessment of trends and prospects of growth and the employment intensity of growth, an employment growth of 3.1 per cent per annum required to achieve near full employment by 2002 appears feasible. It may, however, be recognised that the compulsions of raising productivity levels may lead to a reduction in employment content of growth in individual lines of production. To the extent this phenomenon is more than offset by changes in the composition of growth in favour of sub-sectors with relatively higher, even though declining, employment content, overall employment elasticity may increase.

On balance, however, it would not be reasonable to expect an employment elasticity higher than 0.5, and could even be lower at around 0.45, nearer to what has been estimated for the past three years. Therefore, achievement of the goal of employment for all by 2002 would primarily hinge upon attaining a higher growth of GDP of around 7 per cent per annum on an average during 1995-2002.

3.39 Most of the employment growth in the medium term, however, is likely to take place in the unorganised sectors. Organised sector employment, which constituted about 9 per cent of total employment in 1992, has grown at a rate of 0.36 per cent only during the first two years of the Eighth Plan. It is estimated to constitute 8.7 per cent of total employment in 1994. To begin with, a significant part of the new employment is, therefore, likely to be at relatively low levels of productivity and incomes and to a large extent of the self-employment variety. In the relatively longer run, a greater integration of markets and different segments of the economy as well as tightening of labour markets, quality of employment in the unorganised sector is expected to improve. In the meantime, special efforts would need to be made to ensure better access of the unorganised sector producers to inputs, infrastructure, credit and markets and special measures of welfare such as health, education, housing and a minimum degree of food and social security to the unorganised sector workers so as to improve their productivity and income levels on the one hand, and prevent deterioration in their conditions of work and quality of life, on the other.

Section 3

Poverty Alleviation : Role of Special Employment Programmes

3.40 While the long term strategy for achieving the objective of full employment and eradication of poverty would consist of expansion of employment opportunities, improvement in productivity and augmentation of incomes of both the unemployed and the underemployed through an employment-oriented growth process, special programmes for providing wage and self-employment would need to continue to be instruments of direct interventions in tackling poverty. Such special programmes have evolved over the past two decades and there has been considerable debate over their relevance, adequacy and utility and about the manner in which they have been implemented. The Eighth Plan recognised that special employment programmes would have to continue, and in fact may have to be extended with a view to providing a measure of guarantee of work, particularly as a safety net for the poor, but cautioned that these programmes could only be an interim measure to provide supplementary employment and assistance to the poor till they can find stable employment through the process of growth. The Eighth Plan, therefore, placed emphasis on the acceleration of the rate of employment growth so that the need for special employment programmes declines over time. It envisaged a greater degree of integration of the special employment programmes with the normal sectoral development programmes in the area so as to lead to generation of longer and more sustainable employment along with infrastructural development.

3.41 The Eighth Plan accordingly emphasised the need for relaxation and changes in the stipulations and guidelines incorporated in the on-going schemes. In the case of Integrated Rural Development Programme (IRDP), it suggested that the Programme should be viewed as a "credit-based self-employment programme with an element of subsidy rather than as a programme based on subsidy supplemented by bank credit", and that it should be viewed from the demand side instead of supply side with less emphasis on numbers of targetted beneficiaries. In the case of Jawahar Rozgar Yojana (JRY), the Plan felt that the employment generated under the Programme was not adequate and suggested that additional allocation under the Programme should be linked to certain backward districts/blocks with an element of guarantee of atleast 90-100 days of employment per person. The need for a certain degree of flexibility with regard to earmarking of funds for specific activities was recognised. Decentralised planning with effective participation of Panchayat Raj institutions and of voluntary agencies was emphasised.

3.42 The scope and content of special employment programmes was considered by the Committee of the National Development Council (NDC Committee) on Employment in 1992. While agreeing with the approach of the Eighth Plan in relation to these programmes that a " vigorous pursuit of the employment-oriented growth strategy can alone provide the lasting solution to the problem of unemployment and poverty in the long run" and that the role of the special employment programmes has to progressively decline, the NDC Committee recommended a major restructuring of the on-going schemes so as to integrate them with the sectoral and area development plans. It also suggested that while employment guarantee through wage employment programmes may be useful, such guarantee need not be extended to every region in every State but may be confined to regions with high levels of poverty and under-employment and low levels of wages. The Committee recommended that a significant part of the outlays for rural development in the Eighth Plan should be utilised on building up rural infrastructure that would not only create short term wage employment but also provide the base for economic development and sustained employment generation.

Special Employment Programmes in the Rural Areas

3.43 The major anti-poverty and employment programmes being implemented in the rural areas are the Integrated Rural Development Programme (IRDP), the Jawahar Rozgar Yojana (JRY), and the Employment Assurance Scheme (EAS). In addition to these Centrally-Sponsored Schemes, State Governments have been implementing various wage and self-employment schemes as a part of their State Plans, notable among which is the Maharashtra Employment Guarantee Scheme.

Integrated Rural Development Programme

3.44 IRDP aims at providing self employment opportunities to the rural poor through assistance in the form of subsidy and bank credit to enable them to acquire productive assets and appropriate skills to cross the poverty line on a sustained basis. The activities eligible under the Programme range from traditional land-based activities to the not so traditional projects such as pisciculture, sericulture, floriculture, etc. Purchase of land was made a permissible activity under IRDP by the Ministry of Rural Areas & Employment (previously Ministry of Rural Development) with effect from 1991-92. This was done in recognition of the fact that land based activities have a good scope for generating income and thereby catalysing the process of recovery of IRDP loans. Accepting the economics of the scheme as a viable proposition the Reserve Bank of India (RBI) has recently issued necessary guidelines ratifying purchase of land as a permissible activity under IRDP. Accordingly, banks have been directed to provide loans under IRDP for land acquisition as also short term credit towards meeting farm expenditure. As the price of land is likely to vary from place to place, the National Bank for Agriculture & Rural Development (NABARD) will issue necessary guidelines towards rationalising this aspect of the scheme. The targets and achievements under the Programme during the first three years of the Eighth Plan are given below:

3.45 In physical terms, the achievements have been about 110 per cent in 1992-93 and about 99 per cent in 1993-94. Against the target of 50 per cent for SC/ST families, the achievement in the first two years of the Plan has exceeded the target respectively. In the first eleven months of the 1994-95, about 47.46 per cent of the beneficiaries covered belonged to SC/ST families. Coverage of women fell short of the target of 40 per cent in the first two years of the Eighth Plan and it was 33.40 per cent in the first eleven months of 1994-95.

Table 3.6

Integrated Rural Development Programme Targets and Achievements (1992-95)

Year	Funds Allocation (Rs.crore)	Expenditure (Rs.crore)	No. of beneficiaries Target (Lakh families)	Achievement (Lakh families)	SC/ST (Per cent)	Women (Per cent)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1992-93	662.22	693.08	18.75	20.69	51.41	33.39
1993-94	1,093.43	956.65	25.70	25.38	53.07	33.62
1994-95	1,098.22	718.29 (upto Feb.'95)	21.15	16.25 (upto Feb.'95)	47.46	33.40

3.46 The total credit mobilised for the Programme was Rs. 1,036 crore in 1992-93 and Rs.1,407 crore in 1993-94. Per family investment rose from Rs. 7,889 in 1992-93 to Rs. 8,746 in 1993-94. In the first eight months of 1994-95, Rs. 597.42 crore was mobilised with the average level of investment per family at Rs. 11,000. An important point worth noting is that there has been a progressive reduction in the credit made available for IRDP by the banking sector as also a corresponding decline in the quality of lending which is reflected in a declining subsidy credit ratio. For the Eighth Plan the subsidy credit ratio had been normatively pegged at 1:2 but from 1990-91 onwards this has fluctuated between 1:1.74 and 1:1.79 compared to the ratio of about 1:2 over the Seventh Plan period. One of the main reasons for the low ratio is that banks do not meet the full credit requirements of the IRDP beneficiaries. Given the poor performance with respect to recovery of loans, the banks are reluctant to raise the level of assistance above the minimum required to match the subsidy levels. Collectively, this problem of default culminates in a resource constraint, with banks becoming very conservative and selective in their disbursement of credit. RBI has made it clear that the basic responsibility of recovery is that of the banks. The Ministry of Rural Areas & Employment has also requested State Governments/Union Territories from time to time to issue suitable instructions to the district administration to provide all possible help to the bankers in the recovery efforts.

3.47 Thus far, the programme laid more stress on a wider coverage in terms of numbers of beneficiaries which was all along over achieved. This made IRDP a target-oriented programme rather than result-oriented through a thin distribution of funds. All these years no concerted effort was made to raise the per capita investment level either by allocating more funds or by reducing the numerical targets (families).

3.48 From the view point of efficacy of IRDP to pull the poor above the poverty line, its critics draw attention to its two basic limitations: (i) the level of investment is too low to generate adequate incomes; and (ii) the capacity of the "poorest among the poor" to absorb the investments and sustain the venture and repay the loans is limited. Therefore, besides raising the levels of per-beneficiary investment, it is also suggested that the "very poor" who do not have experience in handling assets should be helped initially through wage-employment schemes and training. A number of steps have recently been taken by the Ministry of Rural Areas & Employment to qualitatively improve the IRDP. In recognition of the fact that the quality of the Programme is linked to the size of investments, conscious attempts are being made to promote higher investment per family even if it has meant a reduction in the physical targets. It was stipulated that the average level of investment per family should be at least Rs. 12,000 during 1994-95. Measures taken to encourage higher investment are: (i) extension of the scheme of Family Credit Plan to 213 districts of the country, under which multiple assets could be given to more than one member of the family after assessing the potential of each member; and (ii) raising of the limit of security- free loans from Rs. 10,000 to Rs. 15,000 for advances for agriculture where movable assets are created and from Rs. 2,000 to Rs. 5,000 where immovable assets are created.

3.49 On the issue of the capacity of the "very poor" to effectively utilise IRDP investment, some studies have shown that they have been able to earn as much per unit of investment as those relatively less poor, but the rise in their incomes has not enabled them to cross the poverty line. Recognising this, the earlier approach of having a lower than poverty line cut-off point for eligibility of assistance under IRDP, the so called Antyodaya approach, has been given up. Now, any family below poverty line can be assisted without the earlier priority to the poorest of the poor.

3.50 With a view to improving the effectiveness of investment in raising income levels of beneficiaries, new measures have been initiated which include: (i) shift to new activities such as sericulture, acquaculture and floriculture, which have a high value addition, and other innovative projects using better technological inputs; (ii) stress on skill training to the beneficiaries; and (iii) strengthening programme infrastructure, including a system of development audit at the district level.

3.51 For the successful implementation of IRDP, proper planning, project identification and beneficiary selection is an essential prerequisite. For this it would be appropriate to shift from an individual-beneficiary approach to promotion of group activities wherever these are profitable and productive. This would facilitate a better provision of linkages and a higher standard of supervision. This necessitates an organisational capability which could rationally identify and synthesise the capability and the skills of the beneficiaries with the local resource endowments and marketability of the venture. The preparation of viable project profiles as also a package of viable schemes should be carefully planned by a team of experts comprising Project Directors, District Rural Development Agency (DRDA), Lead Bank Officers, NABARD, District Development Managers (DDMs), General Manager District Industries Centre (DIC), Khadi & Village Industries Corporation (KVIC) representatives, Non-Governmental Organisations (NGOs) etc.

Scheme for Training Rural Youth for Self-Employment(TRYSEM)

3.52 The Scheme for Training of Rural Youth for Self- employment (TRYSEM) was originally intended to provide technical training and upgrade the traditional skills of rural youth belonging to families below the poverty line to enable them to take up self-employment under IRDP. The scope of the scheme was subsequently enlarged to train for wage employment as well. The target for TRYSEM trainees has been revised upwards from 1990-91 and during the first three years of the Eighth Plan, the targets have been 3.00 lakhs, 3.50 lakhs and 3.18 lakhs respectively. With effect from June 1994, the norms of stipends for trainees, honoraria to master craftspersons and allowances for raw material and tool kits under TRYSEM have been enhanced. The Eighth Plan emphasises the importance of proper assessment of the training needs in relation to the self-employment and wage-employment opportunities, quality of training and group training.

Scheme for Development of Women and Children in Rural Areas (DWCRA)

3.53 The special scheme for Development of Women and Children in Rural Areas (DWCRA) aims at strengthening the gender component of IRDP. This Scheme, which was implemented in only 355 districts in 1993-94, has now been extended to all the districts. The scheme provides for a one-time grant of Rs.15,000 to be used as revolving fund to groups of women for taking up self-employment. The revolving fund has been increased, from 1994-95, to Rs. 25,000, in the case of stabilised DWCRA groups who wish to diversify. Furthermore, a DWCRA group which is registered under the Societies Registration Act or State Cooperative Societies Act can approach a bank for getting a loan in the name of the group for production purposes. Moreover, DWCRA and IRDP are not mutually exclusive. Women belonging to identified rural families can become members of DWCRA and also avail of subsidy and credit under IRDP subject to the overall subsidy ceilings stipulated for various categories of beneficiaries. The number of members in groups may vary from 10 to 15 and in areas of difficult terrain it could be less. Emphasis is now being laid on recognising occupational groups such as women, bonded labourers, quarry workers, firewood gatherers as DWCRA groups. Certain States like Andhra Pradesh, Kerala, Nagaland and Tripura have performed very well.

Table 3.7

Achievements under DWCRA and TRYSEM during the Eighth Plan

Year	DWCRA No. of Groups Formed	DWCRA No. of Women Benefited (lakh)	TRYSEM No. of Youth trained (lakh)
(1)	(2)	(3)	(4)
1992-93	9,029	1.29	2.76
1993-94	15,483	2.68	3.04
1994-95 (upto Nov.1994)	34,867	2.80	2.68

In Andhra Pradesh, for example, there has been a phenomenal increasein the number of DWCRA groups from 400 in 1992-93 to 4,000 in 1993-94. In 1994-95 as against an original target of 734, actually 12,434 groups were formed. Some have become mini banks and reduced their dependence on money lenders. Some are managing lands taken on lease. Quite a few have formed mini-transport companies having acquired autos, Light Commercial Vehicles (LCVs) etc. against bank loans. However, in other States the impact of this scheme has been inadequate, perhaps due to lack of homogeneity among the women's groups and their inability to identify viable activities. Voluntary /organisations can play a critical role in adequately organising the groups and group activities under DWCRA. .

Jawahar Rozgar Yojana

3.54 The prevalence of rural poverty is relatively more intense among the agricultural and other rural labour households primarily because of the seasonal nature of work and inadequate wages. JRY is, therefore, aimed at alleviation of current poverty through creation of supplementary wage employment opportunities for the rural poor during lean agricultural season. The secondary objectives of the programme are creation of community and social assets with a positive impact on wage levels.

3.55 The programme is now operated in three Streams. Under the First Stream, 75 per cent of the total programme funds are allocated among the States/UTs according to their share of the rural poor. Further, the allocations to the districts within each States/UT are made on the basis of an index of backwardness which takes into account the proport of rural SC/ST population in the district and inverse of agricultural production per agricultural worker, with equal weights. Under this stream of JRY, there are two important sub-schemes: the Indira Awas Yojana (IAY) and the Million Wells Scheme (MWS). Till 1992-93, the objective of IAY was to provide dwelling units to members of SC/ST communities and freed bonded labourers below the poverty line, free of cost. Out of the total allocation for JRY at the national level 6 per cent were earlier earmarked for IAY. Considering the extremely satisfactory utilisation of these earmarked funds and the demand for higher allocations to and extension of this sub- scheme, the earmarked percentage has been raised from 6 to 10 from 1993-94. Non-SC/ST poor are now eligible, subject to the condition that the benefits to such persons should not exceed 4 per cent of the total allocation. The primary objective of the MWS is to provide open irrigation wells to small and marginal farmers amongst the SC/ST communities and freed bonded labourers below the poverty line free of cost. From the year 1993-94, the scope of MWS was enlarged to cover non-SC/ST small and marginal farmers below the poverty line. The earmarking for the sub-scheme was consequently raised from 20 percent of the JRY funds to 30 per cent in 1993-94.

3.56 After providing funds for the earmarked sectors of IAY, MWS, Administrative contingent expenditure and training expenses, the remaining funds are to be distributed amongst the different village panchayats to the extent of at least 80 per cent. The balance 20 per cent funds are utilised at the district level for inter-block/village works.

3.57 For the purposes of allocation of funds to the village panchayats, the population of each village panchayat having less than 1000 population is to be taken as 1000 and more than 10,000 as 10,000. The population of SCs/STs is also to be adjusted accordingly. There is no sectoral earmarking of resources at the village panchayat level except that 22.5 per cent of the annual allocation must be spent on items of works which directly benefit the SCs/STs. The village panchayat is permitted to spend a maximum of 10 per cent of funds on maintenance of the public assets within its geographical boundary.

3.58 The Second Stream of JRY was started in the latter half of 1993-94 and is intended to intensify JRY in 120 backward districts of 12 States where there is a concentration of unemployment and under-employment, with a substantial increase in the flow of funds approximately averaging Rs. 6 crore per district. These funds, amounting to 20 per cent of the total funds under the JRY subject to a minimum of Rs. 700 crore, are placed at the disposal of the district authorities who are to identify the pockets of unemployment and under-employment in the district and take up selected works there. Works can be selected from a basket of schemes which include construction of all weather roads, minor irrigation works, soil and water conservation, water harvesting, farm forestry, etc. In addition, primary school buildings, anganwadis, public health centres, markets and other infrastructural facilities are to be built up for more sustained employment and social development. The remaining 5 per cent of the JRY funds constitute the Third Stream (which also was launched in 1993-94) for taking up special and innovative projects such as those aimed at prevention of migration of labour, enhancing women's employment, special programmes through voluntary organisations for drought- proofing and watershed development, etc.

strengthening of rural infrastructure through the creation of durable community and social assets in favour of the rural poor for their direct and continuing benefits. This has also provided the necessary base for the creation of more sustainable employment over time. The details of the physical assets created under JRY on 1989-90 to 1994-95 is at Annex. 3.5.

Table 3.8
Jawahar Rozgar Yojana
Targets and Achievements (1992-95)

Year	Financial (Rs. in crore)		Physical (lakh mandays)	
	Total Allocation	Expen-diture	Target	Achievement
1992-93	3169.05	2709.59	7538.0	7821.0
1993-94				
(Ist Stream)	3181.22	3590.21	10383.3	9523.4
(IInd Stream)	878.20	288.50	-	735.0
1994-95				
(Ist Stream)	3498.72	2192.86	7997.3	7452.7
(IInd Stream)	878.20	559.53 *	1868.1	2063.5 *

* upto Jan.'95.

3.59 The targets and achievements of JRY in the first three years of the Eighth Plan are given in the Table 3.8.

Under the III Stream of JRY, a total of 28 projects were cleared during 1993-94 and 18 during 1994-95 (upto 9.1.95) A sum of Rs. 25.38 crore was released during 1993-94 and Rs. 13.02 crore during 1994-95 (upto 9.1.95) for these projects.

3.60 The implementation of the Jawahar Rozgar Yojana (JRY) has also led to the

Employment Assurance Scheme(EAS)

3.61 EAS was launched from October 1993 as an additional wage-employment programme with a view to providing a measure of employment security to the needy persons in 1,778 identified backward blocks in 261 districts situated mainly in the drought-prone areas, desert areas, tribal areas and hill areas in which the Revamped Public Distribution System (RPDS) is in operation. More Blocks have

Table 3.9
Performance under EAS

	1993-94	1994-95
a) Expenditure incurred (Rs. crore)	183.75	1228.00
b) Employment generated (lakh mandays)	494.74	2733.47

since been added and the Scheme is currently implemented in 2446 blocks including those that are flood-prone. It is envisaged that the Scheme would provide assured employment for 100 days of unskilled manual work to the rural poor who are in need of employment and are seeking it. A maximum of 2 adults (in the age group 18-60) per family would be provided the assured 100 days of employment during the lean agricultural season only. As the works under the EAS are undertaken according to the employment actually sought by the poor and is therefore need-based, no targets are fixed. The details of the performance of EAS during the two years 1993-94 and 1994-95 are given in Table 3.9.

3.62 The Second and Third Streams of JRY and the EAS are in line with the strategy proposed in the Eighth Plan. These new schemes are likely to generate additional employment and also make available larger funds for creation of productive assets in areas which are characterised by backwardness, endemic poverty and under-employment. In the long run, there seems to be a case for rationalising the wage employment programmes with the continuation of the First Stream of JRY with funds flowing directly to the village level, with the convergence of the Second Stream of JRY and EAS on the basis of a single criterion so that it could generate guaranteed employment in backward districts which have a concentration of unemployment and poverty.

Schemes of the State Governments

3.63 Some of the State Governments have been implementing special schemes to provide wage/self-employment through their own Plans. The Employment Guarantee Scheme (EGS) of the Government of Maharashtra is the most important wage employment scheme being implemented in any State, with considerable impact on rural poverty and unemployment. It provides guaranteed unskilled employment in rural areas and 'C' Class municipalities in Maharashtra to adults who register themselves for work. EGS was given a statutory basis from 1977. During 1992-93, EGS had generated 1480 lakh mandays of employment, and employment generation of the same order was anticipated in 1993-94. The EGS has been considered as a model for other States as well as the Centre. The Government of Gujarat is implementing a Special Employment Programme which has a three pronged strategy (a) self employment (b) wage employment and (c) vocational training. It covers two talukas in each District of the State with the aim of providing self employment to all the identified families below the poverty line besides providing opportunities for wage employment to those who seek work. Also part of the programme is a Zero Unemployment Programme being implemented in two Districts of the State for providing self employment or unskilled wage employment to at least one member of each family left out of the IRDP target group of families. The Government of Tamil Nadu has initiated a scheme of assured employment to agricultural labourers in four districts. The Government of Haryana has started a programme titled Udyog Kunj Scheme to provide self-employment opportunities to rural youth in rural areas themselves by setting up small industrial centres close to the villages. In addition to schemes such as these which are specifically for the rural areas, there are also schemes which apply both to the rural as well as the urban areas.

Impact of the Rural Programmes

3.64 During the period 1980-81 to 1994-95, IRDP has assisted approximately 456 lakh rural poor families. The Programme has a target of 126 lakh families to be assisted during the Eighth Plan, against which 62.32 lakh families have been covered between April 1992 and February 1995. The assessments made in the half yearly report of the latest round of Concurrent Evaluation of the programme conducted in 1992 (September, 1992 to February, 1993) reveals that the total family income had increased by between 51 to 100 per cent in 22.85 per cent of the cases and by more than 100 per cent in 25.83 per cent of the cases after assistance under the Programme. In absolute terms, the IRDP assets had generated incremental income of more than Rs.2000 in 56.58 per cent of the assisted cases at the national level, Rs. 1001 to Rs. 2000 in 9.35 per cent of the cases and Rs. 501 to Rs. 1000 in 3.97 per cent of the cases. However, while about 70 per cent of the assisted families were able to raise their income levels, the rise in income was sufficient to cross the poverty line of Rs. 11000 in only 14.81 per cent of the cases. This could be attributed to low levels of initial investment, non-availability of complementary inputs and working capital credit, absence of linkages with infrastructure and marketing as well as to the lack of skills among the beneficiaries to develop and effectively utilise the assets.

3.65 Some of these problems are sought to be tackled by certain new measures taken to improve the programme during the Eighth Plan, as indicated earlier. The effectiveness of IRDP in enabling the assisted families to raise their income levels above the poverty line may improve. But it would not be fair to judge the programme solely on the criterion of proportion of beneficiary households crossing the poverty line, particularly in view of the Antyodaya approach adopted for IRDP assistance earlier. It must be recognised that inspite of various limitations of the programme, over 70 percent of the beneficiary households have been able to utilise the assets and raise income levels by varying extent. Self- employment programmes like IRDP, are designed to raise income levels on a sustainable basis over time and lead to alleviation of poverty unlike the wage employment programme like JRY which provide supplementary employment with the objective of ensuring temporary sustenance for the poor. In this perspective, the decline in the relative importance that IRDP has undergone in recent years needs to be addressed. At the same time, the importance of wage employment programmes like JRY would continue in view of the widespread problem of underemployment and poverty. Outlays for JRY and allied programmes including EAS have increased very substantially during the past three years and in 1994-95 they constituted 5.8 per cent of total plan outlays and 0.85 per cent of GDP. It is, therefore, pertinent to ask the following two questions in respect of its impact: (i) what is the extent of employment and income supplementation that the beneficiary households get from the programme? And (ii) what is the extent to which the programme meets the employment requirements of the kind offered by it in rural India?

3.66 Concurrent Evaluation of JRY conducted in 1992 showed that the average number of mandays of employment generated under JRY per family participating in the programme during the 30 days preceding the date of the survey was 5.15. If this is taken to be the average per month for the year, the total for the year would be about 62 days, and with the average minimum wage level for agricultural labour as Rs. 20 per day, this would imply a supplemental income of Rs. 1,240 per family in a year. With substantial increase in the outlays, including in EAS, employment and income per participating household would be larger. It may be noted, however, that as indicated by the Concurrent Evaluation, of the total workers who participated in JRY works, roughly 57% had an annual income above the poverty line of Rs. 6,400. It appears that JRY has also attracted the underemployed members of the non-poor households.

3.67 The programme generated 102.60 crore person-days of employment during 1993-94 and 95.20 crore during 1994-95. The total number of person-days of unemployment in rural areas in 1995-96 is roughly estimated to be about 540 crore. The latest data indicate that about 59 per cent rural unemployed are educated, viz. matriculates or those with higher qualifications. Most of them are not likely to offer themselves for unskilled manual work under JRY and allied programmes. Assuming that about 50 per cent of all unemployed person-days would be available for such work, the actual total requirements of JRY type employment is likey to be 275 crore person-days. As against this, the outlays on JRY and EAS including State Governments' share are capable of generating 129 crore person-days in 1995-96 which would help in realising about 47 per cent of the total needs.

Issues and Future Directions

3.68 The basic issue in relation to the special employment programmes such as those discussed above is their role vis-a-vis employment generation through the growth process itself. Even though the original rationale for such programmes was the thesis that growth by itself would not help in tackling poverty, there is now a consensus that ultimately employment opportunities and elimination of poverty have to come through the normal process of growth and special employment and anti-poverty schemes can only be a supplementary and interim measure. However, considering that a near full employment situation may be feasible only in the early part of the next century, the special programmes would have to be continued and even expanded atleast till the end of the current century. It is, therefore, essential that these programmes are modified suitably and their implementation integrated with various sectoral development programmes so that they serve the twin objectives of generating short term employment and contributing to the process of development itself that would yield longer and more sustained levels of employment. The Eighth Plan as well as the Report of the NDC Committee have recognised this need for a high degree of convergence between the various poverty alleviation programmes, the area development programmes as well as sectoral schemes. The Eighth Plan suggested that district level plans should be prepared based on the physical and human endowments of the area, the felt needs of the people and the total financial resources available for the district. It would be possible, within this framework to integrate the poverty alleviation programmes with area developmental programmes within a development plan at the district level. However, so far, poverty alleviation programmes have tended to be implemented by the concerned departments more or less in isolation from the sectoral development programmes. It is also observed that the beneficiary oriented programmes like the JRY and IRDP have gained at the expense of area development programmes possibly because the benefits from the former are immediate while those from the latter take some time to become visible. The objectives of the beneficiary oriented programmes and the sectoral programmes need not conflict with each other and it should be possible to find common ground where they can be dovetailed, as, for example, IRDP and JRY with an area development plan which focuses on conservation and better management of land and water resources and development of rural infrastructure.

3.69 Strategies that would result in greater convergence of various programmes at the district level are being worked out with greater involvement of people and NGOs. An attempt has been made to achieve such an integration in the case of Drought Prone Areas Programme(DPAP) and Desert Development Programme (DDP) with the Intensified JRY (IJRY) and EAS and also with the Integrated Wasteland Development Programme (IWDP). Half of the resources from Intensified JRY and half of those from EAS have been earmarked for watershed development projects in the DPAP, DDP and IWDP districts releasing adequate funds in each district for this purpose on a planned basis. Evidently there is scope for similar integration elsewhere as, for example, with sectoral programmes under soil and water conservation, forestry, minor irrigation, animal husbandry, agriculture etc. as funds for these flow from sectoral heads to the district levels. Selected districts are being requested to formulate complete district plans to provide alternative models for integrated development. Another area where the special programmes can be taken advantage of is development of infrastructure. Construction of rural roads, school buildings, Anganwadis and drinking water supply systems would create substantial wage employment, in the short run, but would pave the way for long term development in the countryside.

3.70 In this endeavour to prepare district and sub-district plans, while a greater convergence with dovetailing of funds from different sectoral heads is imperative, access to technical expertise and appropriate technology is equally vital. The guidelines for Watershed Development, for instance, highlight and incorporate both these dimensions. Scientists have developed appropriate technologies for watershed treatment, but their adoption by farmers has been limited. Hence, it is proposed that the Project Implementation Agencies encourage the adoption of low cost locally developed technologies. In addition, these implementing agencies would be assisted by a multi-disciplinary team called the Watershed Development Team(WDT) drawn from different disciplines including plant science, animal science, civil/agricultural engineering and the social sciences; those with practical experience from the field would be given preference. After selection they would receive 4-weeks training related to the preparation, and design of watershed plans and to the various rural development programmes so as to provide them with the required orientation.

3.71 A second issue relates to the relative importance of the self-employment and wage employment schemes. The benefits of wage employment schemes are immediate and they provide supplementary incomes straight away. On the other hand, as already mentioned above, the benefits from self employment programmes in rural areas, more specifically IRDP, have not, in the past, been spectacular, probably because of low average level of investment, absence of linkages in the form of inputs as well as marketing outlets, over-emphasis on targets, neglect of the sustainable aspects of projects/activities and restrictions of coverage to the bottom half of those below poverty line who are unable to absorb the assistance. Some of the recent initiatives in improving the programme outlined earlier such as abolition of the cut off line for eligibility among the poor, stipulating that the investment per family should at least be Rs. 12,000, the Scheme of Family Credit Plan and raising of the ceiling for programme infrastructure from 10 per cent to 25 per cent would certainly improve the quality of the IRDP. Apart from these measures, the success of a self-employment promotion programme like IRDP (or for that matter Prime Minister's Rozgar Yojana --

PMRY) would depend on a right choice of activities. In the agricultural sector, for example, there is a growing potential for self-employment in animal husbandry, fisheries, forestry, sericulture, floriculture, handlooms, and various types of services. If a few of those activities are selected in a district, the necessary infrastructure and linkages could be provided to make the activities viable.

3.72 Proper identification of training needs in relation to the demand is also essential. In the last four years 1990-93 about 112 lakh youths were trained under TRYSEM, however 62 lakh got employment. The possible mismatch between the requirement and the training provided in terms of quantity as well as quality needs to be removed. Financial institutions need to involve themselves in the selection of beneficiaries and identification of viable schemes to a greater extent. It is necessary that once a viable unit is identified, financing should be on the basis of cost of the project. Underfinancing would only be self- defeating. Organisation of group self employment activities and cooperatives would help in reducing risk both to the individual and the financing institutions. Promotion of group activities based on a cluster approach would be a more suitable strategy than the existing individual-beneficiary approach in realising the stated objective of sustained self-employment.

3.73 In relation to the wage employment schemes, the NDC Committee on Employment raised two issues, viz. (a) whether it would not be useful to think in terms of a national employment guarantee scheme on the lines of the Maharashtra EGS and (b) whether the two objectives of providing a safety net to the poor and creation of productive infrastructure and assets could be combined. On the first issue, the NDC Committee and the Eighth Plan recommended selectivity in the area of coverage in view of the high cost of operating the guarantee on a nation-wise scale. As mentioned earlier, creation of about 270 crore person-days of work would meet the total requirements of unskilled manual employment in a year in the rural areas. Assuming that it would cost Rs.50 per day of employment generated, a total expenditure of Rs. 13,500 crore annually would be required to operate a nation-wide guarantee programme. To begin with, it could be started in 120/150 IJRY districts by combining IJRY with EAS, where both are in operation and later extended to a larger number of districts.

3.74 On the second issue, the Eighth Plan had recognised the need for building up of rural infrastructure, which is an essential prerequisite for more sustained employment. All weather roads are needed where inaccessibility to markets, information and to inputs is a bottleneck; minor irrigation works, and water harvesting structures are required to conserve scarce water resources; schemes for soil conservation and social forestry for arresting soil erosion and top soil water run-off; construction of school buildings, primary health centres, anganwadis and panchayat ghars etc. for building the essential social infrastructure. Under the various wage-employment programmes a diverse range of such durable community assets have been created which have strengthened the social and economic infrastructure in the villages, while continuing to focus on employment generation, for poverty alleviation.

3.75 Effective planning, implementation and monitoring of the programmes requires effective institutional mechanisms. The Eighth Plan recognised the need to involve people in the process of development and to build up people's institutions at the grass root level for this purpose. It laid stress on involving the Panchayat Raj Institutions and voluntary agencies in planning and implementation of various development activities including special employment schemes. The Constitution (73rd Amendment) Act, 1992 vide Art. 243(G) provides that the legislature of the State may, by law, endow the Panchayats with such powers and authority as may be necessary to enable them to function as institutions of self-government and to provide for devolution of powers and responsibilities to Panchayats at the appropriate level with respect of the preparation and implementation of plans for economic development and social justice including those in relation to the matters listed in the Eleventh Schedule. In pursuance of this, all the States and Union Territories where this Act is applicable, have either amended their existing legislation or brought in fresh legislation. State Election Commissions and State Finance Commissions have been appointed by them. The successful implementation of this provision of the Constitution would depend upon the extent of functions and resources that are placed at the disposal of Panchayat Raj Institutions and the powers entrusted to them for implementation of programmes. Training and dissemination of information would have to receive a high priority, and for this, financial assistance is being given by the Centre to the States. Elections to Panchayat Raj Institutions have been held in many States/Union Territories and during the course of this year these should be in place in all States/Union Territories. On the question of devolution of financial powers and the raising of "own resources" by the Panchayats, the State Finance Commissions are expected to make their recommendations by the end of October 1995.

3.76 In addition to elected bodies at the district and sub-district levels the Eighth Plan had stressed the role of voluntary organisations and self-managed institutions in the planning and implementation of various rural development programmes including the anti-poverty programmes. In the Seventh Plan period Council for Advancement of Peoples' Action & Rural Technology (CAPART) was created with the specific purpose of providing assistance to voluntary organisations in the field of rural development. One of the major objectives of CAPART is the development and dissemination of appropriate technology for rural areas. It acts as a catalyst for development of appropriate technology and also promotes transfer of new technology through voluntary agencies. In the field of health, sanitation, housing, post-harvest technologies, agricultural tools, rural energy and village industries CAPART has supported action research. It is in touch with scientists and scientific institutions and has set up 10 Regional Resource Centres of Rural Technology in the voluntary sector. Last year the Planning Commission organised a meeting of selected voluntary organisations to work out the plan of action in which the Government and NGOs could play a collaborative role. Some of the important functions to be discharged by the voluntary organisations included mobilisation and organisation of the poor, providing of delivery services, transfer of appropriate technology, training, planning and acting as catalytic agents of change. The Government, in turn, was to assist the voluntary organisations both in ironing out administrative encumbrances faced by them, as also in providing financial and other assistance. As a result, a joint machinery of Government and NGOs has been constituted to give a greater thrust to ensure better implementation of rural development programmes.

Schemes in the Urban Areas

3.77 While rural poverty, because of its sheer size, claims most of the attention, urban poverty is no less significant. According to the official estimates for 1987-88, about one-fifth of the total urban population or 4.2 crore persons is below the poverty line. Estimates of poverty prepared recently by the Expert Committee, however, indicate a much higher level of poverty in the urban areas. According to these estimates, the percentage of the poor in 1987-88 was 40% in the urban areas, it has fallen more slowly than in the rural areas over the past two decades, and it is now higher than in the rural areas. Unemployment rates as revealed by NSS surveys in various rounds have always been higher in urban areas than in the rural areas. Studies based on results of the NSSO indicate that urban poverty is relatively high among the self-employed households which account for about two-fifths of all urban population, and among the casual labour households which account for another one-fifth of the urban population.

3.78 The Eighth Plan noted that the problem of urban poverty is a manifestation of the high incidence of marginal and low income employment in the informal sector and that what is needed is an upgradation of informal sector occupations and their integration with the urban economy. It highlighted the need for an integration of the on-going anti-poverty programme of Nehru Rozgar Yojana (NRY) in the urban areas with other programmes for urban development such as the Integrated Development of Small and Medium Towns and the housing and infrastructural programmes of HUDCO to achieve better coordination. It also emphasised the need for effective identification of appropriate activities and suitable organisation at the district/local level and people's participation for a more effective implementation of NRY.

3.79 The NDC Committee on Employment felt that both on account of the nature of the urban unemployment and the kinds of works that can be taken up, the scope and utility of wage employment programmes are limited in the urban areas, and that the primary emphasis for generation of employment in the urban areas would have to be on self-employment in processing and services sector. The Committee referred to the inadequacy of the level of investment per enterprise under the existing urban self- employment programmes and suggested that the success of self-employment programmes depends on appropriate choice of viable ventures with adequate linkages to the availability of inputs and marketing and other support mechanisms.

3.80 The four-pronged strategy adopted currently for eradication of urban poverty comprises : (i) employment creation for low income communities through promotion of micro enterprises and public works; (ii) housing and shelter upgradation; (iii) social development planning with special focus on the development of women and children; and (iv) environmental upgradation of slums. The Central Government has been funding since 1989 the scheme of Nehru Rozgar Yojana (NRY) which focuses on employment aspects of poverty eradication and partly on shelter upgradation. The State Governments and responsible for the scheme of Environmental Improvement of Urban Slums. A new Centrally sponsored Scheme titled Prime Minister's Integrated Urban Poverty Eradication Programme (PMIUPEP) is also being taken up from 1995-96. Apart from these anti-poverty programmes, there are also other schemes for promotion of self-employment opportunities in the urban areas operated both on a national scale as well as by the individual State Governments. The most important national level scheme has been the Scheme for Self-employment for the Educated Unemployed Youth, which from 1994-95 has been subsumed in the new scheme called the Prime Minister's Rozgar Yojana (PMRY) now implemented both in the urban as well as rural areas.

Nehru Rozgar Yojana (NRY)

3.81 The urban poor constitute the broad target group of NRY. Within this target group, women and beneficiaries belonging to Scheduled Castes and Scheduled Tribes constitute special target groups. It is expected that broadly 30 per cent of the beneficiaries setting up self-employment ventures under NRY should be women. NRY consists of three Schemes :

Table 3.10
Nehru Rozgar Yojana
Targets and Achievements(1992-95)

(in lakh)

Scheme	1992-93 Achievement	1993-94 Achievement	1994-95 Target	1994-95 Achievement
(1)	(2)	(3)	(4)	(5)
1.SUME No. of beneficiaries assisted.	2.37	1.52	1.20	1.25
2.SUWE No. of mandays of work generated.	76.27	72.17	35.00	50.85
3.SHASU a)No. of mandays of work generated	64.22	51.50	65.00	13.11
b)No. of dwelling units upgraded and in progress.	2.28	0.56	1.60	0.62

(i) The Scheme of Urban Micro Enterprises (SUME)

(ii) The Scheme of Urban Wage Employment (SUWE)

(iii) The Scheme of Housing and Shelter Upgradation(SHASU)

3.82 SUME assists eligible beneficiaries to secure technical training and to set up micro-enterprises with the help of seed money provided by the Government as subsidy and bank loan. The Scheme is applicable to all urban areas. SUWE aims at provision of wage employment opportunities to the urban poor through construction of socially and economically useful public assets in towns with a population of upto one lakh. SHASU seeks to provide training in construction trades as well as loan and subsidy from HUDCO to enable the urban poor to upgrade their shelter with improvements relating to roof, flooring, etc. The Scheme is applicable to all towns with a population between one lakh and 20 lakh, with relaxation in the population criteria for hilly States, Union Territories and new industrial townships.

3.83 NRY had outlays of Rs. 71.00 crore in the Central Plan for 1992-93, Rs. 74.97 crore in 1993-94 and Rs. 70.00 crore in 1994-95, which are more or less fully utilised. The achievements under various components of NRY are given in Table 3.10.

Prime Minister's Integrated Urban Poverty Eradication Programme for Small Towns

3.84 This new scheme proposed to be launched from 1994-95 is applicable to Class II towns. Some of the prominent features of the scheme are : (i) an integrated, convergent, whole town and project approach to urban poverty; (ii) participating implementation of urban poverty alleviation programmes; (iii) integration of employment generation aspect with the provision of basic services to the poorer segments of the population; and (iv) co-ordinating and facilitating role for the Urban Local Bodies (ULBs) in view of the 74th Amendment to the Constitution. This programme will not entirely depend upon the traditional financial institutions and envisages mobilisation of resources through community, urban local bodies and private sector participation. The Scheme, which is in the formulation stage, covers areas such as provision of basic physical amenities in urban poor localities, self-employment including a component of training, and shelter upgradation. It has now been decided that as an essential eligibility criterion, the Scheme would be applicable only to those towns where elections to urban local bodies have been held. It is hoped that the new scheme will plug some of the loop-holes in the organisational and implementational aspects of NRY and the avowed objective of convergence of the poverty alleviation programmes will be achieved.

Scheme of Self-Employment for Educated Unemployed Youth (SEEUY)

3.85 SEEUY had been under implementation for about a decade from 1983 in all urban areas other than cities with a population of ten lakh or more. It was targetted at educated unemployed youth (in the age-group 18-35) belonging to families with income not exceeding Rs. 10,000 per annum. A package of assistance (a mix of subsidy and bank loan, with the Central Government providing Capital subsidy of 25 per cent of the loan from the bank) was provided for taking up self-employment ventures in industry, services and business. No margin money was required on the part of the entrepreneur. The scheme was operated upto the year 1993-94 and from 1994-95 it was subsumed by the new Scheme of Prime Minister's Rozgar Yojana (PMRY). About 15.93 lakh educated youth had been assisted under the scheme with loans amounting to Rs.3,190 crore between 1983 and 1993. During the Eighth Plan, about 73,000 persons were assisted during 1992-93 and 56,500 (Provisional) during 1993-94.

Prime Minister's Rozgar Yojana (PMRY)

3.86 Prime Minister's Rozgar Yojana (PMRY) was launched in urban areas only during 1993-94. However, from 1994-95, this scheme is being implemented both in the urban as well as rural areas. The objective of the scheme is to provide self-employment opportunities in industry, business and services to ten lakh educated unemployed youth. The scheme is applicable to youth in the age group of 18 to 35 years, who are matric passed or failed or ITI passed or who have undergone Government-sponsored technical course for a minimum duration of six months, and have a family income not exceeding Rs. 24,000 per annum from all sources. Projects with a cost of upto Rs. 1 lakh are covered under the scheme in the case of individuals, but if two or more eligible persons join together, projects with higher costs would also be covered to the extent of Rs. 1 lakh per person. The entrepreneur is required to contribute 5 per cent of the project cost as margin money and the balance of 95 per cent would be sanctioned as a composite loan by banks without any collateral guarantee. The Central Government would provide subsidy at the rate of 15 per cent of the project cost subject to a ceiling of Rs.7,500 per individual. The scheme envisages compulsory training for the entrepreneurs for a period of four weeks after the loan is sanctioned, during which a stipend of Rs. 300 is paid.

3.87 During the first year of its implementation (1993-94), 32,000 cases were sanctioned against the a target of 40,000. The target for 1994-95 is 2.20 lakh against which, according to provisional information available, about 1.77 lakh cases were sanctioned.

Schemes of the State Governments

3.88 Schemes for encouraging self-employment in urban areas are being implemented in several States. Often, these schemes apply to both urban as well as rural areas. For instance, the Government of Andhra Pradesh has been operating the Society for Employment and Training in the Twin Cities (SETWIN) providing informal training and assistance in taking up self-employment. Similar Societies for Training and Employment Promotion (STEPs) are now run in all the other districts of the State. The Government of West Bengal have been operating a Scheme for Self-Employment for Registered Unemployed (SESRU) since 1985. The Sanjay Gandhi Swavalamban Yojana in Maharashtra, the Soft Loan Scheme in Madhya Pradesh, the Society for Self-employment in Delhi, the schemes of the Manipur Development Society in Manipur, the scheme for self-employment assistance to the educated youth in Nagaland, etc. are some of the efforts on the part of the individual State Governments in promoting self-employment. Many of these schemes are targetted at the educated unemployed.

Impact of the Urban Programmes

3.89 The anti-poverty programmes in the urban areas are more limited in scale and command considerably less resources than the schemes for the rural areas. Their impact on reduction of poverty would consequently be more limited. A review of the implementation of the urban poverty- alleviation programmes indicates a number of operational problems, enumerated below:

(i) While the SUME and SUWE components of NRY have been found to be operationally efficient, having achieved the targets set, SHASU seems to be a 'low achievement' element in the whole programme with achievements in terms of dwelling units upgraded/in progress amounting to only 49% of the targets. There seems to be problems in States not completing necessary documentation formalities, including not furnishing the State guarantee as required by HUDCO, and low recovery of loans as no income generating activity is involved.

(ii) The utilisation of allocations for SUME which is the most productive component of NRY creating self-employment opportunities has not been given due priority. The Central subsidy released under this component since inception of the Scheme upto 31 March 1994 was a mere 17 per cent of the total Central Plan allocation for this component.

(iii) Government subsidy under SUME is limited to 25% of the project cost subject to a ceiling of Rs.5,000 for SC/ST and women beneficiaries and Rs. 4,000 for others. The remaining 75% being secured as loan from Scheduled Banks upto a maximum of Rs. 15,000 for SC/ST and women and Rs.12,000 for others. In order that the enterprises do not suffer from lack of funds, there should be no outer limit to the loan which should be decided on the basis of need and economic viability of the project and need not be linked to the subsidy amount. This aspect has been taken care of in the Prime Minister's Integrated Urban Poverty Eradication Programme where the self-employment component would be on the pattern of PMRY. It has been proposed that SUME should also be on the same pattern.

(iv) There seems to be some unwillingness on the part of the banks in processing and disbursing the loans for fear of non-recovery. A decision has now been taken to constitute a review committee to look into various matters pertaining to overall implementation of funds under the NRY.

(v) A sample study in five States showed that towns with a population of less than one lakh have achieved higher utilisation rates under SUME. In the case of Metro cities like Bombay, very few families fulfilled the income criterion, possibly because of the dominance of large-sized families with more number of earners per family. If, instead of income per family income per capita is adopted as the criterion of eligibility, a better utilisation may be achieved.

(vi) In the case of SUWE, some States did not take up labour intensive schemes, leading to a shortfall in the employment generation. The material-labour ratio fixed also does not seem to be conducive to produce works of quality and longevity. In many cases, the stipulation that the works should generally be taken up in backward or minority areas is not strictly followed.

(vii) The existing organisational structure of NRY places a large responsibility on the Urban Local Bodies (ULBs) and various tasks such as assisting the District Urban Development Agencies/District NRY Committees in socio-economic surveys for identifying beneficiaries, assisting the eligible beneficiaries in setting up self employment ventures and liasing with banks for obtaining loans etc. are expected of them. However, in most cases, ULBs are not equipped either in terms of staff or orientation in planning and management. If NRY has to be implemented more effectively and on a wider scale, it would be necessary to strengthen the ULBs in financial and management terms and also in their commitment to the programme, including closer interaction with NGOs and community workers in slums.

3.90 A Sample survey on management and organisational aspects of NRY recently conducted observed that maximum funds under the Scheme were released in the year of launching (1989) and the backlog in utilisation increased in subsequent years in the absence of equivalent expenditure, utilisation remained poor as the implementing agencies were unprepared to launch the Scheme. However, those States which were able to develop infrastructure for implementation achieved better results. The study also observed that majority of the States did not undertake any socio-economic survey for identification of the target group.

Issues and Future Directions

3.91 Urban poverty is no less severe than the poverty in the rural areas. However, the priority attached to the alleviation of urban poverty is much lower in comparison to that attached to similar programmes in the rural sector. Going by the official estimates of poverty, it is observed that the per capita (per each poor person) outlay (Central share) under NRY, which was one-third of that under JRY in 1989-90, declined to less than one-tenth at present. Even with the initiation of the new scheme of Prime Minister's Integrated Urban Poverty Eradication Programme, the outlays on urban poverty programmes are too meager to have any significant effect. There is, therefore, a case for a sizeable step-up in the scale of these programmes.

3.92 There are quite a few programmes both at the Central and State level which have a direct bearing on the alleviation of urban poverty. These programmes are, however, being implemented through a large number of administrative Ministries and often lack coordination. The convergence of various urban poverty alleviation programmes both at the Central and State level is essential so as not to dissipate the efforts of the various administrative Ministries/Departments. The Centrally Sponsored Scheme of Urban Basic Services for the Poor(UBSP) was launched with this objective in view so as to maximise reach and impact of the various programmes. The strategy implicit in the programme lies in organising communities and creating community based structures and thereby facilitating systematic planning and implementation at the community and city level. The community based structures formed under UBSP, such as the Neighbourhood Committees(NHC) and Community Development Societies(CDS) have over time demonstrated their potential in improving the efficiency and impact of the programme implementation. While conceptually UBSP provides the right mechanism for convergence approach as well as community participation, the ground situation is somewhat different. In the first place, the coverage of UBSP is limited to only about 280 towns and there too only a fraction of slum population is covered. Secondly, the organisation and functioning of UBSP is not uniformally satisfactory. It would seem necessary to restructure and extend the UBSP programme. It would seem necessary to restructure and extend the UBSP programme. The new scheme of Prime Minister's Integrated Urban Poverty Eradication Programme also aims at a measure of convergence of services under various on-going programmes.

3.93 As regards the other self-employment programmes in urban areas, PMRY is an improvement over the earlier SEEUY. The average investment per venture was of the order of Rs.20,000 under SEEUY. It was also observed that the success rate in the self-employment units set up under the scheme had been about 60 percent only, perhaps due to the inadequacy of the level of investment. The NDC Committee observed that "the possibility of starting and running an enterprise with adequate return under SEEUY is doubted." The Committee laid stress on assessing the economic viability of the venture properly which would encourage the banks to increase the loan assistance, thereby contributing to an overall increase in the level of investment. It also recommended that a minimal contribution from the beneficiary should be insisted upon and that the subsidy should be to a lower extent than in the anti-poverty schemes like IRDP and NRY (SUME). PMRY incorporates these suggestions. Investment limit has been raised to Rs. one lakh per individual, permitting higher levels of investment on the enterprise in case of partnerships. Provision for the entrepreneur's contribution of 5 per cent of the cost of the project as margin money has been included. The limits on family income in the criteria for eligibility have been raised. Government of India's subsidy is limited to 15 per cent subject to a ceiling of Rs. 7,500 per entrepreneur. The Scheme also envisages compulsory training for the entrepreneurs. With these improvements over SEEUY, the new scheme is expected to have a higher success rate.

3.94 There are self-employment components under NRY in the form of SUME and under the proposed new Scheme of Integrated Urban Poverty Eradication Programme.(PMIUEP) It has been decided that the self-employment component under PMIUEP would follow the PMRY pattern. The SUME component of NRY, as stated earlier, suffers from the limitation that the investment levels allowed are rather low rendering the ventures unprofitable. With the implementation of PMRY and PMIUEP, the self-employment component under NRY could be at a disadvantage. It is, therefore, necessary to bring SUME also on par with PMRY. Moreover, there is a need for a coordinated implementation of PMRY and the self employment components of PMIUEP and NRY in the urban areas. Where possible, a merger of the three could be considered. This should now be easier as all the schemes come under the purview of the newly found Department of Urban Employment & Poverty Alleviation.

Employment Programmes for Women

3.95 While programmes like IRDP and JRY and SUME under NRY require a specified proportion of their respective target groups to be women and DWCRA is for strengthening the gender component of IRDP, four Central sector programmes specially designed to promote employment and income earning opportunities for women are being implemented. Support to Training-cum-Employment Programme (STEP) consists of action projects designed to strengthen and improve women's work and employment in traditional sectors like agriculture, animal husbandry,dairying, fisheries, handlooms, handicrafts and khadi and village industries. The focus is on the poorest and the most marginalised and assetless women. The programme is implemented through public sector. District Rural Development Agencies, federations of cooperation and voluntary organisations which are provided grants-in-aid to the extent of 90% of the cost of the projects. The second programme relates to the setting up of employment and income generating training-cum - production units for women being implemented with assistance from NORAD. The programme, which is implemented through public sector organisations and undertakings, corporations, autonomous bodies and voluntary organisations provides training women in non- traditional trades, especially in modern and upcoming trades like electronics, computer programming, garment making and fashion technology. The third is the socio-economic programme of the Central Social Welfare Board for providing employment opportunities to the needy and poor women, widows, deserted women and the handicapped. These programmes have generally performed well with the number of beneficiaries covered well above targets set for each year, as indicated in Table 3.11 below. The fourth is the Rashtriya Mahila Kosh, set up during 1992-93 with major objective of meeting the credit needs of poor women, especially those in the informal sector. The Kosh commenced its operations effectively only in Oc-

Table 3.11
Employment Programmes for Women-
Targets & Achievements: 1992-95

Programme	Period	No.of Beneficiaries Target (000s)	Achievement (000s)	Financial Outlay (Rs.crores)	Expenditure (Rs.crores)
(1)	(2)	(3)	(4)	(5)	(6)
1. STEP	1992-97	50		57.00	
	1992-93	10	11.35	11.00	11.00
	1993-94	10	12.00	15.05	15.05
	1994-95	10	68.59	15.00	15.98
2. Employment and Income Generating Training-cum -Production Centres (NORAD assisted)	1992-97	25		20.00	
	1992-93	4	7.16	4.00	4.00
	1993-94	4	6.00	4.00	4.31
	1994-95	4	9.64	4.00	4.99
3. Socio-Economic Programme	1992-97	30		25.00	
	1992-93	6	6.02	5.75	5.64
	1993-94	6	6.08	4.50	4.50
	1994-95	6	6.77	5.50	5.00

tober 1993. Till the end of March 1995, the Kosh has assisted about 62,3000 beneficiaries, sanctioning credit amounting to Rs. 9.59 crores and disbursing about Rs. 5.70 crores. Roughly three fourths of the credit from the Kosh financed purchase of mirch-masala(30%), retail trade(17%), catering units (15%) and fishing (11%).

3.96 There is a need to bring about a greater convergence in various programmes which focus on women, including health, family welfare, nutrition, women and child care, education, with programmes of training and income generation. In the rural development sector, this is being attempted, on a pilot basis under the new scheme of Community based Convergent Services (CBCS). This scheme seeks to build around one lead programme, with other schemes being dovetailed through awareness- generation, community participation, and involvement of voluntary agencies. In addition, the reservation of one- third seats for women in Panchayati Raj Institutions and 33 per cent chairpersons as women, should usher in a new era of women's participation in the development process both at the planning and implementation stage. This empowerment would lead to greater economic and social status for them.

Special Employment Programmes - Summing up

3.97 The strategy adopted for tackling the issues of poverty and unemployment is a two-track one in which the benefits of normal growth process are supplemented by those from direct measures like the Special Employment Programmes, which are more immediate. This seems inescapable at least as long as the present high levels of poverty persist. A question that is sometimes raised in this context is the relative efficacy of the two tracks in this strategy. Special employment programmes like JRY claim investible resources which could otherwise have contributed to growth process. A study on costs and benefits of rural works programme in India has indicated that the benefits accruing from such programmes in raising the income levels of the poor outweigh the costs in terms of reduction of GDP growth due to diversion of investible resources. For instance, it is estimated that a rural works programme starting with an expenditure of 6 per cent of GDP and which declined over time would slow down GDP growth rate only by 0.25 percent per annum over a 20-year period and that the per capita GDP in the terminal year would be lower only by 4.6 per cent while the incomes of the two poorest classes in the rural areas would improve by 40 per cent over the 20 year period. As stated earlier, the current level of outlays on JRY and other rural employment programmes constitutes only 0.8 per cent of GDP. While, therefore, the benefits may be smaller than the study indicated, the costs in terms of growth foregone may not also be large.

3.98 While the expenditure on direct measures to tackle poverty is, therefore, justified as long as rapid eradication of poverty remains a prime objective, there is a recognised need for better targetting and greater efficiency in the implementation of these programmes so that the benefits derived are optimised. In the rural areas, appropriate integration of various on-going wage employment programmes among themselves and with programmes for rural infrastructure building and other development programmes is necessary. Such integration will also enable special employment programmes to contribute directly to the growth process, thereby reducing the force of the "growth foregone" argument. It may also be useful to concentrate allocation of resources on areas with higher levels of poverty, unemployment and underemployment rather than spreading these resources thinly all over the country. A beginning has already been made in introducing this element of selectivity through IJRY and EAS. In the urban areas, the size of the existing programmes of NRY is too small to have any significant impact. There is a case for raising the outlays on the urban anti-poverty programmes significantly. In so far as the self-employment schemes are concerned, some steps have been taken, as mentioned earlier, in improving the performance of IRDP such as raising the investment levels. PMRY is also in operation in the rural areas. As stated earlier, about 59% of the rural unemployed are educated and are, therefore, eligible for assistance under PMRY. It, therefore, appears that some sort of coordination would be required in the implementation of the two programmes. This is true in urban areas too, where PMRY, NRY (SUME) and the self-employment component of PMIUPEP as well as a number of other State level self-employment schemes are/would be in operation. Here again, a coordinated approach is called for.

Section 4

Conclusion

3.99 The Eighth Plan envisaged the creation of additional employment opportunities of the order of 426 lakh during the Plan period on the assumption that the economy would grow at the rate of 5.6 per cent per annum and the employment intensity of growth would be 0.47. An assessment of the performance of the economy in the first three years of the Plan shows that the economy has grown at the rate of only 4.6 per cent per annum, that is, at a rate less than that envisaged in the Plan and that attained during the Eighties. There has, however, been a shift in the composition of growth in favour of employment-intensive sectors and sub-sectors during the period 1992-95 compared to the Eighties. As a result, employment has grown at the average annual rate of 2.03 per cent during the period 1992-95, or 63 lakh per annum compared to a rate of growth of 1.78 per cent or 50 lakh per annum, during the preceding seven years. But this rate of employment growth falls short of the rate of growth of 2.7 per cent or 85 lakh additional employment opportunities per annum envisaged in the Plan and consequently, unemployment has increased from 1.7 crore at the beginning of the Plan to 1.87 crore by the end of 1994-95.

3.100 Employment growth, therefore, needs to average at 3.64 per cent per annum in the last two years of the Plan, if the employment objectives of the Plan are to be achieved. Even if the employment elasticity observed in the first three years of the Plan (0.44) improves to 0.5 in the next two years, the economy would have to grow at the average rate of 7.3 per cent per annum during the period 1995-97. Assessments and forecasts by various organisations and individuals indicate rates of growth of the economy between 5 to 7 per cent. Alternative growth scenarios and employment intensity of growth show that the most modest scenario of a 5.5 per cent growth rate of the economy with an employment elasticity of 0.44 (observed during 1992-95) will create 3.445 crore additional employment opportunities during the Plan period. This would just about take care of the net additions to labour force during the period leaving the backlog at the beginning of the Plan period untouched. The most optimistic scenario of a 6.5 per cent growth rate of the economy with an employment elasticity of 0.5 will also result in a shortfall of about 27 lakh in additional employment generation in the Plan, but will reduce the backlog of unemployment by about 50 lakh.

3.101 Prospects of achieving the goal of near full employment by 2002 appear feasible. Enhancement of public investment in agriculture, especially strengthening irrigation and other rural infrastructure in backward areas through firmly orienting special employment programmes to such efforts, substantial expansion and diversification of rural non-farm sector activities through promotional policies and efforts, continuance of such of the elements of the policy for the small scale industry sector as are found to significantly contribute to the growth of this sector and relating them more closely to the employment intensity of investment rather than merely to capital size as at present, decontrol and delicensing of consumer goods industries to bring about faster growth of such industries, ensuring continued buoyancy in exports of employment-intensive products and development of infrastructure and supporting facilities to enhance the export potential of products like fruits and vegetables, processed foods and fish and fish preparations and appropriate policy changes to further develop domestic and international tourism are some of the areas which need attention from the point of view of faster growth of employment-intensive sectors. The construction sector could be expected to grow faster than in recent years with the liberalisation of infrastructure building, but larger public investment in rural roads, school and health centre buildings and reforms in urban land control systems and tax incentives for savings and investment in housing will be necessary. Similarly, regulatory and taxation regimes for the transport sector and hotels and restaurants segments of the trade sector also need to be suitably liberalised further to bring about faster growth of these sectors. Financial and business services are expanding fast and so is their employment content. Foreign direct investment and domestic investment, much of which are in core industries like infrastructure and capital goods industries, would also lead to substantial indirect employment in the economy.

3.102 Attainment of a near full employment situation by 2002 would require that employment grows at an average annual rate of 3.1 per cent. Compulsions of raising productivity to improve efficiency and competitiveness may lead to a reduction in the employment content of growth in individual lines of production in the coming years. However, to the extent this is offset by changes in the composition of growth in favour of sub-sectors with relatively higher, through declining employment content, overall employment elasticity may increase. On balance, it would not be reasonable to expect an employment elasticity higher than 0.5. It would even be less, at around 0.45, nearer to that observed during 1992-95. Thus, a growth rate of the economy of around 7 per cent per annum would be required during the period 1995-2002 to achieve the goal of near full employment by 2002.

3.103 The first three years of the Eighth Five Year Plan have seen notable changes in the scale and content of the ongoing schemes of poverty alleviation. The total budgeted outlay for rural development in the Eighth Five Year Plan is pegged at Rs.30,000 crores at 1991-92 prices. In the first year Rs.3600 crores was allocated for rural development which was enhanced to Rs.5605.00 crores in 1993-94 and further to Rs.7010 crores in 1994-95.

3.104. Several new initiatives have been taken to enhance and improve the scope of the different poverty alleviation programmes. In the context of wage-employment programmes significant interventions have been made. The Eighth Plan had recognised that under the JRY, the resources were spread thinly as every village was covered, with average employment generation of 15-25 days per person. Consequently, a second stream of JRY was introduced in 1993-94 with substantial additional resources flowing to 120 identified backward districts. Further, an EAS was launched in selected blocks, which now number 2446, situated in tribal, desert, drought-prone, flood-prone and hill districts, to provide assured employment of upto 100 days to an adult seeking manual work. Together, these new initiatives have led to a considerable increase in employment per person which is estimated at 60 days per year. An estimate made in the Planning Commission shows that this takes care of 47 per cent of the total number of person days of under-employment.

3.105 Under IRDP the major thrust has been on increasing the per capita investment. In this effort, attention is being focussed on the Family Credit Plan wherein the guiding principle is more income through higher investment levels. Strengthening of infrastructure, linkages and marketing has also been a major area prioritized for progressive development. Furthermore, quality parameters of IRDP have also received greater attention with the introduction of development audit and a more rigorous regimen of monitoring and inspection.

3.106. The need for a high degree of convergence between the various poverty alleviation programmes, the area development programmes as well as sectoral schemes has also been recognised. This convergence is possible at the district level within a well- formulated district plan prepared on the basis of resource availability and locally felt needs. A High Level Technical Committee on DPAP and DDP recommended that IRDP and JRY could be dovetailed into the area development programmes with focus on land development and water conservation. Consequently, common guidelines have been issued for the preparation and implementation of watershed projects, with dovetailing of DPAP, DDP, IJRY, EAS and IWDP funds. Peoples participation via formation of self-help and user-groups is mandatory; these are to be assisted by a team of professionals from different line departments. It is hoped that this integration with greater peoples' participation would make a better impact on the development of rural infrastructure for more sustained employment.

3.107 The Eighth Plan laid stress on involving Panchayati Raj Institutions (PRIs) and voluntary organisations in planning and implementation of various development activities including special employment schemes. Consequent to the enactment of The Constitution (73rd Amendment) Act 1992 all States and Union Territories where this Act is applicable have brought in suitable legislation to empower the PRIs. Success in this area would depend upon the extent functions are assigned to and resources are placed at the disposal of PRIs and powers given to them for implementation of programmes.

3.108 Considering the extent of urban poverty, the anti- poverty programmes in urban areas need substantial expansion. There is also a need for coordinated implementation of various self-employment schemes operated by the Central and State Government agencies to enhance their impact.

3.109 On the question of trade-offs between special employment programmes and growth, a study on costs and benefits of rural works programme in India has indicated, for example, that a rural works programme starting with an expenditure of 6 per cent of GDP and which declined over time would slow down GDP growth only by 0.25 per cent per annum over a 20-year period and that per capita GDP in the terminal year would be lower only by 4.6 per cent while the incomes of the two poorest classes in the rural areas would improve by 40 per cent over the 20-year period. At the 1994-95 levels, outlays on JRY and other rural employment programmes constituted only 0.8 per cent of GDP. While, therefore, the benefits may be smaller than what the study indicated, the costs in terms of growth foregone may not also be large, and the expenditure on such schemes is justified as long as rapid eradication of poverty remains a prime objective. To the extent these programmes are anchored on to the development of infrastructure, the trade-off with growth will also be still less.

3.110 A direct assessment of the impact of the employment- oriented growth process and anti-poverty programmes on levels of poverty is not possible in the absence of up-to-date data. An analysis based on the functional relationship between incidence of poverty, per capita GDP (in agriculture in the case of rural poverty and in manufacturing, electricity and construction in the case of urban poverty) and relative prices of foodgrains shows that incidence of poverty is likely to have declined in 1994-95 from levels observed in 1991-92.

Annex 3.1

Average Annual Growth rates of Employment by Sectors in States and Union Territories: 1981-91

States/UTs	Agri.	Mining & Quarrying	Mnfg	Const-ruction	Trade	Trpt.	Service	All Sectors
Chandigarh	8.01	3.19	3.09	7.52	6.00	4.29	1.64	3.62
Delhi	1.41	-1.68	2.54	6.47	5.38	3.26	4.54	4.10
Haryana	2.06	5.25	0.56	2.81	3.65	3.10	5.68	2.56
Himachal Pradesh	1.30	1.85	1.54	0.89	4.04	2.42	5.41	1.92
Jammu & Kashmir	1.69	5.94	8.18	5.20	5.22	2.54	4.09	2.84
Punjab	1.63	-6.99	1.45	4.48	3.26	2.43	3.79	2.15
Madhya Pradesh	2.02	2.20	0.76	2.08	4.30	2.38	4.66	2.21
Uttar Pradesh	2.17	5.69	0.93	4.45	5.68	1.49	4.42	2.47
D & N Haveli	3.24	59.26	13.04	-8.35	8.99	13.61	2.81	3.69
Daman & Diu	1.74	-4.96	4.87	6.92	6.84	6.61	7.20	4.25
Goa	0.37	-1.43	2.40	3.87	4.58	2.38	3.17	2.11
Rajasthan	2.74	4.17	1.10	4.89	4.83	2.59	4.19	2.91
Gujarat	2.00	4.68	2.85	5.39	4.05	2.42	3.54	2.53
Maharashtra	2.04	5.87	1.89	4.64	4.30	3.77	3.47	2.47
Bihar	2.28	-0.45	-2.50	-0.36	1.83	-1.48	5.94	2.13
Orissa	1.56	3.49	1.41	-0.59	4.62	2.88	3.23	1.85
Sikkim	1.58	8.12	2.28	-0.85	4.64	6.85	-1.79	1.09
West Bengal	2.48	0.87	2.49	6.07	5.02	3.34	3.65	2.93
Arunachal Pradesh	1.09	30.35	5.50	0.69	6.40	13.05	6.31	2.24
Assam	2.30	4.39	2.51	5.01	3.66	2.66	3.18	2.53
Manipur	2.20	-0.46	-1.35	0.17	3.45	5.19	4.00	2.14
Meghalaya	1.47	0.68	0.69	1.14	6.31	3.80	4.91	2.12
Mizoram	2.30	16.25	5.49	2.27	10.60	6.14	6.11	3.49
Nagaland	3.58	2.99	1.16	6.17	4.76	2.07	2.20	3.34
Tripura	1.85	7.95	1.79	-0.12	5.01	5.38	6.00	2.80
Andhra Pradesh	2.08	9.35	0.98	3.88	3.52	2.70	4.09	2.31
A&N Islands	2.91	7.61	2.43	2.75	5.97	5.62	9.02	3.78
Karnataka	2.06	4.88	1.10	4.56	4.44	2.43	4.37	2.39
Kerala	1.23	4.21	0.87	5.08	3.42	3.79	3.31	2.03
Lakshadweep	5.83	0.00	-3.71	15.44	4.44	6.27	4.00	4.54
Pondicherry	2.59	21.37	2.30	5.40	6.26	3.67	8.02	4.22
Tamilnadu	1.48	2.92	1.00	3.72	2.10	2.44	4.70	1.83
All India	2.06	3.02	1.30	4.00	4.07	2.59	4.22	2.37

Note: Census 1981 and 1991 were not conducted in Assam and J&K respectively.

Annual Average Growth Rates of Assam and J&K are 1971-91 and 1971-81 respestively.

Annex 3.2

ESTIMATES OF EMPLOYMENT: 1992-95

Industry/Sector (with NIC code)		Employment (Lakhs) End of March 1992	GDP Growth (%) 1992-93 (P)	GDP Growth (%) 1993-94 (Q)	GDP Growth (%) 1994-95 (A)	Elasticity 1992-93	Elasticity 1993-94	Elasticity 1994-95	Emploment Growth (%) 1992-93	Emploment Growth (%) 1993-94	Emploment Growth (%) 1994-95	Employment (Lakhs) End of March 1993	Employment (Lakhs) End of March 1994	Employment (Lakhs) End of March 1995
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
0	Agriculture, forestry & fishing *	1914.5	4.92	2.24	2.38	0.45	0.50	0.55	2.22	1.12	1.31	1956.9	1978.9	2004.8
1	Mining & quarrying	26.4	1.55	4.77	5.71	0.64	0.64	0.64	0.99	3.05	3.65	26.7	27.5	28.5
2&3	Manufacturing	331.1	3.11	3.61	8.71	0.60	0.60	0.55	1.87	2.17	4.79	337.3	344.6	361.1
4	Electricity, gas & water supply	10.7	7.54	5.93	7.19	0.32	0.32	0.32	2.41	1.90	2.30	11.0	11.2	11.4
5	Construction	128.5	0.48	1.20	3.96	1.00	1.00	1.00	0.48	1.20	3.96	129.1	130.7	135.8
6	Trade, Hotels & Restaurants	232.4	6.49	4.46		0.50	0.62		3.25	2.77		239.9	246.6	
7	Transport, storage & communication	84.7	5.50	6.01		0.50	0.50		2.75	3.01		87.0	89.6	
(6+7)	Trade and Transport	317.1	6.18	4.93	5.86	0.50	0.58	0.70	3.09	2.86	4.10	326.9	336.2	350.0
8	Financing, insurance, real estate & business services	24.1	3.01	8.51	6.20	0.50	0.60	0.70	1.51	5.11	4.34	24.5	25.7	26.8
9	Community, social & personal services	264.9	4.37	4.81	4.84	0.50	0.60	0.60	2.19	2.89	2.90	270.7	278.5	286.6
	Total:	3017.3	4.33	4.30	5.26	0.50	0.38	0.44	2.18	1.63	2.29	3083.1	3133.3	3205.1

P - Provisional Estimates Q - Quick Estimates A - Advance Estimates

* 5 Year trend growth rates of GDP shown here have been used for estimating employment growth. Actual GDP rates of growth during these three years are 5.07%, 2.95% aand 2.39%.

Annex 3.3

Sectoral GDP Growth Rates Required During 1995-97 to Achieve Employment Goals of the Eighth Five Year Plan.

Sectors	Employment (Lakhs) end of March 1992	Employment (Lakhs) end of March 1997	A.G.R. (%) 1992-97	Achieved (Lakhs) 1992-95	A.G.R. (%) 1995-97	Average Elasticity	A.G.R. (%) 1995-97 (GDP)
Agriculture	1914.5	2080.0	1.67	90.3	1.86	0.50	3.72
Mining & Quarrying	26.4	33.0	4.56	2.1	7.61	0.64	11.88
Manufacturing	331.1	396.0	3.64	30.0	4.72	0.43	10.98
Electricity	10.7	13.0	3.97	0.7	6.79	1.00	6.79
Construction	128.5	165.0	5.13	7.3	10.23	0.32	31.96
Trade	232.4	296.6	5.00				
Transport	84.7	115.0	6.31				
Trade and Transport	317.1	411.6	5.36	32.9	8.44	0.50	16.89
Financing. Services	24.1	30.8	5.03	2.7	7.20	0.70	10.29
Community Services	264.9	313.6	3.43	21.7	4.60	0.60	7.67
Total	3017.3	3443.0	2.67	187.8	3.64	0.50	7.29

Annex 3.4

Structure of FDI and Investment Proposals in IEMs (Aug.91-Dec.93)

Industry/Sector	Share of Industry Sector in		
	FDI approved	Investment proposed in IEM's filed	Employment Potential in Col.3
(1)	(2)	(3)	(4)
Infrastructure	**42.2**	**5.61**	**5.50**
(i) Fuel(Oil Refinery etc.	17.6		
(ii) Power	15.3		
(iii)Hotel & Tourism	4.3		
(iv) Transportation	3.6	2.15	1.92
(v) Telecommunication	1.4	3.46	3.58
Consumer goods	**12.0**	**22.91**	**31.46**
(i) Food Processing	10.2	5.99	9.23
(ii) Textiles	1.8	13.45	16.70
(iii) Vegetable Oil & Vanaspati	-	3.47	5.53
Capital goods	**26.8**	**59.07**	**49.56**
(i) Metallurgical Industry	10.0	19.98	22.02
(ii) Electrical Equipments	8.4	5.52	5.78
(iii) Chemicals	6.6	18.69	11.88
(iv) Industrial Machinery	1.8	2.15	1.39
(v) Paper & Pulp	-	3.66	2.81
(vi) Cement & Gypsum Products	-	7.66	3.61
(vii) Rubber	-	1.41	2.07
Services	**9.4**	-	-
Others	**9.6**	**12.41**	**13.47**
Total	**100.0**	**100.00**	**100.00**

Annex 3.5

Physical Assets Created Under Jawahar Rojgar Yojana (1989-90 to 1994-95)

Sl.No	ITEMS	1989-90	1990-91	1991-92	1992-93	1993-94*	1994-95@	Total
		YEARS						
1	2	3	4	5	6	7	8	9
1	Social Forestry							
	i)Area Covered (hec)	188455.12	235081.40	92478.31	68732.06	75577.27	15167.09	675491.25
	ii) Trees Planted (lakh No)	2916.01	2671.08	6918.04	3416.84	2992.65	485.21	19399.83
2	Works Benefitting SC&ST (No.)	488511.00	402502.00	5844.00	431680.00	496520.00	91155.00	1916212.00
3	Minor Irrig. Flood Protection Works (Hec.)	54024.12	37454.12	56369.56	13034.00	42445.09	3964.31	207291.20
4	Soil Conservation Works (Hec.)	43001.32	17686.49	61708.07	9327.89	16463.85	923.00	149110.62
5	Const. of Village Tank (Nos)	20868.00	11692.00	10519.00	10189.00	274769.00	1586.00	329623.00
6	Land Development Works (Hec.)	13444.73	10253.92	12889.58	9465.10	4962.73	393.00	51409.06
7	Drinking Water Wells Ponds (etc.) (Nos)	154228.00	78784.00	86796.00	55437.00	88719.00	11899.00	475863.00
8	Rural Roads (kms)	180238.96	148912.36	111706.26	92837.28	109995.64	11672.97	655363.47
9	School Buildings (Nos)	34677.00	38490.00	31403.00	27101.00	35909.00	2884.00	170464.00
10	Development of House-sites (Nos)	9782.00	14386.00	9983.00	7733.00	5103.00	291.00	47278.00
11	Construction of Houses (Nos)	57938.00	67083.00	86654.00	25532.00	72760.00	6236.00	316203.00
12	Panchayat Ghars(Nos)	9287.00	12337.00	9957.00	8147.00	10293.00	1855.00	51876.00
13	Mahila Mandals (Nos)	1620.00	1290.00	1951.00	1727.00	2580.00	172.00	9340.00
14	Sanitary Latrines(Nos)	34396.00	32873.00	28344.00	15360.00	22022.00	8095.00	141090.00
15	Construction of Wells under M.W.S. (Nos)	87634.00	56433.00	172328.00	173016.00	149328.00	74568.00	713307.00
16	Construction of Houses under I.A.Y. (Nos)	182957.00	181800.00	207299.00	192369.00	359508.00	148423.00	1272356.00
17	Other Works (Nos)	213489.00	216843.00	240103.00	177641.00	172139.00	19644.00	1039859.00

Note:- * Provisional @ Upto SEPT.1994

CHAPTER 4
SOCIAL INFRASTRUCTURE

Overview

4.1 Provision of social infrastructure strives to achieve the twin objectives of Economic Equality and Social Development, to create a supportive environment for a higher rate of growth for development contributing not only to human resource development but also to holistic and harmonious socio-economic development.

4.2 The concern with availability of 'Social Infrastructure' has evolved over the years from a general emphasis on basic needs of the people to special needs of the specific regions and special groups of people. A "norm" based target for social infrastructure being difficult, effort has been made to fulfil a certain level of "minimum needs". So that the poor and the weak do not suffer exclusion from the overall process of development due to market imperfections, conscious attempts are being made to provide these minimum needs through infrastruture facilities and services in respect to the peoples health and nutritional status, educational status, housing, and environmental status.

4.3 Social development as it should flow from the adequate social infrastructure would therefore mean literacy, education, good health and all that goes to make good health possible like food and nutrition security, drinking water, easy availability of medical and health facilities - both preventive and curative and a hygenic environment and shelter.

Indicators of Social Development

4.4 Table 4.1 which traces the development of Social Indicators includes data collected by the 1991 census and some achievements upto 1993. The information and resultant analysis of the 1991 census were not available when the Eighth Plan was formulated.

4.5 Infrastructure and facilities for medical services, public health, water supply, sanitation, housing, and education have expanded. This is reflected by an improvement in the social conditions over the plans. Table 4.1 shows changes in select indicators of social development. Infant Mortality Rate (IMR) nearly halved, and Female Literacy Rate more than quadrupled during the last four decades. Housing conditions in terms of drinking water, electricity and type of construction have also shown substantial improvement. Seen over a span of four decades (1951-91), the improvements are notable.

4.6 However, more needs to be done. Nearly half the population is still illiterate. Even among the developing countries, position of India in regard to literacy is low. In the 15-19 age group, India's 66 per cent literacy rate was better than only 10 out of 64 developing countries in 1990. Expectation of life has improved in India sharply from 32.1 years in 1951 to 60.8 years in 1991. Control and management of famines and epidemics has had an important role in improving the longevity of Indians. Infant mortality though has reduced to half during the last four decades, is still higher than that many in developing countries. Among 113 developing countries where infant mortality data was available for the year 1992, India ranked 77th in the countries (ranked in the ascending order of Infant Mortality Rate). The households which were covered by electricity, drinking water and sanitation facilities were about 17 per cent in the 1991 census. The percentage in urban areas was higher at 48 per cent, but deprivation of 52 per cent of the households in the high density urban areas exposes them to slum conditions of habitation. (Annex 4.13).

4.7 Availability and utilisation of the existing Social infrastructure varies between the economic and social groups and across regions. An appraisal of the plan in Social infrastructure, taking note of these variations, should review the progress made in removing the disparities.

Rural Urban Differences

4.8 The differential between rural and urban areas in the indicators of social development is sharp. From the 1991 census results, the literacy rate for the urban male was 81.0 per cent as against 57.8 per cent for the rural male. Similarly, the literacy rate for the urban female was 63.9 per cent as against 30.3 per cent for the rural female. Infant mortality of the rural population (which constitutes 74 percent of the population of the country) was 82 per thousand live births as against to 45 for the urban

Table 4.1

Provision of Social Infrastructure and Selected Indicators of Social Development

	1951	1981	1991	1993
1. Crude Birth Rate (per 1000)	41.7	33.9	29.5	28.5
2. Crude Death Rate (per 1000)	22.8	12.5	9.8	9.2
3. Infant Mortality Rate (per 1000)	146.0	110.0	80.0	74.0
4. Life expectancy at birth	32.1	52.3	60.8	
(years) of which	**1941-51**	**1976-80**	**1986-90**	
4.1 Male	32.4	52.5	57.7	
4.2 Female	31.7	52.1	58.1	
5. Sex ratio				
(Females per 1000 males)	946	934	927	
6. Literacy rate	18.33	43.56	52.11	
6.1 Male	27.16	56.37	63.86	
6.2 Female	8.86	29.75	39.42	
7. Gross enrolment as percent to population (6-11 years)	43.1	80.5	101.0	
8. Teacher-Pupil ratio (primary schools)	33	38	42	
9. No. of Medical personnel (per crore population)				
9.1 Doctors	18	37	44	
9.2 Nurses	5(1950)	21	32	
9.3 Health visitors	0.16	1.35		
10. No. of beds(all types)per 100 thousand population (1990)	32	83	94	
11.No. of Primary Health	725	5740	21641	22,441*
12.No. of Sub-Centres		51405	130958	131,318*
13.Pecentage of population covered by water supply				
13.1 Rural		31.0	73.9	
13.2 Urban		77.8	83.8	
14.Pecentage of population covered by sanitation				
14.1 Rural		0.5	2.45	
14.2 Urban		27.0	45.93	
15.Households having pucca houses (%)		32.7	41.6	
16.Households having electricity (%)		38.2	62.3	
17.Population (crore)	36.11	68.3	84.6	88.1(a)

Note: 1. Census data for 1951 & 1991 exclude J&K & for 1981 excludes Assam

2.(a) Extrapolated from report of Standing Committee of Experts on Population Projections.

3.* As on 31.3.1992

Sources:

(1) Items 1to 5 & 12 to 16:Registrar General & Census Commissioner,India

(2) Items 6,7: Department of Education, Ministry of Human Resource Development.

(3) Items 8 to 11:Ministry of Health

areas in 1993 from Sample Registration System data.

4.9 There are differentials in the availability of infrastructure for medical and public health services between the rural and urban areas. Only 31 per cent of hospitals, 48 per cent of the dispensaries and 18 per cent of the total hospital and dispensary beds are in rural areas, where 74 per cent of the country's population is located. Census data show that in 1981, 27.2 per cent of medical personnel were located in rural areas. The rural population have to travel much longer distances than their urban counterparts to avail of medical facilities. Medical treatment was available within a distance of less than 2 kilometers for over 80 cent of cases in urban areas as against 39 per cent in rural areas. In over 20 per cent of cases, persons residing in rural areas had to travel more than 10 kilometres distance to avail of medical facilities. This could also be one of the reasons for higher infant mortality in rural areas than in urban. The percentage of households which used electricity for lighting according to the 1991 census was 30.54 per cent for rural households as against 75.78 per cent for urban households.

Gender Disparity

4.10 According to 1991 census, 39.42 percent of the female population was literate as against 63.86 per cent of the male population. Similarly, educational attainment of girl students at secondary and higher levels is less than that of boy students. (Annex 4.14).

4.11 Given the fact that the fertility rate of mother declines sharply with the level of educational attainment, attempts to control population require priority to be given to female education. The States which have low female literacy (below 40 per cent), account for more than half of the country's population (Annex 4.11). Though the rate of growth of enrolment of girls has been higher than that of boys, disparity still persists. Girls still account for only 45.7 per cent of the enrolment at the primary stage and 37.7 per cent of at the upper primary stage. The drop-out rates of girls at the primary as well as the upper primary stage are higher than those of boys.

Inter-State variations

4.12 In addition to rural urban and gender disparities, there are large inter-state variations. The disparities across states, (as measured by the coefficient of variation), have deteriorated in the case of health related indicators like Crude Birth Rate, Crude Death Rate and Infant Mortality rate. There has simultaneously been a reduction in the inter-state variation of other indicators like female literacy rate and housing amenities like living in pucca houses, availability of safe drinking water, use of electricity. (Table 4.2)

Variations across Income levels

4.13 Utilisation of the available social infrastructure also varies sharply between the high and low expenditure groups. While in the rural areas the availability is lower for all expenditure groups, in urban areas the disparity across expenditure groups is more sharp (Annex 4.1).

4.14 It was in this background that the Eighth Plan reiterated human development as the main focus of development. The Plan document states "Human development will be the ultimate goal of the Eighth Plan. It is towards this that employment generation, population control, literacy, education, health, drinking water and provision of adequate food and basic infrastructure are listed as the priorities."

4.15 The objectives of the Eighth Plan for provision of Social Infrastructure are:

i) Provision of safe drinking water and primary health care facilities, including immunisation, accessible to all the villages and the entire population, and complete elimination of scavenging;

ii) Universalisation of elementary education and complete eradication of illiteracy among the people in the age group of 15 to 35 years;

iii) Containment of population growth through active people's cooperation and an effective scheme of incentives and disincentives.

4.16 At more specific levels, the goals in different social infrastructure sectors have been set out in the respective sections. Eradication of poverty, achieving full employment and social integration do require, inter-alia, an adequate provision of social infrastructure because it is the marginal groups that are affected more acutely by the deficiencies in social infrastructre. Infrastructure for devel-

Table 4.2
Inter-State Variation In Selected Indicators of Social Development

	Coefficient of variation of 14 States (1) (2) 1971	1981	1991	1993
	(Per Cent)			
1. Crude Birth Rate (per 1000)	14.3	13.6	18.3	19.6
2. Crude Death Rate (per 1000)	21.5	23.6	21.7	22.6
3. Infant Mortality Rate (per 1000 live Births)	25.9	30.6	36.5	36.5
4. Female Literacy(percent)	58.5	49.6	40.3	
5. Households living in pucca houses (per cent)		34.4	32.9	
6. Households having Safe Drinking Water (percent)		52.2	29.0	
7. Households having Electricity (percent)		51.8	43.6	
8. Per Capita SDP (Rs. at current prices)	28.1	31.7	34.3	35.9

Notes (1) The 14 major states are Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

(2) Derived from state-wise data in Annex 4.9

opment is a key requirement for growth, and this includes social infrastructrure like piped water supply, sanitation and sewerage, solid waste collection and disposal, irrigation etc.

Public provisions for Social Infrastructure

4.17 Given the gap between "need" and "supply" (Table 4.3), low ranking of India in the indicators of human development among the developing countries, the differentials across states, variation between the rural and urban areas, there is a positive role for the Government in provision and maintenance of social infrastructure.

4.18 Private investment for social infrastructure has been confined to only those services availed of by the affluent sections of , e.g. specialised curative medical services by private hospitals, higher technical and medical education, housing and related amenities in the Central Business Districts (CBD) areas of the metropolis. The effort of public policy has been to channelise resources directly into such services through incentives. For example, payments for medical insurance, contributions to educational institutions and savings for house construction and maintenance, carry tax benefits. In the recent three years such incentives have been increased.

4.19 Flow of private sector resources into elementary education, female education, public health services, training of weaker sections and housing for low income groups has been insignificant. Wherever, such flows have taken place it has been higher in urban areas and in states which have attained higher levels of social development. The requirement of social infrastructure of those who cannot "demand" these services on the strength of the purchasing power (Annex 4.1) will have to be met by the public sector.

4.20 Given their special characteristics, the social services in the public sector are rendered through the institutions managed by Government. Expenditure by governments at the centre and the states on provision of social infrastructure is about 30 per cent of governments' total expenditure, equivalent to about 6 per cent of GDP. This includes both the Plan and the Non Plan expenditure. While there was a significant increase between the Sixth Plan (1980-85) and Seventh Plan (1985-90) on

Table 4.3

GAP BETWEEN NORMATIVE LEVEL OF NEED AND SUPPLY OF SELECTED ITEMS OF SOCIAL INFRASTRUCTURE

ITEMS	NORMS	NEED	AVAILABILITY	GAPS
Housing	One house per household. Rural = 11.87 crore hhds. (Household size 5.49) Urban = 4.75 crore hhds. (Household size 5.08)	16.62 crore houses. @	14.72 crore houses. @ (1991)	Shortage of 1.9 crore houses
Education (Elementary) +	Teacher : Pupil ratio 1 : 40	* Primary : 25.9 lakh teachers.	$ 17.0 lakh teachers.	8.9 lakh teachers.
		* Upper Primary : 14.7 lakh teachers.	$ 10.8 lakh teachers.	3.9 lakh teachers.
	Accessibility of Primary schools within one K.M. of walking distance.	* 6.1 lakh schools.	$ 5.7 lakh schools.	0.4 lakh schools.
Health **				
1. Rural Health Sub Centre	One per 3000-5000 Population	1.33-2.22 Lakh	1.39 lakh	
2. Rural PHC	One per 20000-30000 Population	22-33 Thousand	22.52 Thousand	
3. Rural Community Health Centres	One per lakh population	6660	2467	4193
4. Rural Health Worker				
(a) Male	One per 3000-5000 Population	1.33-2.22 lakh	0.66 lakh	minimum shortage of
(b) Female	One per 3000-5000 Population	1.33-2.22 lakh	1.37 lakh	0.67 lakh
5. Child Development (ICDS)	Population per project (1 lakhs) in Rural/Tribal areas/Urban project areas	5923 projects	3907 projects as on March 31st, 1995	2016

ICDS projects covers: Welfare of childern below 6 years and expectant and lactating mothers.
It takes care of pre-school education, nutrition and health care.

6. Rural Water Supply	To provide atleast 40lpcd of water within 9 walking distance of 1.6 km or elevation difference of 100 metres in hilly areas and additional 30 lpcd in DDP/DPAP areas for cattle.	To provide water supply to 100% propulation as per norms.	82.42% propulation (of 1991 census) covered as on 1.4.95.	17.58% population of 1991 census) still remains to be covered with water supply facilities

+ National Policy on Education, 1986.
* Derived from projected school going population (6-11 years & 11-14 years) : Selected Education Statistics, 1993-94 : Ministry of Human Resource Development.
$ Annual Report, 1994-95 : Ministry of Human Resource Development.
** Health figures are as on 31.12.94
@ Excluding unserviceable Kucha House
lpcd : Litres per capita per day, DDP : Desert Development Programme, DPAP : Drought Prone Area Programme

allocation for social infrastructure by Government (as per cent of GDP), the allocation has remained nearly at the Seventh Plan level in the subsequent years (Annex 4.2). Additional allocations for social infrastructure need to be made especially in sectors like child care, health, elementary education, adult and post-literacy and open-school system, as these will broadbase more opportunities for socio-economic development and quality of life.

4.21 Non-Plan expenditure by governments is for operation of the existing social infrastructure, and Plan outlay is intended for creation of social infrastructure. Non Plan expenditure of governments (Centre and States) measured by the difference between total expenditure and plan expenditure for such infrastructure increased by about one percent of GDP between the Sixth and Seventh Plan. State Governments (Total of Non-Special Category States) expenditure on operation of existing social infrastructure (non plan expenditure) increased at a pace faster than the expenditure on creation of social infrastructure (Plan expenditure). This is reflected by the declining percentage of Plan expenditure as a proportion of Non Plan expenditure as for non-special category states for the period 1987-88 to 1992-93. (Table 4.4).

Table 4.4
Plan Expenditure as a proportion to Non-Plan Expenditure on Social Infrastructure for Non-Special Category States.

Year	Per Cent
1987-88	25.3
1988-89	22.9
1989-90	23.1
1990-91	22.9
1991-92	20.8
1992-93(Revised Estimates)	21.3

Source: Documents of the State and Central Budgets.

4.22 The Actual expenditure on Social Infrastrucutre (total of Non-Special Category states) has consistently fallen short of the plan outlay for Social Infrastructure during the period 1987-88 to 1992-93 . (Table 4.5).

Table 4.5
Plan Oulay and Actual Expenditure Social Infrastructure for Non-Special Category States.

Year	Plan Outlay	Actual Expenditure (Rs.crore)
1987-88	3789.29	3343.22
1988-89	4182.16	3965.33
1989-90	4787.40	4572.66
1990-91	4818.20	4591.19
1991-92	5528.91	4729.30
1992-93	6239.81	5408.61

Source: Documents of the State and Central Budgets.

4.23 Plan outlay for social infrastructure was targetted to increase from 16 per cent of the plan outlay of Centre and States taken together in the Seventh Plan to 18.2 per cent in the Eighth Plan. However, in the first three years of Eighth Plan, the Plan allocation for social sectors has declined to below 16 per cent. (Annex 4.2). Constraint of budgetary resources, is the reason for this decline in the recent years.

4.24 In the first three years of the Eighth Plan outlay for social infrastructure has been 46 per cent of the Eighth plan provision against 55 per cent for other sectors (Annex 4.5). The gap between the first three year's allocation for social infrastructure in relation to the plan's outlay, and other sectors has been wider in the Central Plan when compared to the State's plan. This is due to a larger .paallocation for economic infrastructure by the Centre. (Table 4.6 and Annexs 4.3 to 4.5).

Table 4.6
Percent of Eighth Five Year Plan (1992-97) Outlay provided in First Three Years of the Plan (1992-95).

	Central Plan	States & UT Plans	Total Public Sector
Social Services	44	47	46
Other Sectors	61	45	55
All Sectors	58	46	53

Derived from data in Annex 4.3, 4.4 & 4.5

4.25 State governments have the direct responsibility for provision of social infrastructure. States at lower level of social development allocate a higher outlays for social infrastructure as compared to the average for all states. However, the inter-state comparison of per-capita plan and non-plan allocation for social infrastructure does not conform to this need based requirement. If the per capita expenditure by the State Governments (Plan and Non-Plan) on social infrastructure is indexed with reference to the average per capita expenditure on social infrastructure by all States, it is seen that the States, which have generally inferior social indicators are also the States whose expenditure on provision and maintenance of social infrastructure is below the national average (Annex 4.6).

4.26 In fact five states which have the lowest indicators of infant mortality, female literacy and housing conditions, namely Bihar, Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh have a per capita expenditure on social .painfrastructure at Rs.269 compared to the all States average of Rs.374. (Annex 4.7).

4.27 The State of Rajasthan stands as an exception in that its expenditure on social infrastructure exceeds the all States average after the year 1990-91. (Annex 4.7)

4.28 Central plan supplements the states efforts in responding to more acute problems in availability of social infrastructure. Keeping in view the national objectives and priorities, the Central Plan has to contribute to the fulfilment of national goals.The central programmes are in the area of control of epidemics, family welfare,elementary education, availability of drinking water, women and child development and welfare of the weaker sections. A number of central plan programmes have been initiated in recent years.

4.29 The financial provisions made in the public sector plan during the first 3 years in relation to what the Eighth Plan envisaged is given in Annex 4.3 to 4.5. The physical progress made in the first 3 years in relation to the targets set for the Plan period is given in Annex 4.8.

4.30 Since the programmes in social services are mainly financed by the Government, the pattern of deployment of budgetary resources of Plans is an imporant indicator of the support given to such programmes. The component of Budgetary Support going to social sectors in the Central Plan for the Departments of Education, Family Welfare, Women and Child Development and for meeting basic needs like drinking water and housing, urban development and special employment generation programmes has increased (Table 4.7).

Table 4.7

Allocation of Budgetary Support in Central Plan for Social Sector*

Period	Per Cent of Budget Support for Central Plan
Seventh Plan (Actual)	16.97
Eighth Plan (Projected)	28.45
1992-93 (Actual)	21.70
1993-94 (R.E.)	22.90

* Education, Health and Family Welfare, Welfare of Weaker Sections, Social Welfare and Nutrition, Labour, Water Supply, Sanitation and Urban Development.
RE: Revised Estimate

Section 1

Health & Family Welfare

Part I : Health

4.31 The focus of Eighth Plan is on :

i) Major investment in development and strengthening of primary health care infrastructure aimed at improvement in quality and out reach of services;

ii) Consolidation and expansion of the secondary health care infrastructure upto and including the district level services;

iii) Optimisation of the functioning of the tertiary care;

iv) Building up of referral and linkage system so that optimal utilisation of available facilities at each level is possible.

4.32 During the Eighth Plan specific efforts have been made to ensure that the ongoing economic restructuring does not lead to any adverse effect on provision of essential care to meet the health needs of the most needy segments of the population. Some of the major steps taken in this direction include specific efforts to consolidate and strengthen the primary health care infrastructure with earmarked funding under the minimum needs programme,enhanced assistance to regions of the country with severe problems such as 100% assistance under National Malaria Eradication Programme (NMEP) for tribal areas and North Eastern States with falciparum malaria, enhanced central assistance to specific programmes to meet the cost of treatment, such as cost tests for screening of donated blood for HIV infection, cost of drugs for short course chemomotherary for tuberculosis, cost of cataract surgery for treatment of cataract related blindness in the elderly. Specific efforts are also being made to promote Indian Systems of Medicine and Homeopathy especially in view of the fact that these are traditionally well accepted by the population, and personnel belonging to these system are available in the remote and rural areas and provide treatment at affordable cost. Involvement of voluntary organisations and improved IEC activities are supported so that there is adequate community participation and improved utilisation of the available health facilities.

Primary Health Care

4.33 Primary health care infrastructure provides the mechanism for sustained and continuous outreach of all the health and family welfare programmes in the country. Planning Commission has, therefore, allocated specially earmarked funds for strengthening of this infrastructure under MNP. The emphasis during the Eighth Plan was mainly on consolidation and operationalisation of the primary health care institutes so that performance is optimised. This is to be achieved by completion of building, filling up of vacant posts, supply of equipment, drugs/materials and inservice training of health workers.

Physical targets and achievment in setting up new centres is shown in Table 4.8. There has been a shortfall in the achievment of setting up Sub-Centres (SC's) Primary Health Centres(PHC's) and Community Health Centres(CHC's) (Table 4.8) in the first two years of the plan.

Table 4.8

Physical Targets and Achievment in setting up Sub-Centres, PHC's and CHC's.

	Eighth Plan	1992-93		1993-94	
	Target	Target	Achievment	Target	Achievment
Sub-Centres	17030	4066	147	18	18
PHC's	4450	759	335	640	174
CHC's	1269	259	84	164	71

4.34 The financial norms for construction of Sub-centres, PHC's, and CHC's were drawn up decades ago; with enormous cost escalation during the last two decades, it is not possible for the state governments to meet the physical targets within allocated funds. There is a need for a review of these norms and realistic fund and target allocation. As compared to unsatisfactory performance in creation of new facilities, the progress of work in strenthening the three tier system of Sub-centres, PHC's and CHC's for delivery of health and family welfare services to the rural community has been satisfactory. There is, however, an urgent need to revise the recurring and non-recurring expenditure provided to the Sub-centres, PHC's and CHC's as the present provision is inadequate for fulfilling the tasks assigned.

Health Manpower

4.35 Substantial proportion of the specialist posts in the community health centres are vacant; because of this CHCs will be unable to fulfil their function as first referral units (Table 4.9). In view of the serious implications of this lacuna in the establishment of referral system, as well as effective provision of MCH/FP care, there is an urgent need to rectify this.

4.36 Though the norms require one male and one female multi- purpose worker per 3,000 to 5,000 population, the number of sanc-

Table 4.9
Health Manpower in Rural India

Category	No. in (As on 31.03.92)	%Vacant Position (As on 31.03.92)	No.in (As on 31.12.94)	%Vacant Position (As on 31.12.94)
1. Surgeons	652	29.4	678	37.2
2. OBST & Gynaecologists	355	63.1	411	48.6
3. Physicians	399	23.6	452	34.8
4. Paediatricians	274	45.2	314	50.8
5. Doctors at PHCs	22013	14.3	23803	14.8
6. Block Extension Educators	5125	7.3	5770	7.7
7. Health Asstt. (Male)	19726	7.6	18505	7.8
8. Health Workers	64008	12	61788	13.1
9. Health Asstt. (Female)/LHV	21233	12	19084	11.4
10. Health Workers (Female)/ANMs	121765	7.9	129089	6
11. Pharmacists	16287	12.6	19317	10.1
12. Lab Technicians	8875	12.7	9817	20.3
13. Nurse Mid-wives	12479	16.9	11433	24
14. Radiographers	565	24.2	1064	19.9

tioned posts of male multi-purpose workers (Table 4.9) is only half of that of female multi-purpose workers. The vacancies in radiographer and lab-technicians and other para-professional posts have serious implications in malaria and TB control programmes (Table 4.13).

4.37 Growth and development of appropriate health manpower according to the needs of the health care system is essential for providing good health care to the population. The National Education Policy for Health Sciences, as approved by the Central Council of Health and Family Welfare in 1993, has suggested setting up of an Educational Commission in Health Sciences, to oversee, coordinate and support activities in this important area. The necessary legislation is awaited. In view of the changing disease profiles and changes in treatment regimens over the last decade, there is an urgent need for in service training programme so that the existing manpower provides high quality services. There is also a need to identify existing lacunae in the training programmes at undergraduate and post graduate levels and remedy them.

4.38 Review of the ongoing state and the centrally assisted programmes indicate that lack of trained para-professioinal in key positions is one of the factors for poor performance of the programmes; for instance the nonavailability of lab- technician and male multipurpose worker has been cited as the reason for poor case detection in malaria and tuberculosis programme. Realising the need for creation of adequate para-medical manpower, and the fact that the need could vary from state to state and from year to year, the Planning Commission has accepted 10 areas of health related vocational training programmes in the 10+2 stream, as identified by the Expert Group on Helath Manpower Development. Some states have so far made use of this facility. It is essential that optimum utilisation of this provision is made so that each state can generate appropriate manpower for health infrastructure this would at the same time generate employment opportunities.

Control of Communicable diseases

4.39 Communicable Diseases have been and continue to be the major causes of morbidity and mortality in India. In view of this there are several Centrally sponsored programmes for control of communicable diseases.

National Malaria Eradication Programme

4.40 The National Malaria Eradication Programme is the oldest of the Communicable disease control programmes in the country. After the initial success of the modified plan of operation the estimated number of malaria cases have remained around 20 lakh during the last few years (Table 4.13). Focal outbreaks with varying morbidity and mortality rates are reported periodically. There is a progressive increase in the incidence of falciparum malaria in the tribal areas and the North-Eastern States. Increasing resistance to chloroquin, the drug used for treatment of malaria, and to a variety of insecticides used for spraying operations is a source of concern. In many states there are major shortfalls in smear collection from fever cases and administration of suppressive treatment as well as delays in smear reading and administration of radical treatment. Problems in reaching the insecticides to the sites of spray operation in time and shortfall in the operation costs being met by the states, result in disruption of timely spray operation. Realising the serious consequences of these lapses there is an attempt to use innovative approaches to improve smeartaking, drug administration and timely insecticidal spray.

4.41 The tribal areas account for over 60% of all reported falciparum malaria with high case fatality rates. The quantum of central assistance which was 50% in the first two years of the Eighth Plan (and earlier) has now been increased to 100% in the North Eastern States to tackle the malaria problem. Intensification of the malaria control activities in tribal areas of Andhra Pradesh, Uttar Pradesh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra, Bihar and Orissa is being taken up with assistance from the World Bank.

National Leprosy Eradication Programme

4.42 India has over half of the known leprosy cases in the world. The strategy during the Eighth Plan is for early detection of leprosy cases and provision of Multi-Drug Treatment (MDT); initially the effort was to cover all the endemic districts with prevalence rate of leprosy of two or more per thousand population. The Ministry of Health and Family Welfare has further strengthened the Programme by extending MDT services to areas previously not covered by MDT including the States of Madhya Pradesh, Uttar Pradesh, Bihar, Orissa, West Bengal with World Bank assistance. It is expected that with vigorous implementation of the MDT programme it might be possible to reduce the prevalence to 1/10,000 by 2000 A.D. Successful completion of MDT will cure leprosy, but the deformities already developed or those developing later due to peripheral nerve damage will continue to exist. Efforts should be made to reassure the patients and the general population that persistance of these do not mean that the infection has not been cured. In addition correction of deformities and rehabilitation of those with persistant disablities should receive due attention so that these persons can function effectively and become part of the productive workforce in the country.

National Tuberculosis control Programme

4.43 During the Eighth Plan, Centre has increased the outlay for the programme so that additional funding for improving diagnostic facilities and providing drugs for short course chemotherapy for treatment of tuberculosis could be given to all states. Early case detection and good case holding are to be focus of efforts. This is especially important because of the reported increase in the drug resistant strains of M.Tuberculosis and the expected increase in the numberof tuberculosis patients due to the association between TB and HIV infection and increasing prevalence of HIV infection. The Ministry of Health in consultation with and support of Planning Commission has recently prepared a project for assistance from World Bank to support the programme in ten metropolitan cities namely Calcutta, Bombay, Madras, Bangalore, Hyderabad, Delhi, Pune, Lucknow, Bhopal, Jaipur and five States viz. West Bengal, Bihar, Himachal Pradesh, Kerala and Gujarat. The metropolitan cities have been specifically chosen because of increased prevalence of HIV infection and consequent potential increase in number of tuberculosis cases.

National AIDS Control Programme

4.44 India has the distinction of having initiated the National AIDs Control Programme very early in the silent phase of HIV epidemic. The intervention programmes were evolved on the basis of Indian data, were rational and feasible. Recognising the importance of initiating the intervention in the silent phase of the epidemic, adequate funds have been provided for the programme to combat and minimise the magnitude of HIV epidemic in India so that the country can benefit from having had a decades warning.

4.45 The major components of the AIDS Control programme and the allocation of funds for these are

i) modernising the blood banks, screening donated blood to ensure its total safety.(35 percent);

ii) strengthening of STD control programme.(4.4 percent);

iii) Surveillance and clinical management.(10.4 percent);

iv) IEC activities.(44 percent).

4.46 Poor utilisation of funds and tardy progress of the AIDS programme in some states has been a cause of concern.

Water-borne diseases

4.47 Diarrheal diseases including cholera and water borne diseases such as viral hepatitis and typhoid fever continue to extract a heavy toll in terms of morbidity and mortality. There is an urgent need to strenghthen the efforts currently underway to provide safe drinking water ensure water quality testing and improve environmental sanitation so that the morbidity due to these diseases is reduced. This is especially important in view of the emergence of strains of salmonella, shigella and other bacteria resistant to generally used antibiotics and consequent increase in the cost of therapy as well as case fatality rates. .pa

Communicable disease surveillance

4.48 Overcrowding, lack of safe drinking water and poor environmental hygiene result not only in continued high prevalence but also in periodic focal outbreaks of communicable diseases in the country. There are lacunae in the existing system of disease surveillance, delays in reporting of and responding to communicable disease outbreaks, as well as the lapses in the existing waste disposal system in urban and rural areas. During the remaining period of the Eighth Plan efforts are directed to initiate some interventions to correct these lacunae. A high Powered Committee on Urban Solid Waste Management in India constituted by Planning Commission under the chairmanship of Member (Health) has compeleted its deliberations and made its recommendations. It is expected that some of the interventions recommended will be taken up in the remaining period of Eighth Plan. Ministry of Health & Family Welfare has also constituted an Expert Committee to review the Public Health System under the chairmanship of Member (Health), Planning Commission. The terms of reference of the committee are to review the Public Health Systems and quality of epidemic surveillance, effectiveness of the existing health schemes, status of primary heatlh infrastructure in rural areas, and the existing Health Management Information System. The committee is to submit its report by Sept. 30, 1995 and its recommendations will help initiate newer interventions during the remaining years of the Eighth Plan.

Iodine deficiency disorders

4.49 It is estimated that over 15 crore Indians are at the risk of developing Iodine Deficiency Disorder (IDD), 5.4 crore have Goitre, 66 lakh have minor neurological defects and 22 lakh have Critinism. Universal use of Iodised salt is the simple inexpensive and safe method of preventing IDD. Inspite of the fact that the Goitre control programme was one of the oldest centrally sponsored programme in the country, IDD prevalence remained essentially unaltered over the decades in India. Lack of awareness of the need to take Iodised salt and problems in transport are some of the numerous problems responsible for the poor performance. With the government's committment to universal iodisation of salt there has been substantial increase in the production of iodised salt during the Eighth plan. The installed capicity for production of Iodised salt is 6.2 million tonnes but the estimated production is only 30 lakh tonnes against the requirement of 52 lakh tons. Efforts are underway to increase production and ban use of uniodised salt in all the states of the country. Quality control measures to test iodised salt at all levels from manufacturer to the consumer have been evolved and tested. It is essential that all these activities are strenthened so that the goal of elimination of IDD (reduction in Goitre rate below 5 percent and elimination of Critinism due to IDD) by 2000 AD is achieved.

Table 4.10
Number of Elders and Index of Aging

Year	Percentage distribution of total population for different age groups			Population 60+ (crore)	Index of Aging*
	0-14	15-59	60+		
1.	2.	3.	4.	5.	6.
1971	42.02	52.01	5.97	3.27	14.21
1981	39.70	54.20	6.10	4.17	15.39
1991	35.6	57.8	6.6	5.58	18.54
1996	33.7	59.3	7.0	6.49	20.77

Source: 1971 and 1981: Census of India
1991 and 1996: Report of the Standing Committee on Population Projections, 1989
* Population 60+/Population below 15 x 100

Non-communicable diseases

4.50 Over the last three decades there had been a substantial decrease in infant mortality and an increase in life expectancy in India. With changing demographic profile due to shift in age structure of the population and increasing longevity (Table 4.10) and alteration of life styles, there is a progressive increase in prevalence of non-communicable diseases such as diabetes mellitus, cardio-vascular diseases, cerebrovascular accidents and cancers. In addition degenerative disorders like cataract, hearing impairment, and arthritis are common in the elderly and cause considerable disability. During the Eighth Plan period the number of people aged 60 years and above will increase by 1.1 crore. The country must therefore gear itself to combat the continuing communicable disease burden and at the same time develop programmes to effectively deal with the problem of the non-communicable diseases and degenerative disorders of the elderly.

4.51 Cataract is the cause of more than 85 per cent of blindness in the country. The Ministry of Health and Family Welfare has initiated Blindness Control Programme as a Centrally-sponsored Programme aimed at reducing cataract related blindness from the reported 1.4% in 1980 to 0.3% by 2000 AD. The World Bank assisted blindness control programme is currently underway in seven States. In addition, in Jammu & Kashmir Ministry of Health and Family Welfare is implementing a programme identical in contents to the World Bank aided project. The programme is implemented through the financially and operationally autonomous District Blindness control societies.

4.52 Hyperetension, diabetes, cardiovascular diseases, cerebrovascular accidents and cancers are major health problems increasingly seen in the middle age and elderly population in recent years. Early onset of diabetes, gestational diabetes, pregnancy induced hypertension, myocardial infarction and hypertension in the relatively younger age group has been reported and this is a source of concern. Health education aimed at lifestyle alterations and reduction in the "at risk" behavioral patterns in the population is essential to reduce the future burden from these diseases. Equally important is the early detection and prompt and adequate treatment of the persons with these problems as well as management of complications and rehabilitation of those with disabilities.

Integrated district health care model

4.53 Extending the concept of District Diabetes Control Programme an operational contour of District Health Care Model has been evolved by the Planning Commission and some of the states have initiated diseases control programme, as an integral component of primary care utilising this concept. The primary objective in this model is to link primary, secondary and tertiary health care centres so that they play appropriate role in disease prevention and management of preidentified non-communicable diseases. Earlier studies in Jammu & Kashmir are now being followed by new pilot projects which have been initiated in Nagpur district where nearly 50 percent of population are residing in urban areas and in the border desert district of Jaisalmer. A proposal for similar pilot project in the coastal Vishakapatnam district in Andhra Pradesh is being evolved. It is expected that the experience gained through these pilot studies would provide valuable insight into the utilisation of available health care infrastructure both for communicable and non-communicable diseases control.

Indian System of Medicine and Homeopathy

4.54 In the Eighth Plan adequate emphasis has been given for Indian Systems of Medicines and Homoeopathy (ISM&H) in view of the fact that these systems of medicines are widely accepted in the country and practitioners belonging to these systems are available and provide health care at affordable costs in remote rural areas. The strategies suggested for improving ISM&H services include formation of a separate Department in the Centre with corresponding Departments in the states, stregthening of of ISM&H educational institutes, encouraging cultivation of medicinal plants, establishing facilities for quality control of drugs and strenghtneing R&D efforts. Enhancing the capabilities of existing net work of hospitals and dispensaries in this system is also being envisaged.

Involvement of NGO's

4.55 Efforts have been made to improve the involvement of non governmental and voluntary organisations in reaching the programme to the most needy segments of population and also to promote community awareness and community participation in the health programmes. Voluntary organisations have been provided with necessary assistance in many programmes such as Blindness Control Programme, AIDS Prevention Programme, Leprosy Eradication Programme.

Outlay for Health Care

4.56 The Eighth Plan has targetted an outlay on Health of Rs. 1,800 crore (1991-92 prices) in the Central Sector, Rs. 5,308 crore (1991-92 prices) in the States' sector and Rs.468 crore (1991-92 prices) for the Union Territories. In the first three years of the Plan, States & UTs have provided about 43 per cent of the five year outlay and the centre, 68 per cent (Annex 4.3 to 4.5)

4.57 However, allocations for rural health in States and U.T.'s Plan finance, as "Minimum Needs" have declined (Table 4.11). What is even more worrying is the fact that in several states earmarked outlays have not been fully utilised.

Table 4.11

Rural Health Outlay as Per Cent of Medical and Public Health Outlay in State and U.T. Plan

Year	Per Centages
1992-97 (Target)	38.9
1992-93 (Actual)	36.8
1993-94 (R.E.)	33.7
1994-95 (B.E.)	31.1

4.58 Health sevices being a state subject, the state government have primary responsibility in provision of public health care. Expenditure by the governments of Bihar, Madhya Pradesh, Orissa and Uttar Pradesh has been 20 to 30 percent lower than the all states' average, on per capita basis, (Table 4.12), though the need for health services in these states, as reflected in infant mortality and the overall death rate is significantly higher.

Part II : Family Welfare

NDC committee on population

4.59 In order to give a new thrust and dynamism to Family Welfare Programme an area specific micro planning was suggested in a background document submitted by the Planning Commission as a result of which a Sub-committee of National Development Council on Population was constituted. The report of the Sub-committee was considered in the meeting of the National Development

Table 4.12

PER CAPITA EXPENDITURE (Plan & Non-plan) ON PROVISION & MAINTENANCE OF OF SOCIAL INFRASTRUCTURE BY STATE GOVERNMENTS IN SELECTED STATES

(MEDICAL & PUBLIC HEALTH)

(Rs. at Current Prices)

S. No.	State	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93
					Actuals (R.E)				
0	1	2	3	4	5	6	7	8	9
1	Bihar	14.01	15.73	14.76	22.48	23.59	28.28	30.44	33.29
2	Madhya Pradesh	18.30	20.58	25.25	26.76	28.21	31.99	33.63	35.77
3	Orissa	17.60	22.55	24.61	25.50	27.98	31.63	39.51	42.08
4	Rajasthan	23.62	26.11	30.78	34.39	39.25	48.05	54.03	58.27
5	Uttar Pradesh	19.48	18.99	9.04	27.01	31.58	48.22	31.10	34.91
6	Total-5 states	18.30	19.66	17.24	26.65	29.70	39.16	34.87	38.11
7	Total-All India	28.88	27.95	29.78	35.87	39.80	48.29	48.52	52.53

SOURCE :

1. The per - capita expenditure has been obtained from the State Plan Expenditure and State Non-Plan Expenditure over the years. The source of State Plan Expenditure is the State Plans Division of Planning Commission the source of Non-plan Development Expenditure are the State Budgets Analysis of Reserve Bank of India.
2. The year-wise population figures of states and for the country as a whole have been calculated from the Govt. of India, Ministry of Finance, Economic Survey - 1994-95.

Table 4.13

PERFORMANCE OF SOME IMPORTANT NATIONAL DISEASE CONTROL PROGRAMMES

	Cataract operations		T B				Malaria@		
YEAR	TARGET (lakhs)	%ACH.	Case Dtection TARGET (lakhs)	%ACH.	Sputum Exam. TARGET (lakhs)	%ACH.	Incidence (lakhs)	p.f.cases (lakhs)	Deaths (NO.)
1	2	3	4	5	6	7	8	9	10
1992-93	20.0	80.3	17.5	88.0	33.9	81.6	21.2	8.8	422
1993-94	24.3	78.7	18.0	65.6	35.2	68.3	22.0	8.5	345
1994-95	24.5	87.0**	19.0	59.2*	34.0	71.7*	25.0**	8.3 **	1069

* Provisional till January, 1995. ** Provisional

@ Relates to calender year.

Council held on September 18, 1993. The Department of Family Welfare has initiated follow up action to implement the recommendation.

4.60 Recognising the fact that reduction in Infant and Child mortality is essential prerequisite for accpetance of small family norm, Government of India has attempted to integrate MCH and Family Planning care as a part of Family Welfare services at all levels. The NDC in 1991 approved the Gadgil - Mukherjee formula which for the first time gave equal weightage to performance in MCH sector (IMR reduction) and FP sector (CBR reduction) as part basis for computing central assistance to Non-Special Category states. At secondary and tertiary care level FP services are closely integrated with obstetric/gynaecology and paediatric care. At the primary health care level the PHC doctor and the ANM provide both MCH and FP services.

4.61 The Eighth Plan targetted to achieve the following by 1997, the terminal year of the plan:

Crude Birth Rate : 26 per 1000 population
Infant Mortality Rate : 70 per 1000 live births
Couple Protection Rate : 56%

4.62 The Infant Mortality Rate (IMR) an important indicator of health standards, has declined from 80 per 1,000 live births in 1991 to 74 in 1993. However,large variations are reflected across the States. (Annex 4.9). Inspite of similar norms under this centrally sponsored programme, there have been substantial differences in the performance between States. At one end of the spectrum is Kerala with mortality and fertility rates- similar to those in some of the developed countries, proving that per capita income is not a critical determinant of these Family Welfare indices. At the other end are the four large northern States (Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan) with high Infant Mortality Rate and Fertility Rates.

4.63 Recognising the need for special attention and additional inputs to improve the performance in poorly perfoming districts, one-half of the total funds for Social Safety Net Scheme have been provided to the Department of Health and Family Welfare. On the basis of data from 1981 census, 90 districts with Crude Birth Rates of over 39 per thousand population, high Infant Mortality Rate and low literacy among women have been chosen and a package of interventions aimed at reduction in maternal and infant mortality and increase in institutional delivery have been initiated in 1992-93. Planning Commission has requested Department of Family Welfare to assess progrerss of SSN project through process and impact indicators. A project aimed at revitalising the Family Welfare Programme in Uttar Pradesh has been initiated with assistance from USAID in 1993.

Permanent methods of Family Planning

4.64 In India age at marriage is low and usually most women have two or more children by the time they are in their mid-twenties. For these young couples surgical sterlisation is the safest and most effective method of ensuring freedom from pregnancy for the next two to three decades, and therfore, permanent methods of contraception have been the sheet anchor of national Family Planning Programme. During the first two years of the Eighth plan there was a progressive increase in the number of couples using sterlisation for contraception. Provisional figures for 1994-95 however, show a small reduction. It is imperative that appropriate steps are taken to ensure that all eligible couples desiring sterlisation have ready access to services.

4.65 Over the last two decades there had been a steep and progressive fall in the number of vasectomies in the country; in 1993-94, vasectomy accounted for less than 3 percent of all sterilisations. Vasectomy is safer and simpler than tubectomy and the procedure for it is eminently suitable for use in the Primary health care setting. It is essential that steps are taken to popularise vasectomy and improve participation of men in the Planned Parenthood movement.

Reversible methods of Family Planning

4.66 India is self sufficient in terms of production of reversible methods of contraception- IUD, OC, and Condom. The logistics problem of reaching these supplies to the PHC level are being resolved satisfactorily. OCs and Condoms are being provided through social marketing. Centchroman- non steroidal long acting oral contraceptive developed by CDRI Lucknow has also been introduced in the social marketing programme since 1993.

4.67 Reversible methods of contraception like IUD and Oral Contraceptives are needed to achieve appropriate spacing between pregnancies and to prevent unwanted pregnancies. Over the last two years, there has been a progressive improvement in the acceptance of IUD, OC and Condoms. However, even now both the acceptance and what is even more important the continuation rates for these contraceptives are low. Counselling, providing information on the contraceptive options, helping the users to choose the method best suited to their needs and providing follow up services are some of the steps that might go a long way in improving both acceptance and continuation rates.

4.68 The coefficient of correlation calculated between CPR and Birth Rates based on the State-wise (cross section) data, taking the birth rates for the years 1981, 1986, 1988 and 1991 and CPR's of previous years, respectively shows statistically, a very weak relationship. (Table 4.14).

Table 4.14
Correlation between birth rates and CPR

Years	Correlation Coefficient
1981	-0.003070
1986	0.000335
1988	0.000292
1991	-0.001000

Source: A critical evaluation of the methods of computing C.P.Rs, P. P.Division, Planning Commission.

4.69 This means that a high CPR need not necessarily imply a fall in birth rates and , therefore, CPR does not serve as a useful parameter to assess the success of family planning efforts. In the past, targets were given for each of the contraceptive methods and achievement in terms of these targets was used to assess performance. This approach does not take into account the age and parity of the person accepting these methods nor the continued use of temporary methods. Consequently, achievements in terms of Couple Protection Rates did not go hand in hand with the expected decline in Crude Birth Rates. The use of CBR as parameter for assessment of performance, as enunciated in the Eighth Plan, has now been accepted and is likely to provide better assessment of impact of the programme.

4.70 It is interesting to note that the CBR which virtualy stagnated at 33 per thousand in the eighties, has started to decline steadily. The SRS has estimated the national Crude Birth Rate as 28.5/1000 in 1993. Though the overall performance is satisfactory, there is an urgent need to improve the quality and coverage of health services and reduce the birth rate in Bihar, UP, MP and Rajasthan the four States with nearly 40 per cent of India's population. The performance of the states of Kerala and Tamil Nadu has been commendable with both having already achieved the target of Net Reproduction Rate of unity.

Maternal and Child Health

4.71 Maternal and Child Health Programme (MCH), an integral and important component of Family Welfare programme; it is also a key intervention strategy for population stabilisation. It was accorded a high priority in the Eighth Plan. As a part of overall strategy for reduction of maternal, infant and child mortality rates, the Child Survival and Safe Motherhood Programme was launched in August, 1992. The programme aims at sustaining the ongoing programmes of immunisation, management of diarrhoeal diseases, prophylaxis and treatment of anaemia in pregnant women and children under five years of age, administration of vitamin A to children under three years of age. The new interventions include treatment of pneumonia by the peripheral health staff, improvement of essential obstetric and newborn care, and establishment of first referral units for providing emergency obstetric care. This programme was initiated first in the poorly performing districts and is expected to cover all the districts by the end of the Eighth Plan. IMR has dropped from 80 in 1991 to 74 per thousand live birth in 1993. With the intensification of Safe Motherhood and Child Survival Programme and intensification of MCH activities, it would appear that the targets of IMR of 70 by 1997 and 60 by 2000 A.D. are achievable realities. However, it is essential to achieve the target in all the states of the country, both in urban and rural areas. It may be desireable to aim at reducing the IMR further during the nineties because in the next decade, the adverse consequences of HIV epidemic on maternal and child health will inevitably start manifesting themselves. Every effort should be made to optimally utilise the available funds, avoid duplication of efforts and improve quality of services so that their utilisation increases.

4.72 There has been a massive improvement in immunisation coverage over the last decade (Annex 4.10), but the target of 100% coverage against six vaccine preventable diseases before the infant becomes one year old is yet to be achieved. Yet another problem is the occasional slip up in the performance of the field workers, affecting the quality of the services and resulting in occasional morbidity and rare mortality.

4.73 Attempts to improve ante-natal and intra-partum care have shown considerable improvement but coverage of pregnant women for the tetanus-toxoid and iron folic acid is still below 80 percent. (Annex 4.10). Antenatal, intrapartum and neonatal care services of accpetable quality are still not available to majority of rural population and the maternal and perinatal mortality rates remain unacceptably high.

Intersectoral cooperation and involvement of voluntary agencies

4.74 Fertility is influenced by a varity of factors including education, employment, empowerrment and health of women and children. Hence an integrated intersectoral approach to tackle the existing problems of women in the social sectors is likely to be effectively implemented which would result in rapid improvement in the performance of the Family Welfare Programme. Intersectoral coordination and involvement of all the sectors in the programme are essential for the success of the Family Welfare Programme. The role of Non-governmental Organisations and Voluntary Organisations for promotion of Family Welfare Programme has been emphasised and recognised at various fora. At the instance of Planning Commission, the Government had taken several initiatives to increase involvement of NGOs in Family Welfare activities. NGOs working in social sectors e.g. education, rural development, women's welfare, nutrition must function in a multi- dimensional framework and include family welfare as part of their activities. Voluntary Organisations especially women's organisations working in rural areas, urban slums and difficult areas need to be strengthened and encouraged to undertake family welfare activities.

Outlay for Family Welfare Programme

4.75 The Family Welfare programme is a totally Central Sector plan. The plan outlay for the Eighth plan is Rs.6,500 crore (1991-92 prices) against which a sum of Rs.3,079 crore (1991-92 prices) has been spent (Annexure 4.5).

4.76 In this totally centrally funded programme, the norms for construction costs, personnel costs and expenditure on drugs at the primary health care level were evolved decades ago and have not been revised taking cost escalation into consideration. As the centre has to reimburse the costs incurred by the states in running the programme according to the norms set by the central government, there had been considerale payment of arrears year after year. In view of all the problems this practice creates, the Department of Family Welfare has been requested to undertake a realistic appraisal of the costs involved in running the programme at the current prices and request appropriate allocations.

4.77 For quick estimation of the evaluation of the family planning and MCH Programme the Department of Family Welfasre has evaluation teams which go to the field and have on the spot assessment of the quality of the services being provided.

4.78 The Office of the Registrar General of India works out the annual estimates of crude birth rate, crude death rate and Infant Mortality Rate through their scheme of Sample Registration System. It provides an independent check / evaluation of the impact of the Family Welfare programme in the country. Besides, the decennial growth rate as estimated by the office of the Registrar General of India on the basis of the census also provides indirect evaluation of impact of the family planning programme.

4.79 Independent evaluation studies relating to the Family Welfare programme are being conducted by the Ministry of Health and Family Welfare from time to time. The National Health & Family Welfare Survey was conducted by the Department of Family Welfare in 1992-93 in which information on various aspects of maternal and child health and family planning was collected. Besides, there are 18 Population Research Centres functioning in the universities and research institutions in various states which are also involved in carrying out evaluation studies of the Family Welfare programme.

Section 3

Housing, Urban Development and Water Supply

Part I : Housing

4.80 The National Housing Policy has been adopted in Parliament in August, 1994. The long term goal of the Policy is to reduce houselessness, to improve the housing conditions of the inadequately housed and to provide a minimum level of basic services and amenities to all. It recognises that the magnitude of housing task calls for involvement of various agencies including Government at different levels, cooperatives, the community and the private sector. The policy envisages a major shift in Government's role to act as a facilitator than as a provider. The needs of the vulnerable sections will continue to be taken care of by the Government.

4.81 In line with the National Housing Policy, which is a Statement of the long term objectives, the core strategy of the Eighth Plan consists of creating an enabling environment in housing activity, viewed as an important component of the national economy by eliminating various constraints and providing direct assistance to the specially disadvantaged groups including rural and urban households, SC/ST, physically handicapped, widows and single women. The areas where the Government would function as a facilitator include provision of basic infrastructure, technology development and dissemination, flow of finance, removal of bottlenecks from legal and regulatory provisions.

4.82 The targets set for the Eighth Plan involve construction of 159.5 lakh new housing units comprising of 78 lakh new units in the urban areas and 81.5 lakh units in the rural areas. In the case of upgradation, target is 58 lakh units. The Eighth Plan also laid down a target of EWS new housing stock at 98 lakh units (30 lakh units in urban areas and 68 lakh units in the rural areas). The Ministry of Urban Affairs and Employment is monitoring the progress of Economically Weaker Sections (EWS) housing schemes. The Ministry of Rural Areas and Employment is monitoring the progress in respect of the scheme relating to provision of rural house-sites and construction/assistance. There is no comprehensive monitoring system or even sample surveys at regular intervals as of now to indicate the new additions to the housing stock through informal setor and individual efforts. Ministry of Urban Affairs and Employment is considering to establish an effective monitoring system through the National Building

Table 4.15

Housing in Eighth Plan - Projections & Achievements

(No. in lakh)

Name of the Scheme	Projection for 8th Plan	1992-93 Target	1992-93 Achiev.	1993-94 Target	1993-94 Achiev	1994-95 Target	1994-95 Achiev
1. New Housing Units	159.50	Progress	not reported				
(Urban)	(78.00)						
(Rural)	(81.50)						
2. Upgradation of Housing Units	58.00						
3. EWS(dwelling Units)$	98.00	1.15	1.14	0.96	0.80	0.92	0.75
(Urban)	30.00						
(Rural)	68.00						
4. Housesites (No. of families)	40.00	6.00	8.88	5.52	9.21	6.26	6.73
5. Consn.assistance (No. of families)	-	2.79	5.34	2.95	4.66	3.63	3.12

$. While the Eighth plan projection cover all sources through which EWS housing is provided figures reported on year-wise achievment are reported by state government agency.

Table 4.16
Plan provisions for Housing

(Rs. crore)

	Eighth Plan outlay	1992-93	1993-94	1994-95 (approved)
State Sector	3581.67	526.97	819.51#	820.31
Central Sector	2795.00			
i) M/O Rural Areas and Employment	1454.00			
(a) Indira Awas Yojana (IAY)	1104.00	6% of JRY funds earmarked, for IAY, now raised to 10%		
(b) Centrally Sponsored Schemes of rural housing **	350.00	5	10	30
(ii) M/O Urban Affairs and Employment (Budgetory support for Housing Activity)	466.00	118.58	81.69	72.60

Anticipated Expenditure
** Scheme approved in 1994-95

Organisation's proposed 3-tier scheme. The achievements in respect of EWS Housing and the scheme of house sites and construction assistance during the first three years of the Eighth Plan (Table.4.15) are given below.

4.83 There is need for a reassessment of allotment of house sites programme to be provided through the plan in view of the fact that the coverage during the 7th Plan regarding distribution of house sites was 43.21 lakh as against the balance of 13.67 lakh identified (earlier) landless labourers and rural artisans. Keeping this in view, it may be appropriate to take up fresh surveys and enumeration of the landless families to assess the need. In addition, another stumbling block in the implementation of the scheme is non-availability of housesites for distribution in certain States. It may also be mentioned that the construction assistance programme is lagging behind the distribution of house-sites.

4.84 Corresponding to the Eighth Plan projections for housing activity in the country (Table 4.15) the Working Group on Housing Finance projected an investment of Rs.97530 crores, at 1991-92 prices covering both the public and private sector. Public Sector programme for housing are implemented by Centre and States. Public Sector Plan provides for houses for SC,ST and freed bonded labourers below the poverty line under Indira Awas Yojana (IAY) funds for which are earmarked under Jawahar Rozgar Yojana at state level. In addition a new Centrally sponsored scheme for rural housing has been taken up in 1994-95. Support to urban housing is provided by Ministry of Urban Affairs and Employment. (Table 4.16).

4.85 In addition, direct participation for weaker sections' housing, the role of the Government is to create an enabling environment and to remove the constraints to housing activity for various sections of the population, to promote a substantial increase in the supply of housing and basic services, to support standardisation and upgradation of the housing stock and to stimulate rental housing. In order to create an enabling environment for increased housing activity, some of the initiatives that have been taken interalia include: (a) Constitution (77th) Amendment Act, seeking to provide establishment of State-level Rent Tribunals, has been enacted and the State Governments have been advised to set up State level Rent Tribunals. This is a step forward to increase the rental housing market; (b) Delhi Rent Bill, 1994 is under consideration in the Parliament; (c) The Model Apartment Ownership Bill and Model Bill regulating developers activities have been formulated and sent to the States; (d) Draft amendments to Urban Land (Ceiling & Regulation) Act are under finalisation; (e) The scheme for encouraging NRI investment in housing and rural estate development on repatriation basis has been launched and recommended to the State Governments for taking up specific projects; (f) excise duty and custom duty concessions have been granted to entrepreneurs producing innovative cost effective building materials by utilising various wastes like fly ash, phospho- gypsum, red mud etc.

4.85.1 A network of building centres is being established with central assistance. So far 366 centres have been identified, out of which 176 have become functional.

Housing Finance

4.86 Flow of finance from LIC and GIC to the Housing Sector should continue at least at the present rate. In the context of the recommendations made by Malhotra Committee, the present scenario with regard to directed credit, particularly from LIC needs to be reviewed.

4.87 As in other countries and as recommended by the Working Group on Housing Finance set up by the Planning Commission, a certain percentage (5% at least) of provident fund accretions (Central) should contribute to the resources for housing finance companies, not at concessional rate but at appropriate cost of fund. This is facilitated by the recent announcement of Ministry of Finance in freeing 15% of PF accretion which was otherwise going to Central Government.

4.88 Role of HUDCO as the apex national agency catering to the requirement of economically weaker sections and low income group population should be clearly recognised and not mixed up with the commercial operations.

4.89 Introduction of foreclosure clause in NHB Act, rationalisation of stamp duties and transfer of Property Act (both of which are in the State domain) would help develop secondary mortgage market to expand housing finance. Debureaucratisation and decontrol of Development Control Rules and building byelaws will be important steps in facilitating location of new economic enterprises including foreign investment in and around urban areas. A technical group on Urban Planning Systems is being set up to suggest interalia measures for simplification of procedures and suggest changes in Town Planning Acts, Building Bye Laws etc. to ensure greater degree of flexibility.

4.90 There is need for improving the cost recovery factor, particularly for rural housing and urban housing for economically weaker sections. The role for HUDCO and State Housing and Area Development Agencies may be limited to sites and services programme rather than complete housing leading to larger spread of public support in housing activities. Balancing concessional interest rate on loans to commercially weaker sections with the average cost of borrowing in HUDCO and State Housing Boards,interest rate subsidies would be necessary.

4.91 A Working Group was set up by the Planning Commission for the North-Eastern Region to help in the development of housing development system and strategy for the Region. Integration of the various programmes of housing, both in urban and rural areas with the provision of other basic services and also employment generation programmes to the extent feasible, is another important task to be attended to.

4.92 It was envisaged that out of Rs.97,500 crore of total investment projected in housing sector, about Rs.5,000 crore should come from budgetary support and Rs.25,000 crore from formal sectors/credit. The balance about 70% was to be generated through own-savings/formal sector lending. It is necessary that an assessment of the actual situation be attempted so that the envisaged flow of resources to the housing sector could be provided for. The figures of investment through private sector/informal sector initiative are not monitored in the Ministry of Urban Affairs and Employment.

4.93 The National Housing Policy recognises the importance of the private and the informal sector in the provision of shelter and towards facilitating the flow of funds. The role of private sector in acquisition and development of land and provision of infrastructure is gradually increasing. In addition, the private finance institutions are now coming up with innovative schemes to finance, construct, operate and transfer infrastructure services. However, the efforts in this regard need to be speeded up.

Urban Development

4.94 As per 1991 Census the urban population of India being 21.7 crore has increased to around 26 per cent of total population. This massive increase coupled with congestion, pollution, deterioration in civic services, poverty etc. has caused grave concern. In the

through institutional financing, market borrowings and private participation;

iii) institutional and financial strengthening of urban local bodies in tune with the provisions of 74th Constitutional Amendment; and

iv) simplification/rationalisation of legal, procedural and institutional bottlenecks in tune with the process of economic liberalisation.

4.96 The two major considerations in formulating the urban development policy relate to:

Table4.17
SUGGESTED FINANCIAL PATTERN FOR IDSMT

(in lakh)

Sl.No.	Town with Population	Project Cost	Central Assistance (grant)	State Share (grant)	HUDCO/other financing institut ions/ other sources
(1)	(2)	(3)	(4)	(5)	(6)
1.	Less than 20,000	100	48	32	20
2.	20,000 -50,000	200	90	60	50
3.	50,000 - 1 lakh	350	150	100	100
4.	1 lakh to 3 lakh	550	210	140	200
5.	3 lakh to 5 lakh	750	270	180	300

light of past experiences and the emerging issues the Eighth Plan besides formulating new stratey in the context of emerging macro economic scenarios, is continuing the overall Seventh Plan strategy of urban development being supportive of economic development.

4.95 The main thrust areas suggested for the urban sector relate to:

i) Integrated approach to urban development with explicit recognition of rural urban linkages;

ii) more innovative and broad based approach to financing and management of urban infrastructure, implying a shift from exclusive dependence on budgetary support to resource mobilisation

i) process of macro economic reforms initiated since 1992 will have far reaching implications in terms of pace and pattern of future urbanisation. To avail of the potential advantage of macro economic reforms in terms of higher growth and efficiency, the reforms in the urban areas will be important pre- requisites; and

ii) The 74th Constitutional Amendment which is a milestone in the urban sector entails re- structuring of the urban local bodies, their finances and management.

4.97 The Schemes in the Urban Development Sector in the Eighth Plan cover only those conventionally dealt with by the State Departments of Urban Develoment. They include social services, physical infrastructure at local level and also poverty alleviation programmes.

The Scheme of environmental improvement of urban slums

Table4.17
Suggested financial Pattern For idsmt

(in lakh)

Sl.No.	Town with Population	Project Cost	Central Assistance (grant)	State Share (grant)	HUDCO/other financing institut ions/ other sources
(1)	(2)	(3)	(4)	(5)	(6)
1.	Less than 20,000	100	48	32	20
2.	20,000 -50,000	200	90	60	50
3.	50,000 - 1 lakh	350	150	100	100
4.	1 lakh to 3 lakh	550	210	140	200
5.	3 lakh to 5 lakh	750	270	180	300

4.98 This scheme formulated as a response to the growing problems of slums has been in operation since 1974 and aims at ameliorating the living conditions of urban slum dwellers and envisages provision of drinking water, drainage, community baths, latrines, widerning and paving of existing lanes, stret lighting and other community services.

4.99 Of the 254 lakh slumdwellers to be covered under the scheme at the beginning of the Eighth Five Year Plan, 11.62 lakh and 12.58 lakh slumdwellers have been covered in 1992-93 and 1993-94 respectively. In 1994-95, 10.60 lakh slumdwellers have been covered till January, 1995 as against the target of 14.63 lakh for the year.

The scheme of Integrated Development of Small and Medium Towns (IDSMT)

4.100 This scheme launched during the Sixth Five Year Plan with a view to (a) reduce migration of population to large cities; (b) to generate employment opportunities in small and medium towns; and (c) to provide infrastructural facitilities in these towns, is being continued. As against the tentative target of 200 towns to be covered during the Eighth Plan, 44 towns were covered in 1992-93 followed by 54 towns in 1993-94. Additional 85 towns are likely to be covered during 1994-95. Most of the towns covered under the scheme have not availed of the institutional finance as envisaged under the scheme.

4.101 Based on All India Meeting of State Secretaries in charge of the Urban Development held in July, 1994, proposals have been made by the Ministry for revision of the IDSMT guidelines which inter-alia include extending the coverage to towns having population upto 5 lakh, revision in the objectives of the scheme and expansion of the scope etc. The pattern of financing for the scheme suggested by the Ministry is shown in Table 4.17.

Mega Cities: Scheme of infrastructural development

4.102 This scheme has been started keeping in view the importance of mega cities in the national economy, to move to structural form of assistance to mega cities and to promote investment in economic and physical infrastrcutre in the mega cities. The basic features of the scheme are as under :

i) The scheme would be applicable to Bombay, Calcutta, Madras, Bangalore and Hyderabad;

ii) The scheme would be administered through the Ministry of Urban Affairs and Employment and funds would be channelised through a specialised nodal agency at the State level;

iii) The sharing between Central Government and the State Governments would be in the ratio of 25:25 and the balance 50 per cent is to be made from institutional finance;

transmission and distribution lines. The Board is proposed to receive a total budgetary support (Central and States) of Rs. 400 crore. An amount of Rs.800 crore is to be mobilised by the Board through HUDCO and Rs.65 crore are to be generated internally.

Table 4.18

Outlay and Expenditure on Urban Development

(Rs. crore)

Head of Development	Eighth Plan 1992-97	1992-93 Actual	1993-94 Actual	1994-95 (B.E.)	1992-95 (B.E.)	Per cent of Eighth Plan Outlay
1	2	3	4	5	6	7
Centre	1407.10	110.14	150.66	240.50	501.30	35.63
State and UTs	3984.88	750.92	688.98	1170.65	2610.55	65.51

iv) The funds from Central and State Government will flow to the nodal agency as grant. The nodal agency will constitute a revolving fund with the help of Central and State shares.

4.102.1 The projects to be included under the scheme would be in three categories:

i) projects for basic services where minimum returns are not expected;

ii) projects in which user charges could be levied; and

iii) projects which are remunerative.

National Capital Region (NCR) Planning Board

4.103 The core objectives of the Regional plan - 2001 for NCR in force from 1989 are :

i) to contain Delhi's population size within manageable limits, and

ii) Development of NCR in a harmonious and balanced manner.

4.104 The NCR Planning Board has approved an investment plan involving a total outlay of Rs.1,846 crore in the Central Sector (exclusive of power needs)and Rs.1,967 crore in the State Sector including Rs.702 crore to be entirely financed by the participating states for regional roads and power

Plan Outlay

4.105 The budgetary support for the Eighth Plan for Urban Development in Central Sector is envisaged at Rs.707.10 crore. excluding Rs.700 crore recently approved for the scheme of Infrastructural Development of Mega Cities. The outlay for the Eighth Plan in the Central and State sectors as well as the expenditure'/allocation during each of the first three years of the plan are indicated in the table 4.18

4.106 The per capita expenditure for the Scheme of Environmental Improvement of Urban Slums have been increased to Rs. 800 from 1.4.95 from the earlier level of Rs. 525 in vogue from 1991.

4.107 For the Mega City Scheme an outlay of Rs.75 crore and Rs.84 crore respectively were provided in 1994-95 and 1995-96.

4.108 For the NCR Planning Board in the Eighth Plan, the Board has an allocation of Rs. 200 crore. The allocation and outlays for the year 1992-93, 1993-94, 1994-95 and 1995-96 are Rs.10 crore, Rs.20 crore, Rs.25 crore and Rs.40 crore, respectively.

Financing Urban infrastructure

4.109 The existing funding sources would hardly take care of 50% of the investment requirements (including backlogs) for urban infrastructure. Further investment need to go up in real terms at a rate higher than the growth of urban population. It may not be a prudent alternative to depend on the budgetary support (from the Centre and State) alone. Generation of internal resources by urban local bodies to finance capital intensive projects may be feasible only in the long run. Private investment would not be forthcoming for the majority of projects in the absence of assured cost recovery and facilitating environment. This is where the Government has to play a facilitating role as a catalyst to attract the private investment. This will be crucial to manage the difficult transitional period till the gains of economic liberalisation and process of democratic decentralisation get consolidated.

4.110 The need for setting up of a specialised institution for financing urban infrastructure schemes in line with the above financing strategy was indicated in the Seventh plan but an urban infrastructure wing came into existence in HUDCO in the year 1989-90. Over the years, the HUDCO's financing operations have increased but the demand in this regard is still growing and as a result there is likely to be a big gap between needs and demand for urban infrastructure financing which can be met only through capital market and participation of financial institutions. The modality in setting up a National Urban Infrastructure Financing Corporation, which should be autonomous, could be considered in immediate future.

4.111 As already emphasised a shift from exclusive dependence on budgetary support to resource mobilisation through institutional financing, market borrowings and enhanced participation by the private sector in activities which can be performed more efficiently by them is called for. Further the new concept of BOOT in the field of urban infrastructure financing could also be promoted and supported in this regard.

4.112 The strengthening of urban local bodies in tune with the provisions of the 74th Constitutional Amendment to undertake larger responsibility in terms of both planning and provision of local services through means of functional and financial devolution of powers is another area which may need attention.

4.113 The recongition of the emerging problems of environmental degradation, especially in metro cities, has also to be kept in view in devising the urban development strategy. This should also be integrated with the recommendations of the Rio Conference pertaining to sustainable human settlements. A couple of pilot projects for sustainable city development (e.g. Madras) have been planned.

4.114 The likely scenario of external assistance (multilateral and bilateral) for urban infrastructure also needs to be examined in depth. In particular capital intensive urban transport projects in metro cities need external assistance. Further with the economic growth and the present climate on liberalisation, the demand for infrastructure and services in urban areas is likely to register a significant increase. The resource mobilisation measures in general and setting up of the State Finance Commission, in particular, in the context of the 74th Constitutional Amendment is another area, which deserves consideration. This will enable the urban local bodies to perform their functions and contribute to their resources. A Resource group under the chairmanship of Dr. Raja Chelliah has been set up for this purpose.

4.115 Problems of urban transport are complicated and complex. The Urban Transport Projects are highly capital intensive and it would be necessary to devise speical strategy to take care of all these projects.

4.116 The programmes of IDSMT (for towns upto 5 lakh population) and mega cities scheme (for five Metros) need to be strengthened with higher plan allocation in the remaining two years of the Plan to have the desired impact on the improvement of quality of urban infrastructure benefiting all segments of population. The programme of NCR Planning board also falls in this category.

4.117 The Planning Commission in collaboration with Ministry of UA&E, has recently set up an inter-Ministerial task force on Urban perspectives and policy to inter-alia develop a perspectve on urbanisation for the next two-three decades. The Task Force will evolve a long term strategy for urban development and also recommend feasible and efficient policy options with particular reference to financing of shelter and urban infrastructure, eradication of urban poverty and development of compatible institutions and planning systems in a decentralised set up. The task force will be assisted by three technical groups one each on : a) urban perspective and policy; b) financing of urban infrastructure; and c) urban planning systems.

Part II

Water Supply & Sanitation

4.118 The basic objectives envisaged in this programme for the Eighth Plan is to provide safe drinking water to the entire population in the rural areas and to cover additional population in urban areas through appropriate mix of Central and State investments, institutional financing in the case of large urban water supply systems, strengthening of operation and maintenance system and more importantly involvement of local people and communities at various stages of implementation and maintenance. The Plan also envisages small headway in the area of rural sanitation in terms of investments, awareness campaignn, participatory mechanism etc.

4.119 The provisions of safe drinking water and sanitation is a State subject and primary responsibility of the State Governments and more specifically of the local bodies. However, in the case of rural water supply, the Central Government has taken up a large scale centrally sponsored programme. This has been done to supplement the efforts of the State Governments in tackling the problem of 'No-source' villages/habitations. In the case of urban water supply, there was no Central support till 1992-93, From the Annual Plan 1993-94 only, a modest scheme for water supply to small towns below 20,000 population has been initiated. In the case of urban sanitation, the limited focus under the Central Plan programme is on the welfare objective of eliminating the obnoxious practice of manual scavenging through conversion of all existing dry latrines into sanitary latrines and rehabilitation of liberated scavengers and their dependents.

Outlay

4.120 The Eighth Plan outlay for Water Supply and Sanitation is Rs.5,968 crore for Central Plan (Excluding Rs.100 crore provided as Central support for construction of Ganga Barrage at Kanpur, subsequent to finalisation of the Eighth Plan) and Rs.10,743

Table 4.19
Percentage of cumulative population coverage

Sl. No.	Sub-Sector	Estimated coverage at the beginning of VIII plan	Envisaged coverage at the end of VIII plan	Expected coverage at the end of Annual Plan 1994-95
		(As per Projected population in the corresponding years)		(As per 1991 census)
1.	Rural Water Supply	78.40*	100.00	82.42 (76.56)$
2.	Rural Sanitation	2.73 @	5.00 @	3.72 @
3.	Urban Water Supply	84.90	94.03	NA
4.	Urban Sanitation	47.90	69.31	NA

* This was based on an estimate. On the basis of the actual figuresreceived subsequently, this works out to only 73.81% as per 1991 census. rage through Government initiatives only and does not take into account the coverage through private initiative.

$ This is based on the data as per 1991-93 survey (73.06 percent equivalent covered population having availability of water at the rate of 40 lpcd) plus 3.5 percent covered subsequently till the end of 1994-95.

N.B. These figures are based on the reporting of the Governments and may not necessarily tally with those indicated elsewhere in the report based on 1991 census documents.

crore in the States and UTs Plans. Against this a provision in the first three years has been 32% and 48% (at 1991-92 prices) respectively. (Annexs 4.3 to 4.5)

4.121 The physical targets envisaged and likely achievements during the Eighth Plan are summarised in the Table 4.19.

4.122 The physical performance, reported by the State Governments, is as under:

(A) Rural Water Supply and Rural Sanitation

4.123 At the time of formulation of the Eighth Plan, it was estimated that about 3,000 hard core 'No-source' villages of the 1985-list of 'Problem villages' numbering about 1.62 lakh as on 1.4.1985 had spilled over to the Eighth Plan. Besides this, it was also estimated that about 1.5 lakh 'partially covered' and a significant number of acute quality problem villages/habitations also remained, where the level and quality of water supply needed urgent improvement. In order to achieve the objective of 100% population coverage, the Eighth Plan has, therefore, to concentrate on coverage of habitations also rather than only villages, particularly because most of the 'No-source' villages (Problem villages), have already been covered. All except 146 leftover "no-source" villages of "1985 list" of problem villages numbering about 3000 at the beginning of the Eighth Plan, are expected to have been covered at the end of the Annual Plan 1994-95. In all, about 1.46 lakh villages/habitations including "partially covered" and "quality problem" villages/habitations are expected to have been covered in the first three years of the Eighth Plan. In terms of population, it is expected that 82.42% of the rural population has been covered with water supply facilities.

4.124 The progress of various sub-missions programmes under Rajiv Gandhi National Drinking Water Mission, since its inception in August, 1986 is as follows.

i) Under Guineaworm eradication programme, the Ministry of Rural Area & Employment had approved 7,284 schemes of conversion of step- wells into sanitary wells. Against this, 6,750 step-wells have been converted upto March 1995, and the number of affected villages and the reported cases of disease has been brought down from 1831 and 566 as on 1.7.1992 to 803 and 363 respectively as on March,1995.

ii) In the case of control of fluorosis, the Ministry of Rural Area & Employment had approved schemes for 483 defluoridation plants, against which 415 plants have been commisioned upto March,1995. In addition, 676 schemes of alternative sources for 3,995 habitations to benefit 50.6 lakh rural population have also been approved at an estimated cost of Rs.301.11 crore.

iii) In the case of sub-mission on excess iron removal, schemes for 11,908 iron removal plants were approved by the Ministry of Rural Area & Employment. Against this 5,328 plants have been commisioned upto March, 1995. In addition, 3,640 plants have been approved under other schemes.

iv) Under the sub-mission on control of brackishness, schemes for installation of 163 desalination plants were approved by Ministry of Rural Development, against which, 150 plants have been commissioned upto March, 1995. In addition, 191 schemes for 56 habitations (12.04 lakh population) have been approved in seven states for supply of drinking water from alternative safe sources at an estimated cost of Rs. 79.18 crore.

v) In order to overcome the problem of excess arsenic in drinking water in certain areas in West Bengal, 9 schemes for 1,133 habitations (15.74 lakh population) have been approved at an estimated cost of Rs.98.10 crore.

4.125 As regards rural sanitation, the expected coverage through Government initiative is additional 0.99% of the 1991 Census population in the first three years of the Eighth Plan and cumulative coverage of 3.72%.

(B) Urban Water Supply and Sanitation

4.126 In the absence of any worthwhile management in formation system, it has not been possible to ascertain the current position of population coverage in the urban areas. The coverage of urban population by protected water supply is estimated to be around 85%

at the beginning of Eighth Plan. However, the service levels are far below the desired norms in most of the cases, particularly the smaller towns, where the same are even worse than rural water supply norms. In most of the cities, supply of water to the 'Urban poor locations' is uncertain and inadequate. It is felt necessary to develop an effective Monitoring and Management Information System to monitor the progress of urban water supply and sanitation programme.

4.127 The physical status at the beginning of Eighth Plan, the target for the Eighth Plan and the achievement during the first three years, in respect of a few important schemes are given in Annex 4.8.

4.128 Besides financial constraints, there have been various other significant constraints and new developments contributing to the slower pace of progress; some of which are as under:

i) While the 1985 list of 'problem villages' was almost to be exhausted, the recent survey cnducted by the State Governments during 1991-93 at the instance of Ministry of Rural Area & Employment, has given a new dimension to the problem of rural water supply, which has assumed much greater significance. As per the survey, a very large number of new 'no-source' villages and habitations has re-emerged due to various causes such as, depletion of water table or due to the use of improper technology and malfunctioning of the water supply systems, created, etc. As large as 67,836 villages and 2.11 lakh habitations have emerged as 'no-sorurce' category and around 1.84 lakh villages and 1.83 lakh habitations as "partially covered" category. Due to reemergence of a very large number of 'no-source' villages/habitations, the Ministry of Rural Development, conducted a revalidation survey with the help of reputed technical and social service institutions in mid- 1994. In this revalidation survey, while all the identified 'no-source' villages were re- validated, only 30 % were revalidated in the case of "no-source" habitations. Partially covered villages/habitations however, were not re-validated at all. As per the re-validation survey, the number of 'no- source' villages and habitations came down to 24,000 and 1.16 lakh respectively. Apart from these, a large number of villages/habitations are also suffering from acute quality (potability) problem, the reconciled firm number of which is yet to be ascertained. Due to these reasons, it may now be quite difficult to achieve the Eighth Plan objective of providing safe and adequate water supply to the entire rural population. It would, therefore, be necessary to phase out the rural water supply programme by making inter-se prioritisation to cover "no-source" villages/habitations, 'acute quality problem' villages/habitations and 'partially covered' villages/habitations in that order.

ii) Though, the overall coverage of population in the country as a whole is reported to be at 82.42% as in March,1995, there are some States, where the coverage of population is much lower than this, such as in Kerala (56.8%), Rajasthan (60.14%), Punjab (50.33%), U.P. (59.14%) and West Bengal (66.82%). In the case of Punjab, the figure, however, does not take into account the private tubewells/handpumps, which are in large number.

iii) The operation and maintenance of rural water supply system has been in a very bad shape, particularly,due to lack of finance and involvement of community. There is a large gap between the requirement and availability of funds for operation and maintenance. The State Finance Commissions have, therefore, to look into the matter relating to the adequate financial provision for operation and maintenance of the schemes. It would also be necessary to involve people and create awareness amongst them to generate revenue to narrow down the gap further.

iv) In the case of Centrally Sponsored Low Cost Sanitation Scheme for Liberation of Scavengers, though, the Eighth Plan envisages to convert all the existing dry latrines into sanitary latrines in the urban areas by the end of the Plan for complete abolition of the obnoxious practice of manual scavenging of human excrete, the present state of affiars indicates that we are no where near the target. The main reasons for non-achievement of the target are

a) Inadequate allocation of funds. Against the estimated requirement of Rs. 550 crore towards the Cntral subsidy including interest differential support to HUDCO, the actual provision available in the Eighth Plan is only Rs. 150 crore. Moreover, the annual allocations made during the first 3 years are still lower and are only about Rs. 73 crore, which works out to only 48.8% in nominal terms and 40.9% in real terms, of the Eighth Plan outlay.

b) Inadequacy of the States' organisational capacity for implementation of this scheme.

c) Lack of proper coordination between the two components of the scheme viz.,

(i) Conversion of Dry Latrines into anitary Latrines; and (ii) Rehabilitation of Liberated Scavenges and their dependents.

d) Delay in obtaining State Governments' guarantee by the local bodies for HUDCO loan component.

e) 'The Employment of Manual Svavenging and Construction of Dry Latrines (Prohibiion) Act,1993' was enacted in June,1993. Except for 6 States, who had initially adopted the resolution under Article 252 (i) of the Constitution, no other State has adopted the same so far.

Issues and Policy Implications

4.129 Keeping in view the progress achieved, the problems faced and the new developments taken place, it is considered desirable to incorporate the following changes in the Eighth Plan:

i) As it may not be possible to achieve the envisaged Eighth Plan targets, the target for coverage of population with rural water supply be reduced. Similarly, the target for urban water supply and sanitation be reduced significantly and the target date of completion for conversion of all the existing dry latrines in urban areas be spilled over to the Ninth Plan.

ii) It would also be necessary for sustainability of water source, that the Rural Water Supply Programme be restructured in the light of the recommendations of the Expert Group, constituted by the Ministry of Rural Area & Employment, which suggests a switch over from Mini-Mission projects to normal ARWSP projects with Mini-Mission approah of scientific source finding and integration of other allied schemes.

iii) As a follow up of 73rd and 74th Constitutional amendments, most of the State Governments are likely to entrust the responsibilities of operation and maintenance of urban and rural water supply system to the local bodies and village Panchayats, and therefore it would be necessary for the State Finance Commissions to explicitly indicate the norms and other financial implications and make a realistic assessment of requirements of funds and also to make suitable recommendations for provisions of finances by category of towns and villages. Water Supply and sanitation agencies, including the local bodies, should be given full autonomy for determining the tariffs with the provision for automatic annual increase to cover the cost. Tariff fixation should be based on average incremental cost including O&M cost, depreciation charges, debt dues, etc.

iv) It is imperative that the larger reliance is placed on institutional finance. This too, though growing, is limited in comparison to requirements. The need for strengthening the existing infrastructure-wing of HUDCO and/or setting up of a specialised Infrastructure Corporation, which can tap resources from the capital market and financial institutions, is strongly felt.

v) The Solid Waste Management, which has been the most neglected component of the sector until now, will have to be dealt with seriously in the wake of resurgence of Plague, which has resulted into a huge financial loss to the country. Appropriate policy and methodology would need to be adopted following the recommendations of the report (still awaited) of High Level Committee, set up in the Planning Commission.

vi) In the case of Rural Sanitation, the software is equally important as the hardware, without which, the programme may not be succeed. Keeping this in view, the guidelines for the Centrally

Sponsored Rural Sanitation Programme earmarks 10% of the funds for Information, Education, & Communication (IEC) component. This, however, is not actually being fully utilised at present by most of the States. It is, therefore, necessary that this aspect receive due importance for the success of the rural sanitation programme.

Section 3: Literacy and Education

4.130 To the individual, education means expansion of cultural horizons and employment opportunities. To the nation, it means enhanced prospects of social and economic development. In the process of both individual and national development, education is the foundational investment. This investment must be substantial and made with the recognition of its urgency.

4.131 The thrust areas and strategies for the 8th Plan were conceived against the backdrop of three specific initiatives: (i) the National Policy on Education (NEP), 1986; its revised Programme of Action (POA); and the goal of Education For All (EFA) by 2000 AD. Consequent upon the restructuring of the Indian economy in 1991, the thrust areas are: Universaliation of Elementary Education (UEE), Eradication Of Illiteracy (EOI) in the age group of 15-35, and strengthening of Vocational Education (VE). Girls and out-of-school disadvantaged groups constitute special targets.

4.132 With nearly 47.8 percent of the population being illiterate with wide rural-urban and inter-state variations, the 8th Plan target seeks to achieve 100 percent literacy in the age-group 15-35 years, in all the states.

Elementary Education

4.133 The 8th Plan aims at fulfilling the Constitutional directive for Universalisation of Elementary Education. Translated into physical terms, this means an enrolment target of 4.38 crore children in the age group of 6-14 years during the 8th Plan. Even after reaching this challenging target, 1.15 crore children would remain to be covered during the period 1997-2000.

4.134 In the first two years of the 8th Plan, enrolment at the elementary stage is not commensurate with the target requirements. Additional enrolment in Classes I-V during 1992-95 was about 1.16 crore pupils and in Classes VI-VIII it was 70.6 lakh, giving a total of 1.87 crore, which comes to about 43.07 percent of the 8th Plan target. The progress of enrolment has been slow particularly in Assam, Bihar, Gujarat, Haryana, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu and Uttar Pradesh. In the year 1993-94, the Gross Enrolment Ratio (GER) at the primary stage (Classes I-V) has been less than 100 in the case of Arunachal Prdesh, Bihar, Goa, Haryana, Jammu & Kashmir, Madhya Pradesh, Manipur, Meghalaya, Orissa, Punjab, Rajasthan, Uttar Pradesh, Andaman & Nicobar Islands, Chandigarh, Dadra and Nagar Haveli and Delhi. (Annex 4.11). At the upper primary stage (Classes VI-VIII), GER is more than 100 percent in Himachal Pradesh, Kerala, Mizoram, Tamil Nadu, Lakshdweep and Pondicherry. An inter-State comparison highlights the need to probe the reasons for low enrolment both at primary and upper primary stages and also identification of the proportion of enrolment of underage and overage children so as to obtain a reliable Net Enrolment Ratio (NER) and plan effective statewise attainment of the objective of UEE by the year 2000.

4.135 Some efforts have been made for improving retention. Elementary education is free. Schemes of free text books, uniforms and midday meals, have helped in this direction. The 8th Plan aims at reducing the dropout rate from 45% to 20% in case of Classes I-V and from 60% to 40% in case of Classes I-VIII. As against this target, the dropout rate in classes I-V in 1993-94 is 36.32% and in classes I-VIII 52.80%. Adequate measures seem necessary to reduce dropout particularly at the upper primary level so as to prevent additions to the ranks of illiterates in the 15-35 age group in the next few years. Otherwise, the target requirements for the literacy programme will increase in subsequent years/plans.

4.136 The important requirement of supportive infrastructure for elementary education is covered under the programme of Operation Blackboard (OB) (Annex 4.8). During the 8th Plan, it was proposed to cover the remaining schools under the on-going scheme, expand the scope of the Scheme to provide three teachers and 3 rooms in primary schools where enrolment exceeds 100 and to extend it also to the upper primary stage. The progress during 1992-95 has been :

i) 1.18 lakh schools covered under teaching/learning equipments as against a target of 1.09 lakh;

ii) 26,000 teachers sanctioned as against 33,000 anticipated;

iii) Under expanded Operation Blackboard, 9,074 teachers sanctioned as 3rd teacher as against 42,000 anticipated;

iv) 7,335 upper primary schools were sanctioned with TLE as against a target of 14,000.

4.137 Out of the 8th Plan allocation of Rs. 950.00 crore for the scheme, Rs. 549.11 crores are expected to have been spent during 1992-95. While teaching/learning material is reported to have reached all the schools, the facility of additional teacher and classroom has not reached in the same manner. Impact of Operation Blackboard (OB) in teaching/learning levels of information is yet to be firmly assessed. An evaluation study of six states carried out by NCERT has brought out the above lacunae. By making the National Council of Teacher Education (NCTE) a statutory body, (Act 73 of 1993), planned and coordinated development of teacher education has been made possible with accreditation standards.

4.138 The scheme of Non-Formal Education (NFE) was designed to cater to the needs of children who are not able to attend full time formal schools or have dropped out for various reasons. During 1991-92, 2.72 lakh centres of NFE were operative in the country. During 1994-95, about 2.52 lakh centres were operating of which 1.27 lakhs centres catered to co-education and 0.97 lakh were meant for girls. About 63 lakh children are being covered under NFE.

4.139 Teacher education and in-service teacher training also form part of the programmes for UEE. As on 1990-91, 17.62 lakh teachers were covered under the programme of Mass Orientation of School Teachers(PMOST) and 306 District Institutes of Education and Training were sanctioned by 1991-92. During 8th Plan it was proposed to sanction another 119 DIETs making a total of 425. In the first three years of the 8th Plan, 119 DIETs have been sanctioned and 15,692 teachers trained under the programme. Special Orientation Programme for Primary Teacher (SOPT) has been initiated during 1993-94 as a Centrally Sponsored Scheme with a view to providing training to teachers in the use of Operation Blackboard materials and orienting them towards the Minimum Levels of Learning (MLL) with focus on the teaching of language, mathematics and environment studies. This programme is going on in almost all states and 1.14 lakh teachers have been trained against the target of 4.50 lakh per year.

4.140 It may be too premature to appraise the scheme of District Primary Education Programme (DPEP) which has become operational only during 1994-95. The Scheme emphasises decentralised management, community mobilisation, capacity building and locally relevant curriculum and pedagogy. The programme has been lanuched in 42 districts in seven states with the objective to cover 110 districts by the end of the 8th Plan.

Education Technology

4.141 This is a Centrally Sponsored Scheme combining certain elements of the Central Plan scheme. The scheme seeks to provide the entire cost of Radio-cum-Cassette Player (RCCP) for primary schools and 75% of Colour TV in upper primary schools to provide access to quality education to enable production of suitable programmes for these schools. Six autonomous State Institutes of Education Technology (SIET) in Uttar Pradesh, Bihar, Orissa, Maharashtra, Gujarat and Andhra Pradesh have also been funded under the scheme. The scheme extends financial support to the Central Institute of Educational Technology (CIET) for producing programmes for school sector for broadcasting through Doordarshan and Akashwani. 2,81,616 Radio-cum-Cassette Players and 51,507 colour TVs have been distributed. CIET and State Institutes of Educational Technology (SIET's) have together produced 3,921 TV and 1,100 Audio Programmes for the school sector.

Adult Education

4.142 Eradication Of Illiteracy(EOI) has been accorded a high priority in the 8th Plan and is a major thrust area. It is also one of the components of the Minimum Needs Programme (MNP) with earmarked outlay. In view of the importance of this programme, a Committee on Literacy was constituted in the Planning Commission in April, 1992 in pursuance of the decision of the National Development Council held in December, 1991. The committee made its recommendations in January, 1993 and gave a new direction to literacy and UEE programmes.

4.143 The National Literacy Mission (NLM) was launched in May, 1988 for achieving universal literacy in the 15-35 age group. The target was to cover 8 crore adult illiterate persons by 1995. This target has since been revised upwards to make 10 crore persons literate by the end of the 8th Plan (1992-97). The emphasis in this regard is on sustainability of literacy skills and the achievement of goals of remediation, continuation, and application of skills to actual living conditions. The NPE, 1986 and POA in 1992 stressed effective achievement.

4.144 Serious attention to the literacy problems of the weaker sections of society, specially SCs/STs and women was emphasised by the 8th Plan. Efforts have therefore, been directed to the districts/regions which are educationally backward and have high concentration of SCs/STs population with low female literacy.

4.145 With regard to adult literacy, NPE stressed effective achievement. The qualitative and quantitative achievement of NLM needs to be assessed thoroughly. The implementation of the programme has shown a certain discrepancy between target, enrolment and achievement. As already stated, the 8th Plan target was to cover 10 crore adult illiterates by 1997. The coverage upto March, 1994 was 5.8 crore illiterates of whom about 4.1 crore had been made literate. In view of the above, the target is not likely to be achieved by the end of the 8th Plan, if the prevalent administrative procedures are to be followed. The district level age profile of the target population of TLC does not appear to conform NPE (1992). While the TLC could be utilised as a useful instrument in environment building for bringing children to school and to non-formal centres. It cannot cater to the requirement of the primary education age group of 9-14 and should remain confined to adults of the 15-35 age-group. However, the community mobilisation technique (adopted through Zilla Saksharta Samitis) has created a climate of support to literacy and primary education and needs to be pursued vigorously. Special efforts should be made for a mission-mode method for NPE and UEE in the TLC/PLC districts.

4.146 NLM has concentrated initially on high literacy districts/states where it was easier to complete the task and prevent further illiteracy. But TLC is not rationally spread across districts and regions. A substantial number of districts are yet to be covered under TLC in the Hindi speaking states which contain 50% illiterate population of the country. The Hindi speaking states show only 35% coverage under TLC which is very inadequate.

4.147 The National Literacy Mission (NLM) emphasised the retention of literacy skills through continuing education. For this purpose, 22,000 Jan Shiksha Nilayams (JSNs) were sanctioned under the programme of Post Literacy and Continuing Education (PL&CE). However, only around 18,000 are currently operational. To make adult education more meaningful, JSNs should be developed as an effective library-cum-information window, capable of enabling neo-literates to up-grade their income-generation skills, to take advantage of rural employment schemes, and participate in the Panchayat Raj activities. This scheme requires to be extended substantially to all districts whether under TLC or PLC with due reorganisation.

4.148 The scheme of continuing education under the NLM has now been formulated afresh so as to launch a continuing education campaign on the conclusion of the Total/Post Literacy Campaign (Phase one). So far, about 41 million persons are reported to have been made functionally literate under the Mission. The continuing education programme is essentially for these neo- literates. The Continuing Education Programmes are proposed to be launched only in such districts as have successfully completed both TLC and PLC phases. Currently, there are 105 districts where PLCs are being implemented. Considering that emphasis under adult education would be on continuation of learning and application of new skills, the fact that participation in post literacy campaigns is only 50% is very unsatisfactory. Also, there is a great discrepancy between the number of neo-literates enrolled and number of actual participation, in the districts covered so far. Obviously, PLC requires reorganisation.

4.149 An outlay of Rs. 1,400 crore was allocated for adult education in the 8th Plan in the Central Sector and Rs. 394.44 crore in the State sector. Only 35% of the 8th Plan allocation for adult education is likely to be utilised during the first three years of the 8th Plan in the Central Sector and 56% in the State sector. As regards the achievement in terms of percentage of total target nearly 56% target set for the 8th Plan has been covered. However, in view of the overall performance in terms of actual achievement, only 50% of the learners have achievement levels of primer III. The remaining target has to be achieved effectively by the end of the 8th Plan.

Secondary Education

4.150 The quality of secondary education in general needs improvement. Two measures taken in this direction include establishment of the Navodaya Vidyalayas in more districts and providing funds to upgrade the facilities in the Kendriya Vidyalayas.

4.151 The schemes for improvement of science education in schools, environmental orientation to school education, Computer Literacy and Studies in Schools (CLASS) and Navodaya Vidyalayas continued their operation during the 8th Plan. Under the CLASS Project upto 1991-92, 2,598 Secondary schools were equipped with computers. During the 8th Plan, CLASS was restructured and a target of 1,320 additional schools was expected to be covered by 1994-95.

Navodaya Vidyalayas

4.152 Navodaya Vidyalayas (NV) came into operation with the objective of making available good quality modern education to talented children from the rural areas, through free education in residential schools in all the districts of the country. At the commencement of the 8th Plan, there were 280 Vidyalayas functioning and the main emphasis during the 8th Plan has been to consolidate the existing 280 Vidyalayas including their construction programme and to cover the remaining districts by establishing 150 new Vidyalayas -- i.e. 50 new Vidyalayas per year -- during the first three years of the Plan and to improve the academic excellence of the students with proper monitoring and evaluation of the scheme. In all, 79 new schools were established upto December, 1994. The inadequate provision of buildings, furniture, equipment, laboratories, libraries etc. is attributed to inadequate resource allocation. The programme of Action in the National Policy on Education has envisaged a comprehensive review of the scheme after NVs had been established and consolidated in all the districts of the country. Accordingly, the Ministry of Human Resource Development has proposed independent external evaluation at the end of the 8th Plan by which time the scheme would be covering all the districts of the country.

Kendriya Vidyalayas

4.153 Under Kendriya Vidyalaya Sangathan, as on 1994-95 there are 818 Vidyalayas having an enrolment of more than 7 lakh. However, like in NVs, expansion without simultateous creation of necessary infrastructure has tended to compromise quality of education. Considering the role of these institutions in promoting education with national identity, it has been decided during the Mid-plan to support these vidyalayas through a plan scheme.

Science Education

4.154 The Scheme for improvement of Science Education in schools continued to be in operation during the 8th Plan, with 100% Central assistance. The components of the scheme include provision of science kits to upper primary schools, upgradation and strengthening of science laboratories in secondary/senior secondary schools, supply of library books on science related subjects to secondary/senior secondary schools and training of science and mathematics teachers.

4.155 The achievement during 1992-95, both financial and physical is given in the table 4.20.

Vocational Education

4.156 Under Vocational Education, the 8th Plan target is to divert about 11.63 lakh higher secondary students to the Vocational stream. Upto the end of 1993-94, 9.12 lakh students were enrolled in 16,450 vocational sections approved in 5,701 schools. About 150 vocational courses have been introduced in major areas of agriculture, business, commerce, engineering and technology and para-medical and health services. However, the quality of courses remains a cause for concern. This seems to explain the sluggish progress of the vocational stream as well as its linkage with industry aiming to promote apprenticeship to such passouts. In order to boost the programme and activities in Vocational Education Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) has been established under NCERT at Bhopal on 1st July, 1993. Planning Commission called a meeting of secretaries of health and education departments of the Union and the States on April 15, 1994 to bring about closer linkages and appreciation of health related vocational courses.

Table 4.20
Financial and Physical Achievements

	1992-93	1993-94	1994-95*
Amount spent(Rs. in crore)	24.94	22.08	22.70
No.of States/UTs covered	14	15	15
No.of Schools covered			
i) Upper Primary (Science kits)	11678	5756	5000
ii) Secondary/Higher Secondary (Library assistance)	5179	3874	3250
iii) Secondary/Higher Secondary (Laboratory assistance)	5849	3914	3250
No.of institutions assisted for setting up of District Resources Centres (Anticipated)	---	---	---
No.of Voluntary organisations covered (for innovative programmes)	7	12	12

* anticipated

Higher and Technical Education

4.157. In this sector during 1992-95 there have been developments in the form of institutions building, revision of curriculum and efforts at improvement of quality. While there have been no significant shifts in areas like fee structure and resource mobilisation, beginnings have been made in these areas.

4.157.1 Perspectives of development of Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs), Regional Engineering colleges (RECs) and Polytechnics and their role in the changed situation have been discussed in a series of sessions in the Planning Commission, which inter-alia stressed the need for assessing and forecasting of technology requirements and also for modernising of teaching, research and other facilities in technical institutions. Four major areas were identified for IITs; viz. (i) New thrust area - Technology Development; (ii) International Consultancy; (iii) Industrial Foundation/Park; and (iv) Creation of Corpus Fund. Under Technology Development Missions, three strategies were conceived - (i) Long-term project mission areas with visible gains in 7 to 10 years; (ii) Short- term mission areas with measurable results in about five years and (iii) areas where primary focus being on long-term gains, useful intermediate results may be achieved as spin-off. For the objective, seven generic fields were identified by the five IITs and Indian Institute of Science IISc, Bangalore in the following areas: (i) Food processing Engineering; (ii) Integrated Design and Competitive Manufacturing; (iii) Photonic/Laser Devices and technologies; (iv) Energy Efficient Technologies and Devices; (v) Communication, Networking and Intelligent Automation ; (vi) New materials and (vii) Genetic engineering and Bio-technology. A National Steering Committee constituted by the Planning Commission is monitoring the progress of these missions Periodically.

4.157.2. Interaction and inter-dependence are the well recognised concepts in the present day global situation. Universities and Technical Institutions are no exception to this, especially in the present situation of inadequate resources. To bring about a meaningful interaction among university-industry-national R&D Laboratories-Professional Bodies and Academies, Planning Commission has constituted a Standing Committee in February, 1995. Similarly, Industrial foundations at IITs have been conceived with the objective of bringing about an environment for development of an effective and synergistic relationship between accademia and industry. In pursuance of this, IIT, Delhi has set up its Foundation for Innovation and Technology Transfer (FITT).

4.157.3. Resources inadequacy situation affect higher and technical education as well. One of the thrust areas of the 8th Plan in the higher and technical education sector was to make the system financially self-supporting to the extent possible. That the public resources for higher education is limited, has been well acknowledged. Incentive announced in the budget 1993-94 for100% tax rebate for donations to Universities is an indication towards efforts at attracting resources from outside the Government. Future efforts would need to be towards internal resource mobilisation of Universities through consultancy, applied research, rationalisation of fee structure etc.. Creation of a corpus fund for IITs and IIMs is a right step towards encouraging resources mobilisation as well as to provide financial autonomy. The reports of the Committees of UGC on "Funding of Institutions of Higher Education", 1992-93 and of AICTE on "Mobilisation of Additional Resources for Technical Education", 1994 spell out the need for various new strategies in funding higher and technical education having intermediate as well as long term implications. A revised pattern of funding has been implemented in IITs, IIms and IISc, Bangalore beginning with the financial year 1993-94. To encourage and accelarate the creation of an adequate level of Corpus Fund, the Government of India will provide 100% matching grants for savings out of the Non-Plan grant, revenue receipts and net earnings from consultancy and continuing education programmes to the extent these are transferred to the Endowment Fund.

4.157.4. All India Council for Technical Education (AICTE) became a statutory organisation by the Act of 1988 and have issued Regulations in 1994 regarding admissions and fees in private, professional unaided technical institutions. With its statutory status AICTE is now in a position to activate a proper planned and coordinated development of technical education in the country.

4.157.5. In the Higher Education System, Inter-university Centres in Nuclear Science, astronomy and astro-physics and atomic energy have been established by University Grants Commission (UGC) with a view to providing common research facilities and services leading to excellence in the system. Similarly in the area of networking of libraries and information centres in bringing about a cost effective libbrary system and quick exchange of data, INFLIBNET, an information and library networking programme of UGC is worth encouraging and supporting. Planning Commission had organised a brain storming session on sharing of library and information resources through networking in August, 1994. With a view to restructure the university education system, particularly in the context of higher enrolment at the first degree level in Arts, Science and Commerce courses, UGC has brought in programmes on vocationalisation of 1st degree education. 35 Vocational Courses identified by UGC are being introduced at undergraduate level. To oversee the implementation of the Value Orientation of Education at all levels, a Standing Committee was constituted by the Ministry of Human Resources Development in August, 1993. The committee is working out action plans with specific time frames involving all segments of education, community, gorernmental and non-governmental organisations to realise the objective of value orientation of education.

Distance Education

4.158 The Distance Education System has been developed to cater to a large segment of student population which cannot avail of the formal system due to various reasons, at the secondary and senior secondary and University levels. Both National Open School (NOS) and Indira Gandhi National Open University (IGNOU) have continued their operations during the 8th Plan. The enrolment position of NOS is as in Table 4.21.

Table 4.21

Years	NOS
1991-92	34781
1992-93	53567
1993-94	62289
1994-95	67269

4.158.1 As against an 8th Plan allocation (for NOS) of Rs. 11.00 crore the expenditure so far has been about Rs. 5.55 crore. The enrolment in IGNOU which was 75,666 in 1992-93 has increased to 1,82,000 by 1994-95. The Distance Education Council (DEC) which was set up as a statutory Authority under the IGNOU Act, in 1992 has given Rs. 53.80 lakh to three open universities in 1992-93 and Rs. 60.00 lakh to two open universities during 1993-94. In the 8th Five Year Plan, Rs. 60 crore have been allocated for IGNOU against which Rs. 66.00 crore have been spent. The technological developments are making these programmes extensive in reach and popularity.

Part II

Culture

4.159 Education and Culture are closely linked. To promote cultural understanding new schemes have been supported. Certain schemes have exceeded the 8th Plan provision such as development of cultural organisations, award of scholarships and fellowships to artists in the field of performing, literary and plastic arts, the Nehru Centre, Bombay, Gandhi Smriti and Darshan Samiti, New Delhi and Indira Gandhi National Centre for Arts.

4.159.1 A closer monitoring of plan expenditures by the Department is necessary. The new scheme of setting up of a multi purpose cultural centres has not progressed since no meaningful project proposals fulfilling the norms and guidelines laid down by the Department of Culture have been forwarded by the State Governments. The State of West Bengal and Sikkim have been given grants for setting up such complex.

4.159.2 The Sahitya Academy, due to resource crunch, was unable to initiate the Translation Bureau. The progress in the building programme of various cultural institutions has also been slow.

4.159.3 The Archaeological Survey of India, Centre of Modern Art and the three academies have faced acute shortage of space.

4.159.4 The National Council for Science Museum, Calcutta seems to be in a position to utilise additional funds to develop and complete the Science City.

4.159.5 The Scheme of Zonal Cultural Centres (ZCCs) continued its operations during the 8th Plan. Duplication of efforts as among the activities of ZCCs, State Departments and the three National Akademies - the Lalit Kala Akademi, Sangeet Natak Akademi and Sahitya Kala Akademi would need to be avoided. Department of Culture, through coordinating the activities of various functionaries and also through involving the National Akademies in the functioning of the ZCCs can minimise the duplication. Involving the akademies would also ensure the application of highest technical know how in organising the activities of the ZCCs.

4.159.6 The other two areas where the Department could expand its operation are in the development of folk and tribal arts and in the conservation of monuments of archeological interest, the latter preferably through training cadres of conservationists.

Part III

Youth Affairs and Sports

4.160 Out of the total 8th Plan approved outlay of Rs. 350.00 crores for the Department of Youth Affairs and Sports, the likely expenditure during 1992-95 comes to about Rs. 274.05 crore which is about 78.3% of the approved outlays. Under Youth Affairs, the major schemes are National Service Scheme (NSS) and Nehru Yuva Kendra Sangathan.

4.160.1 The National Service Scheme (NSS) of Youth Affairs is envisaged for the development of Youth of Universities/colleges and +2 level schools for the development of their personalities through community services. The programme has successfully taken up activities which have social orientation like literacy, environment enrichment, national integration, significance of community management of resources etc. During the 8th Plan it was envisaged to enrol 16 lakh volunteers, conducted 25,000 special camps and adopt 14,500 villages. During 1992-95, the scheme is expected to enrol 12 lakh volunteers, conducted 15,000 special camps and adopt 8,500 villages. Out of the total 8th Plan approved outlay of Rs. 63.76 crore, an amount of Rs. 31.61 crore was expected to be utilised during the first three years of the Plan. The shortfall in spending could be attributed to savings in pay/allowances of staff of NSS Organisations.

4.160.2 The scheme of Nehru Yuva Kendras aims at providing the rural and non-student youth with opportunity to take part in the process of National development as also to develop their own personality and skills. During 1992-95, the activities conducted include camps, vocational training, rural sports and games, rural cultural activities, youth club development programme, functional literacy implementation and campaign on human survival

Table 4.22
Plan Outlay and Expenditure under MNP in the Eighth Plan

Year	Outlay			
	State	Centre	Total	Actual Expenditure
1992-93	3469.76	933.47	4403.23	3768.10
1993-94	3963.43	1451.83	5415.26	4963.62 *

* Anticipated Expenditure. Source: Plan documents.

value. Out of the 8th Plan approved outlay of Rs. 53.38 crore the expenditure under the scheme comes to approx. Rs. 28.86 crore during 1992-95.

4.160.3 Sports Authority of India had been allocated an amount of Rs. 100.81 crore during the 8th Plan. The expenditure during 1992-95 under its various schemes approximates about Rs. 85.11 crore. The activities taken up included, inter alia, managing and maintaining of stadia, to sport and nurture talented young sports persons, to train coaches and national teams, creation of a Central pool of Sports equipment etc. Adoption of scientific approach towards development of sports potential through promotion of sports medicine and application of its technique in the selection and fostering of sports talent is another thrust area taken up during 8th Plan.

4.160.4 A Core Group on Sports Medicine was set up in March 1992 in Planning Commission whose recommendations are being implemented. Sports Authority of India has developed sports Science and Sports Medicine facilities including a Dope Control Laboratory and other facilities at Delhi, Patiala and Bangalore.

4.160.5 Netaji Subhash National Institute of Sports (NSNIS), Patiala has developed a two years course in Sports Medicine and as on 1994, 28 doctors have qualified the course.

Section 4 : Minimum Needs Programme (MNP)

4.161 The concept of the Minimum Needs Programme (MNP) emerged and crystalised out of the experience of the previous plans that neither growth nor social consumption can be sustained, much less accelerated, without being mutually supportive. In the absence of such a programme, the pressure for investments in the development of infrastructure and production sectors left relatively small allocations for social services.

4.162 The Minimum Needs Programme was introduced during the Fifth Five Year Plan.

Table 4.23
MNP spending as a Proportion of Total Plan outlay

Plan/Year	MNP Spending Rs.Crore	Total Plan outlay Rs.Crore	MNP as a per--centage of total plan outlay
VII Plan (1985-90)	13,417	2,18,731	6.13
1990-91	3,429	58,369	5.87
1991-92	3,749	64,753	5.79
1992-93	3,768	72,853	5.17
1993-94	4,963 *	92,629 (RE)	5.36

R.E. Revised Estimate. * Anticipated Expenditure.

This programme aims at ensuring basic amenities of life which are necessary for an acceptable level of human development for all sections of people.Components of this programme are : elementary education; adult education; rural health; rural water supply; rural electrification; rural roads; rural housing; environmental improvement of urban slums; nutrition; rural domestic cooking energy; rural sanitation;and a public distribution system.

4.163 Since many of the components under the Minimum Needs Programme are State subjects, Programmes relating to these components are included in the Annual Plans of the State Governments. The Planning Commission, by earmarking the outlays in respect of the Minimum Needs Programme under various sectors, ensures that the allocations are utilised by the State Governments for the purpose for which they are earmarked. In addition to this, the Central Ministries also participate in programmes under some of the components of the Minimum Needs Programme and execute the projects through the State Governments. The outlay and expenditure figures for the first two years of the Eighth Plan over which actuals expenditure is available) indicate that the projected outlay for MNP was not spent. Table 4.22 gives a summary of expenditure of Centre and states against the targetted outlay. Annex 4.12 gives component wise details.

4.164 MNP spending as a proportion of Total Plan outlays has been declining over the years. (Table 4.23). The physical progress of the components of MNP are given Annex 4.8.

Section 5 : Welfare of Select Social Groups

4.165 At the commencement of planning, large disparities existed in India across areas, regions and social groups. One of the main tasks of Planning was, therefore, to identify and remove such disparities. The main disadvantaged groups were Women and Children; members of Scheduled Castes and Scheduled Tribes, persons belonging to Minorities and Other backward Classes; Handicapped persons; etc,.

Welfare of Scheduled Castes, Scheduled Tribes, Other Backward Classes and Minorities

4.166 The Eighth plan outlay for welfare of SC, ST and OBCs was Rs. 2,549 crore (1991-92 prices) for the Central Sector, and Rs. 3,051 crore (1991-92 prices) for the State's sector. Against an outlay of Rs.2,549 crore an expenditure of Rs.1,425 crore (1991-92 prices) was incurred for the Central sector, which was 55.9 % of the total outlay indicating a marginal shortfall of 4.1% assuming the linear pattern of expenditure In the State's sector against a plan outlay of Rs. 3,051 crore a sum of Rs.1,519 crore has been spent which is 50% of the Eigth plan outlay, and assuming a linear pattern of expenditure indicates shortfall of 10%.

Scheduled Castes and Scheduled Tribes

4.167 The 1991 census result show that most of the Scheduled Caste and Tribe population living in rural areas have low levels of literacy and are employed mostly in the primary sector. Special Component Plan (SCP) for Scheduled Castes and Tribal Sub-Plan (TSP) have been designed to channelize the flow of funds out of the State/ Central plans from various sectors of development to benefit the Scheduled Castes and Scheduled Tribes for their socio-economic development. These special plans are being monitored in the sectoral plans for educational, health, family welfare, housing and urban development, women and children, so that the disadvantaged population groups can be better provided for.

4.168 Special Central Assistance (SCA) for Scheduled Castes is an additive to the State Plan efforts for implementation of various socio-economic programmes for the welfare of Scheduled Castes. With this assistance 20.66 lakh families were assisted during the year 1992-93, 23.24 lakh families were assisted during the year 1993-94 and 26.78 lakh families are likely to be assisted during the year 1994-95. This is against a target of 125 lakh families for the Eighth Plan as a whole (1992-97). Asssuming a linear pattern of achievement, 56.5% of the target was achieved during the first three years of the plan indicating a marginal shortfall of 3.5%

4.169 Under the National Scheme for Liberation of scavengers a target of training 3.5 lakh beneficiaries and rehabilitating 4 lakh beneficiaries was set. The annual and cumulative achievement are given in Table 4.24.

4.170 The cumulative achievement in the case of training of beneficiaries is only 23 percent, indicating a shortfall of 37% (assuming a linear pattern of achievement).

Table 4.24
Progress under the National Scheme for Liberation of Scavengers

	Target for the Eighth Plan	Achievment			Cumulative	
	1992-97	1992-93	1993-94	1994-95*	Actual	Per cent
Training	3.5 lakh	15,578	23,070	42,332	80,980	23
Rehabilitation	4.0 lakh	18,913	31,309	1,43,946	1,94,168	48

Note:
* likely
Source: MTA Document, Eighth Five Year Plan, Ministry of Welfare.

The progress of rehabilitation is expected to be 48% indicating a shortfall of 12% (assuming a linear pattern of achievemnt).

4.171 The achievement under the Post Matric scholarship scheme for SC/ST has been good. Against a target of 61 lakh beneficiaries, 15.31 lakh in 1992-93, 16.75 lakh in 1993-94 and 14.38 lakh during 1994-95 have been awarded the Post Matric scholarship. The cumulative achievement is 76% of the target. This is 16% in excess of the target (assuming a linear pattern of achievement).

4.172 Under Tribal Development in the programme for Special Central Assistance (SCA) for Scheduled Tribes is also an additive to the State plan efforts for implementation of various socio-economic programmes for the welfare of Scheduled Tribes. With this assistance to Tribal sub-plan, the Eighth Plan had a target to cover 46.50 lakh families. Against this 28.69 lakh families (8.88 lakh in 1992-93; 10.42 lakh in 1993-94 and 9.39 lakh in 1994-95) were covered during the first three years of the plan which constitutes 61.7% of the target.

4.173 To uplift the literacy rate among tribal women, a new scheme was introduced from the year 1993-94 and is being implemented through Non-Governmental Organisations in 48 districts with tribal concentration where female literacy is less than two percent.

Welfare of Backward Classes

4.174 A National Backward Classes Finance and Development Corporation (NBFDC) was registered under the Companies Act during 1992 with the main objective of promoting activities for economic development and provide financial assistance to these classes in setting up of employment ventures.

Welfare of Minorities

4.175 The National Minorities Development And Finance Corporation has been set up during 1994-95 with an authorised share capital of Rs.500 crores to promote economic and developmental activities for the benefit of backward sections among the minority, preference being given to occupational groups and women. For setting up self employment and other ventures, the corporation would extend loans and advances to the members belonging to the minorities, whose annual family income is below double the poverty line income as defined by the Planning Commission from time to time.

Section 6 : Social Welfare

Part I : Women and Children

4.176 The Mahila Samridhi Yojana (MSY) launched in 1993 as a central scheme, attempts to encourage rural adult women to open a MSY account in her name. A deposit of Rs 300 in a year, with a one year lock-in period will get an incentive of 25 percent from the government. Under the MSY against the Eighth plan target of 600 lakh accounts to be opened, 88.15 lakh accounts have been opened upto April, 1995 and a total amount of Rs.88.52 crore has been deposited.

4.177 The National credit fund for women called Rashtriya Mahila Kosh (RMK) has been set up to meet the credit needs of the poor women engaged on small business in the informal sector. Under this scheme against an Eighth Plan target of 2,00,000 groups of women (each group consisting of arouns 10 women) to be provided credit, a total of 37,066 groups have been financed in 1993-94.

4.178 Some of the other activities undertaken during the Eighth Plan for women and children include

i) Adoption of National plan of Actions for the children and for the girl child.

ii) Adoption of the National Nutrition Policy, 1993.

iii) Setting up of National creche fund for child care services

iv) Integrated Child Development Services (ICDS).

v) Creches for Children of working / ailing mothers.

vi) Balwadi Nutrition Programme.

vii) Early Childhood Education through Assistance to Voluntary Organisations.

viii)Balsevika Training Programme

ix) Assistance to Voluntary Organisations in the field of Welfare of Women and Child Development.

Nutrition

4.179 Nutrition has been recognised as a major tool for assessing the poverty of the country. The average dietary intake per consumption unit is around 2280 K. Cal., which is close to the recommended dietary intake of 2400 K. Cal. A major programme for the provision of nutrition needs for the mother and child is the Integrated Child Development Scheme (ICDS). This scheme covers the welfare of children below the age of six and expectant and lactating mothers.

4.180 To combat the problem of nutritional anaemia, a project for fortifying salt with iron is under implementation. A new technology for fortification of salt with iron and iodine has been developed at the National Institute on Nutrition (NIN) Hyderabad.

4.181 To prevent nutritional blindness due to Vitamin 'A' deficiency, a scheme of fortified milk with Vitamin 'A' is under implementation. The scheme has been extended to 51 dairies in the country and 25 lakh litres of milk was fortified daily. Four Quality Control Laboratories set up under Food & Nutrition Board have continued to analyse samples of fruit and vegetable products, foodstuffs, like; Vitamin 'A' fortified milk, Bakery products, etc,.

Part II

Handicapped

4.182 Most of the schemes for the handicapped are centred around Urban areas. Efforts need to be made to extend these services in rural areas. Some of the activities introduced for handicapped during the first three years of the Plan include :

i) Scheme for Assistance to Voluntary Organisations for Establishment of Special Schools for handicapped was introduced during 1993-94.

ii) Rehabilitation Council of India Act came into force during 1993-94.

iii) There are scholarship programmes for handicapped students upto the school level.

iv) There are schemes of assistance to disabled persons for self employment as well as for purchase / fitting of prosthetic aids and appliances.

v) A Welfare Programme of street children initiated during 1993-94.

4.183 Despite a 3 percent reservation in jobs in the government, a large number of handicapped persons remain unemployed. In the year 1992 of the 3.23 lakh registered only 4,310 were employed. Similarly, in the year 1993 of the 3.37 lakh registered only 4,450 persons were employed.

Section 7 : Evaluation of programmes

4.184 Large sums of money are spent under the plan for developmental activities. In addition to viewing the progress of these activities in terms of utilisation of outlay, there is a need to monitor the physical progress, backed by an evaluation of the spending, preferably by an independent agency so as to learn from the mistakes of the past. The Eighth Plan is committed to evaluating all expenditure undertaken. However, not much has been done. Some of the evaluation experiences are detailed below.

Literacy and Education

4.185 The Ministry of Human Resource Development, in April, 1993 had constituted a 6 member Expert Group under the Chairmanship of Prof. Arun Ghosh (Ex-Member, Planning Commission) to undertake 'Evaluation of Literacy Campaigns' of the National Literacy Mission. The Group submitted its Report in September, 1994. The Group has suggested a framework for Post Literacy and Continuing Education Programme. They have specifically mentioned that carrying out successful PC/CE remains the single most difficult problem confronting the NLM and the whole of the literacy programme. Project Evaluation Office (PEO) had conducted a quick study of the scheme for financial Assistance to Dance, Drama and Theatre Ensembles during 1993-94, Study had suggested : (i) a through review of the policy of Grant-in-aid as well as the role of Department of Culture vis-a-vis Sangeet Natak Akademi, Zonal Cultural Centres and the State Governments, (ii) Involvement of the states and the local self-government institutions to provide more opportunities as well as facilities at the school and other levels for organising performances; (iii) periodic review by Department of Culture in consultation with eminent institutions and Art projects regarding item-wise expenditure on the grant released as well as excalation of prices; (iv) the laying down of criteria to ensure, among other things, continuity of management, economic stability, artistic viability etc.; and (v) differential treatment to new and up-coming performing art organisations.

4.186 Programme Evaluation Organisation (PEO) has conducted a quick study on the scheme for financial assistance to Dance, Drama and Theatre ensembles during 1993-94. The study suggested

i) a thorough review of the policy of Grant-in-aid as well as the role of Department of Culture, vis-a- vis Sangeet Natak Academy, Zonal Cultural Centres and the State Governments;

ii) involvement of the states and the local governments to provide more oppurtunities as well as facilities at the school and other levels for organising performance;

iii) periodic review by Department of Culture in consultation with eminent institutions and art projects, regarding item-wise expenditure on the grant released as well as escalation of prices;

iv) the laying down of criteria to ensure among other things continuity of management, economic stability, artistic viability etc.; and

v) differential treatment to new and up-coming performing art organisations.

Health and Family Welfare

4.187 Independent evaluation studies relating to the family welfare programme are being conducted by the Ministry of Health and Family Welfare from time to time. The National Health and Family Welfare survey was got conducted by the Department of Family Welfare in 1992-93 in which information on several aspects of maternal and child health and family planning was collected. Besides, there are 18 Population Research Centres which are functioning in Universities/Research Institutions in the states, which are also involved in carying out evaluation studies of the family welfare programme.

4.188 The office of the Registrar General of India works out the annual estimates of Crude Birth Rate, Crude Death Rate and Infant Mortality Rate through the Sample Registeration System. It provides an independent check / evaluation of the impact of the Family Planning Programme in the country. Besides, the decennial growth rate, as estimated by the office of the Registrar General of India, on the basis of the census also provides indirect evaluation of impact of the Family Planning Programme.

4.189 For quick estimation of the evaluation of the Family Planning and MCH programme, the Department of Family Welfare has evaluation teams which go to the field and have on the spot assessment of the quality of the services provided.

Rural Water Supply

4.190 The Ministry of Rural Areas and Employment constituted a six member expert committee to evaluate Rural Water Supply with special reference to Mini-missions and

Sub-missions under Rajiv Gandh National Drinking Water Mission. As per the report of the expert group which was submitted in April, 1994, the Sub-missions have not succeeded fully in tackling the quality problems in a systematic manner except in the case of guineaworm eradication which stands out as an example of a well coordinated programme. In defluoridation, the Fill and Draw type of plants appear to have been acceptable at the community level. However, the Hand Pump Attached Defluoridation and Iron Removal plants could not achieve thedesired success due to inappropriate technology, unsuited to community perceptions and community involvement. The desalination plants could also not be successful mainly due to lapses at different levels, such as poor planning and implementation, technology inappropriate to the rural setting and high cost of operations and maintenance. A large number of administrative problems have also cropped up in the sub- mission on Control of Brackishnes.

4.191 So far as Operation and Maintenance of Rural Water Supply Systems are concerned, the Mini-missions and Sub-missions have not attempted to develop appropriate operation and maintenance models to suit varied hydro-geological, agro-climatic,techno-economic conditions and societal perceptions in the rural areas. The operation and maintenance of rural water supply systems continues to be weak. Community participation has not been given the importance it deserves and the involvement of NGO's has only been marginal. The pioneering experiment of district level water quality testing labs has succeeded in bringing out the relevance of the quality aspects of rural water supply. However, the establishment and functioning of the labs have not been instrumental in evolving a functional water quality surveillance programme.

4.192 In view of the lessons learnt from the success and failure of Mini-missions approach, it is necessary that the whole Technology Mission Programme be restructured in the light of the recommendations of the Expert Group.

Community/NGOs Participation

4.193 It may not be out of place to mention that educational programmes cannot be implemented by the Government alone. The participation of the community, its involvement and the efforts of the Non-governmental Organisations have always a significant role in this sphere. Whether Universalisation of Elementary Education or expansion of Adult Literacy, participation of community is critical for the success of the programmes. The 73rd and 74th Amendments require participation of the village panchayats, village education committees and the entire local community in educational development. Total Literacy Campaigns have generated enthusiasm and created an environment for learning in many districts. The Zilla Saksharta Samitis which plan and implement the programmes are in the nature of umbrella Voluntary Organisations which seek to mobilise all sections of society including voluntary agencies in the districts. Further, voluntary agencies participate actively in the scheme for environmental orientation to school education and for strengthening culture and values in education for Secondary and Higher Secondary School Children. Achievements of the above schemes are visible in many instances but not precisely quantifiable.

Section 8 : Information & Broadcasting

4.194 The thrust of the Eighth Plan for Information and Broadcasting sector is -

i) to bring a qualitative change in the broadcasting services;

ii) expansion of coverage especially in north-east, hilly, tribal and border areas;

iii) strengthening of external services;

iv) functional autonomy of broadcasting media and making them self supporting, at least for Plan investment; and

v) modernisation of information and publicity media.

4.195 An outlay of Rs.3,634 crore was approved for the sector for the Eighth Plan. Media wise details of outlay and expenditure are at Annex 4.15. The pace of utilization of funds in the first two years was quite low. Not only was the actual expenditure in these two years just 16% of the Eighth Plan outlay but it was also only 70% of the annual plan outlays allocated. The pace picked up somewhat in 1994-95 due to improved utilisation by Doordarshan. Even then, the utilisation during the first three years is expected to be around 25% (at 1991-92 prices) only of the Eighth Plan outlay. Media wise utilisation is likely to 30 - 31% in case of A.I.R. and Films and 22-23%

in the case of Information and Doordarshan (Annex 4.16). The main reasons responsible for low utilization of funds are :-

i) ad hoc approach and constantly changing priorities resulting in thin spread of resources over a large number of schemes;

ii) delay in preparation and processing of project proposals;

iii) delay in implementation e.g. selection of sites, acquisition of land.;

iv) faulty and incomplete project planning resulting in frequent revision of cost estimates; and

v) problems relating to choice of technology and delay in procurement of equipment.

4.196 The Eighth Plan envisaged the outlay of the sector, particularly AIR and Doordarshan, to be financed from internal resources constituting 88.5% of the outlay. A target of internal resource generation of Rs.3,217 crore was fixed for the Plan period - Rs. 3,202 crore for Broadcasting sub sector and Rs. 15 crore for the Films sub sector. The pace of resource mobilization in the first three years has been much less than expected.

4.197 Doordarshan is facing stiff competition from foreign TV channels which are cutting into its market share of advertising revenue. Flexibility of advertisement rates and aggressive marketing are two major advantages enjoyed by the foreign TV media. Under the present scenario, any substantial increase in revenue from the existing level of about Rs.400 crore will be difficult, unless Doordarshan changes its strategy to neutralize these advantages. According to the revised projections of internal resources, only about 50% of the Eighth Plan target of resource mobilisation may be achieved. As budget support constitutes a small portion of the total outlay and no substantial increase in this can be expected, the extent to which internal generation can be improved will basically determine the size of the operational outlay available for the last two years.

4.198 To compete with foreign and private TV media for advertising revenue, the Government media must have a professional and aggressive marketing set up. Advertising is a highly competitive and professional field demanding specialised skill. Such professional assistance should either be with the employees or be available to Doordarshan. Existing personnel of the media need to be trained in the field of marketing and should get exposure to specialised agencies. This aspect of human resource development should be given due attention.

4.199 Non Lapsable Fund (NLF) created as a repository of the revenue generated by commercial services of AIR and Doordarshan has been the main source of financing Plan investment of AIR and Doordarshan since 1987-88. The manner in which NLF has been operated, imposes two constraints on resources available from it.

i) Part of the funds under NLF is being used for financing expenditure of non plan nature which unfortunately, has grown at a pace much faster than other non plan expenditure. NLF should not be used at all to finance any non-plan expenditure.

ii) Withdrawal from NLF during a particular year is restricted to the net accruals during the year, thus impounding the carry forward surpluses from previous years. This is not correct as the name of the fund implies. Though the restriction has been waived selectively in two annual plans, it should not be there at all.

4.200 The Eighth Plan envisages establishment of 85 Broadcasting Centres, 186 radio transmitters including upgradation of 62

	8th Plan Target	Likely Achievement (1992-95)	Percentage
1. Broadcasting Centres	85	66	77.0
2. Radio Transmitters	186	135	72.0
3. Studios	14	10	71.4

transmitters and establishment of 14 additional studios. The progress during the first three years is satisfactory. Actually the performance is quite good in respect of setting up of new full fledged broadcasting centres and FM Transmitters. About 87% of the Plan target of full fledged broadcasting centres and 77% of target of FM transmitters (Annex 4.17) is likely to be achieved in the first three years. The table below indicates the performance :

4.200.1 Against the Plan allocation of Rs. 1,134.95 crore, the expenditure during the first three years is expected to be around Rs. 338 crore (at 1991-92 prices) indicating a utilisation of about 30%.

4.201 An outlay of Rs.2,300 crore was approved for Doordarshan for the Eighth Plan. This was expected to be financed basically from internal resources - budget support constituting only about 7% of the outlay. During the first two years, the pace of utilization of outlay has been quite low as many schemes failed to take off for reasons already indicated. Only about 80% of the annual plan outlays could be utilized during this period. The problems faced earlier have since been addressed and a large number of new schemes sanctioned. Thus taking this into account, about 23% of the 8th Plan outlay is likely to be utilised during the first three years.

4.202 Review of the physical progress during the first three years indicates major short falls in the areas of establishment of Programme Generation Facility (PGF) Centres and setting up of High Power Transmitters (HPTs). Only about 28% of the target in respect of PGF Centres and 31% of the target for HPTs is likely to be achieved. Performance in respect of LPTs and VLPTs is likely to be satisfactory (Annex 4.18).

4.203 The Ministry had proposed a revision in the Plan targets of HPTs and LPTs. Against the originally approved target of 58 HPTs, a revised target of 74 HPTs was suggested with an additional outlay of Rs.128 crore. In the case of LPTs, 95 more transmitters are proposed to be set up over and above the original Plan target of 273 LPTs. The additional funds required for this purpose was projected to be Rs.126 crore. Even without these additional outlays, the outlay for schemes already sanctioned is much more than the approved Plan outlay on account of HPT's and LPT's. Since no substantial improvement is expected in the internal resource generation i.e. of NLF, which could take care of the increased requirement, financing of additional schemes in the form of enhanced targets is not possible unless substantial additional budget support is given or alternative methods like purchasing equipment on deferred payment adopted. Keeping in view the resource crunch and the policy of making the electronic media, especially Doordarshan, self sufficient in meeting its plan investment, a step up in budget support may not be possible.

4.204 Doordarshan's long term strategy for HPTs, LPTs and VLPTs needs to be drawn up with care. Since LPTs and VLPTs are not as cost effective as HPTs, large increases in the former without considering the HPT option is not quite judicious. A related point is the maintenance of many transmitters widely spread and in remote areas. Since unbridled expansion of engineering staff is not possible, contractual maintenance through trained private manpower should be organised, if at all so many LPTs and VLPTs in far flung areas are to be installed.

4.205 In the areas of Field Publicity and Films Division there is a need to properly develop software for reflecting national themes and disseminate them in conjunction with the organisations in the States rather than expanding the number of offices and increasing the staff. Modernisation of equipment and switching over to latest technology in producing software should receive due attention.

4.206 The Press Information Bureau (PIB) has not been able to maintain its schedule of modernisation. The archaic equipment and methods currently in use practically render this very important organisation ineffective. Not only should, therefore, be a state of the art media centre in the national Capital but all offices of PIB through out the country have to receive facilities and equipment incorporating the latest technological advance. In this context proper implementation of the scheme of computerisation is a must.

Section 9 : Summing up

4.207 In keeping with the emphasis of Eighth Plan on human development, the allocation for social sectors have been protected within the total public sector plan in the first three years. However, in relation to what was envisaged by the Eighth Five Year Plan for the five year period, the Plan provision has been only about 40 -45% during 1992-95. The constraint of budgetary resources of Centre and the own resources of States for their plans are the contributing factors for low allocation in relation to the five year plan projections. However, Central Government has increased the allocation for the social sectors out of the budgetary resources made available for the plan.

4.208 Effective use of the available resources is more important than mere stepping up of Plan outlays. The targetting of benefits from the principal programmes in social sectors is being focussed on the more acute problems. For example, the emphasis on female literacy and education, special programmes for the poor performing districts in regard to family planning and identification of backward districts in implementation of wage employment programmes, a component of which is directed towards developing the social infrastructure in such districts.

4.209 The public sector programmes for social sectors are implemented by Government departments as distinct from the enterprises. The institutional structure of the agency implementing the programme is not as well structured as the "firm". The balancing of benefits against the costs requires special efforts.

4.210 Eighth Plan taking note of the special institutional characteristics of the social sector projects in the Plan, had laid emphasis on evaluation of benefits from the plan programmes by an independent agency other than the implementing department. While a few programmes were assigned to Programme Evaluation Organisation for evaluation, (and possibly none to the National Sample Survey Organisation) by and large an independent evaluation has not been pursued so far. However, implementing departments themselves have undertaken evaluation exercises particularly in the area of women and child development and programmes for rural development.

4.211 Eighth Plan had further stipulated association of clearly defined segments of population (i.e., users of the services) with the method of evaluation of programmes. While there are reviews by higher formations in publicsector,such as the legislative bodies or representation of public in advisory committees, the involvement of consumers of services in the process of evaluation has to be pursued further.

4.212 To bring about a parity between the "costs" and "benefits", the first step is monitoring of revenues, if any, from the service against the expenditure incurred. While the scope for this is limited in a few programmes, the services in health, education, water supply and sanitation and housing are amenable to treatment as independent "profit" or "cost" centres. Eighth Five Year Plan stipulated that allocation for the programmes financed out of budget support will be subject to ...."revenue earnings from the assets created being maximised and credited to the implementing agency so as to bring about a reasonable parity between costs and benefits during the Plan period". Such measures have remained confined to the revenue surplus establishments, e.g., non-lapsable funds under Ministry of Information and Broadcasting Ministry for AIR and Doordarshan or the Department of Telecommunication. These have to be extended to most of the social services programmes. Planning Commission made an effort in respect of the Department of Culture. In the following years, the flow of resources from budget of the Governments to social sectors will sharply increase. If the social sectors plan programmes are to be effective as "investments" for social development as distinct from subsidies for "welfare", the discipline of the Plan on evaluation and benefits maximisation will need to be strengthened.

Annex 4.1

Indicators of Level of Living by Expenditure Deciles - All India

Attributes	Rural		Urban	
	lowest 10%	Highest 10%	lowest 10%	Highest 10%
1. Percentage of Children				
(a)Vaccinated for Polio	14.89	40.60	31.76	80.37
(b)Vaccinated for Triple Antigen	10.86	32.74	22.09	74.92
2. Percentage of Mothers registered for				
(a)Pre-Natal Care	17.36	41.67	39.04	94.05
(b)Post Natal Care	10.35	20.36	21.16	58.33
3. Participation in Education				
(a)Percentage of literate	32.96	63.55	50.77	91.70
(b)Percentage of Population Matric and above Literate	1.69	16.72	5.39	58.19
4. Percentage of Population having tap water facilities	12.37	24.83	60.20	87.08
5. Percentage of Population living in electrified dwellings	15.22	54.66	47.11	96.55
6. Percentage of households having no laterine	93.20	73.93	52.00	7.16
7. Percentage of households using firewood as fuel	84.14	70.80	61.15	4.86

Source: 42nd round of NSSO 1986-87

ANNEX - 4 2

Public Sector Plan Outlay and Government Expenditure
on Social Services - Centre, States & U.T.s

		6th Plan 1980-85	7th Plan 1985-90	8th Plan 1992-97 (Target)	1990-91 Actual	1991-92 Actual	1992-93 Actual	1993-94 (R.E)	1994-95 (B.E)
0	1	2	3	4	5	6	7	8	9
1.	Outlay on Social Services as % to Total Plan Outlay	14.56	15.98	18.20	16.46	15.91	15.54	15.41	16.09
2.1	Plan Outlay on Social Sector as % of GDP	1.74	2.00	2.30	1.79	1.67	1.61	1.81	1.96
2.2	Plan Outlay on All Sectors as % of GDP	11.97	12.56	12.62	10.90	10.51	10.37	11.78	12.21
3.1	Expenditure of Governments (Centre & States) (Plan & Non Plan) on Social Sectors as % of GDP	5.68	6.37		6.48	6.27	6.04	6.25	6.58
3.2	Expenditure of Governments (Centre & States) (Plan & Non Plan) on All Sectors as % of GDP	21.66	20.48		36.82	35.32	31.35	31.22	34.13

Source : 1) Expenditure figures from R.B.I. bulletins.
2) G.D.P. figures : Economic survey, Ministry of Finance, 1994-95.

Annex 4.3

Plan Expenditure/Outlay on Social Services - Centre

(Rs. Crore)

HEADS OF DEVELOPMENT	Eighth Plan Outlay 1992-97	1992-93 Actual	1993-94 (R.E.)	1994-95 (B.E.)	1992-95	Expnd. during 1992-95 as Percent of Eighth Plan Outlay
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Medical and Public Health	1800	362	426	439	1227	68
2 Family Welfare	6500	921	1073	1085	3079	47
3 Water Supply and Sanitation	5968	463	701	764	1928	32
4 Housing	1691	113	467	401	981	58
5 Urban Development	1292	37	62	130	229	18
6 General Education	6619	733	933	1000	2666	40
7 Technical Education	824	149	163	169	482	58
8 Welfare of SC,ST and Other Backward Classes	2549	440	496	480	1416	56
9 Social Security, Welfare & Nutrition	2383	472	556	557	1585	67
10 Other Social Services *	4819	437	528	578	1543	32
(I) Social Services Sub Total	34445	4127	5407	5603	15136	44
(II)Heads of Development Other than Social Services	213420	35775	46370	47635	129781	61
All Heads of Development (I+II)	247865	39902	51777	53238	144917	58

*- Includes Plan Heads- Sports & youth services,Art & culture, Information & publicity Broadcasting,Labour & employment & Secratariat social services

#- Excluding Rs. 100 Crore approved subsequently as central support for construction of Ganga barrage at Kanpur.

Annex 4.4

Plan Expenditure/Outlay on Social Services - States & UTs

(Rs. Crore)

HEADS OF DEVELOPMENT	Eighth Plan Outlay 1992-97	1992-93 Actual	1993-94 (R.E.)	1994-95 (B.E.)	1992-95	Expnd. during 1992-95 as Percent of Eighth Plan Outlay
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Medical and Public Health	5776	747	784	942	2473	43
2 Family Welfare	-	0	0	0	0	0
3 Water Supply and Sanitation	10743	1623	1603	1960	5186	48
4 Housing	3582	481	691	622	1795	50
5 Urban Development	3985	686	581	889	2155	54
6 General Education	10194	1290	1378	1760	4428	43
7 Technical Education	1962	220	273	410	903	46
8 Welfare of SC,ST and Other Backward Classes	3086	457	515	567	1538	50
9 Social Security, Welfare & Nutrition	3268	391	477	597	1464	45
10 Other Social Services *	1970	319	318	349	986	50
(I) Social Services Sub Total	44566	6214	6619	8096	20928	47
				(7078)	(19911)	(45)
(II)Heads of Development Other than Social Services	141669	20416	19648	23826	63890	45
				(20831)	(60895)	(43)
All Heads of Development (I+II)	186235	26629	26267	31922	84818	46
				(27909)	(80805)	(43)

Information & publicity Broadcasting,Labour & employment & Secretariat social services

Figures in brackets are likely revised estimates for 1994-95 for all heads of development, state-wise, which is about 13.22 percent less than the B.E. The same shortfall has been used for the social sectors and other sectors.

ANNEX - 4.5

Plan Expenditure/Outlay on Social Services - Centre, States & Uts

(Rs. Crores)

HEADS OF DEVELOPMENT	Eighth Plan Outlay 1992-97	1992-93 Actual	1993-94 (R.E.)	1994-95 (B.E.)	1992-95	Expnd. during 1992-95 as Percent of Eighth Plan Outlay
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1 Medical and Public Health	7576	1109	1209	1381	3698	49
2 Family Welfare	6500	921	1073	1085	3079	47
3 Water Supply and Sanitation	16711	2086	2304	2724	7114	43
4 Housing	5273	595	1157	1023	2774	53
5 Urban Development	5277	722	643	1018	2383	45
6 General Education	16813	2023	2310	2761	7094	42
7 Technical Education	2786	369	436	579	1385	50
8 Welfare of SC,ST and Other Backward Classes	5635	897	1011	1047	2955	52
9 Social Security, Welfare & Nutrition	5651	863	1033	1155	3051	54
10 Other Social Services *	6790	756	848	927	2531	37
(I) Social Services Sub Total	79012	10340	12025	13699 (12681)	36064 (35046)	46 (44)
(II)Heads of Development Other than Social Services	355088	56191	66018	71460 (68465)	193669 (190674)	55 (54)
All Heads of Development (I+II)	434100	66531	78043	85159 (81146)	229732 (225720)	53 (52)

*- Includes Plan Heads- Sports & youth services,Art & culture,Information & publicity Broadcasting,Labour & employment & Secratariat social services

Figures in brackets are likely revised estimates for 1994-95 for all heads of development, State-wise, which is about 13.22 percent less than the B.E. The same shortfall has been used for the social sectors and other sectors.

Source : Eighth Five Year Plan & subsequent Annual Plans.

ANNEX - 4.6

PER CAPITA EXPENDITURE (Plan & Non-plan) ON PROVISION & MAINTENANCE OF SOCIAL INFRA STRUCTURE BY STATE GOVERNMENTS RELATIVE TO ALL STATES AVERAGE

S. No.	State	1985-86 to 1987-88 (1986-87)@	1989-90 to 1991-92 (1990-91)@
0	1	2	3
1	Andhra Pradesh	1.114	0.928
2	Arunachal Pradesh	2.828 *	3.411 *
3	Assam	1.131 *	1.135 *
4	Bihar	0.595	0.648
5	Goa	2.303	3.722
6	Gujarat	1.377	1.055
7	Haryana	1.134	1.023
8	Himachal Pradesh	2.185 *	4.571
9	Jammu & Kashmir	2.102 *	2.007 *
10	Karnataka	1.051	1.029
11	Kerala	1.434	1.384
12	Madhya Pradesh	0.804	0.791
13	Maharashtra	1.343	1.228
14	Manipur	2.610 *	2.270 *
15	Meghalaya	1.895 *	2.245 *
16	Mizoram	4.093 *	4.316 *
17	Nagaland	4.658 *	3.668 *
18	Orissa	0.772	0.757
19	Punjab	1.454	1.516
20	Rajasthan	0.874	0.972
21	Sikkim	4.138 *	3.803 *
22	Tamil Nadu	1.173	1.289
23	Tripura	2.057 *	2.097 *
24	Uttar Pradesh	0.590	0.701
25	West Bengal	0.929	0.835
	All States	1.000	1.000

@ Three year average centred around the year.
* Special category states having low population and financed largely through resources from centre.

Source : R.B.I. Bulletins, S.P.Division & Economic Survey - 1994-95, Ministry of Finance.

ANNEX - 4.7

PER CAPITA EXPENDITURE (Plan & Non-plan) ON PROVISION & MAINTENANCE OF
OF SOCIAL INFRASTRUCTURE BY STATE GOVERNMENTS IN SELECTED STATES

(Rs. at Current Prices)

S. No.	State	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93	93-94
		Actuals							(R.E)	(B.E)
0	1	2	3	4	5	6	7	8	9	10
1	Bihar	120.05	116.77	116.76	163.97	196.73	215.63	224.36	237.60	402.79
2	Madhya Pradesh	140.83	157.25	184.31	186.33	339.27	163.53	279.38	281.22	395.53
3	Orissa	132.11	161.53	169.40	189.37	225.80	234.05	286.47	332.15	455.05
4	Rajasthan	146.72	166.81	213.15	228.82	257.54	334.80	363.76	392.95	485.58
5	Uttar Pradesh	114.59	118.08	118.54	162.49	211.77	253.42	235.37	229.54	287.16
6	Total-5 states	125.91	134.36	145.61	177.37	237.79	236.44	260.51	269.22	405.22
7	Total-All India	177.77	196.72	218.22	264.28	317.68	302.24	349.81	374.04	468.22

SOURCE :

1. The per - capita expenditure has been obtained from the State Plan Expenditure and State Non-plan Expenditure over the years. The source of State Plan Expenditure is the State Plans Division of Planning Commission and the source of Non - Plan Development Expenditure are the State Budgets Analysis of Reserve Bank of India.

2. The year-wise population figures of states and for the country as a whole have been calculated from the Govt. of India, Ministry of Finance, Economic Survey - 1994-95.

ANNEX – 4.8

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)		Achievement		
					1992-93 (Actual)	1993-94 (Anticipated)	1994-95
1	2	3	4		5	6	7
I	HEALTH SECTOR						
(i)	National Malaria Eradication Programme (NMEP)		Project for Seven States with high tribal population density & 100% assistance to NE States.		100% assistance to N.E. States approved w.e.f. 1.12.94		
	- Kala-Azar	decline in incidence by 33%, decline in deaths by 28%		Cases (Deaths)	77102 (1419)	45459 (710)	18056 (280)
(ii)	National Leprosy Eradication Programme	13 Lakh cases (1993) Protection in 201 endemic districts	arrest disease by 2000. Protection for all endemic Districts.	No. of districts covered	201	249	463
(iii)	National Control of Blindness	1.4% in 1993 267 District Blindness Control Societies (DBCSs)	0.3% in 2000 DBCS in all districts.	No. of districts covered	105	301	401
(iv)	National TB Control Programme	1.5% population suffering & 5 lakh death annually	10 lakh cases to be treated annually	cases treated in lakh nos.	15.39	11.8	4 (Till June 94)

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)		Achievement 1992-93 (Actual)	Achievement 1993-94	Achievement 1994-95 (Anticipated)
1	2	3	4		5	6	7
		HIV testing facility.		which orders have been placed.			
(v)	National Cancer Control Programme	Financial assistance to (a) Oncology wings of 20 Medical Colleges (b) 15 Voluntary organs.	Prevention, early detection, augmentation of treatment facilities	Assistance to a)Oncology	10	6	11
				b) Vol.Org.	9	3	8
(vi)	National Iodine Deficiency Control Programme	1.5 crore population, under risk 5.43 crore have goitre.	to bring down incidence to below 10% in endemic districts	Iodized Salt (Lakh M.T.) Production Target	50	50	50
				Target Achievement	28	29	27 (upto June'94)
(vii)	National Mental Health Programme		11 institutes to conduct training	Institution Strengthening is ongoing.			
(viii)	Drug De-addiction Programme		38 Drugs De-addiction centre by 1993-94.	5 Central Institutions, 3 Regional Institutions and 31 Centres in various states have been provided assistance for Detoxification services.			

ANNEX – 4.8 Contd.

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)		Achievement 1992-93 (Actual)	1993-94 (Anticipated)	1994-95
1	2	3	4		5	6	7
II	FAMILY WELFARE SECTOR						
(i)	National Goals		1996-97				
	CBR (Per 1000)	28.7 (1993)	26		29.2(1992)	28.7(1993)	N.A.
	IMR (Per 1000)	74 (1993)	70		79(1992)	74(1993)	N.A.
	CPR (%)	45.4 (1994)	56		43.6 (Mar.92)	43.5 (Mar.93)	45.4 (Mar.94)
			1992-97				
(ii)	Family Welfare Programme		320.9 Lakh Ster.	Lakh nos.	42.9	44.7	42.8
			393.4 Lakh IUD		47.4	59.7	62.0
			232.7 Lakh CC		150.0	172.9	149.4
			43.9 Lakh OP		30.0	35.6	37.6
(a)	Services & supply						
1.	Rural Family Welfare Centres	5435 Centres					
2.	District & Sub-District level post Partum Programme	550 Centres 1012 Sub-Centres	70 Addl. Centres 825 Addl. Sub-Centres				
(b)	Child Survival & Safe Motherhood						
1.	Child Survival		465 districts to be covered	No. of districts covered	51	154	255
2.	Safe Motherhood		219 districts to be covered.		21	53	104

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)	Achievement 1992-93 (Actual)	1993-94 (Anticipated)	1994-95
1	2	3	4	5	6	7
III	HOUSING & URBAN DEVELOPMENT					
(i)	EWS^ (Dwelling Units) New housing stock (^ While the eighth plan projection cover all sources through which EWS housing is provided, figures reported on year-wise achievements are reported by State Govt. agencies.)		98 Lakh	1.14	0.80	C.75
(ii)	Allotment of house-sites (No. of families)		40 Lakh	8.88	9.21	6.73
(iii)	Construction assistance (No. of families)			5.34	4.66	3.12
(iv)	E.I.U.S.^ (Slum dwellers) (^ Environmental Improvement of Urban Slums)		Balance to be covered at the beginning of the 8th plan = 254 lakh	11.62	12.58	10.60

ANNEX – 4.8 Contd.

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)	Achievement 1992-93 (Actual)	1993-94 (Anticipated)	1994-95
1	2	3	4	5	6	7
IV	WATER SUPPLY & SANITATION					
(i)	Rural Water Supply					
(a)	(State sector & Central Sector) No. of problem villages / habitations.	3000 'No Source' villages ('NC' category) + 1.5 lakh partially covered villages/ habitations. 'pc' category) remained to be provided with water supply facilities.	Coverage of all 3000'No Source' villages and 1.5 lakh partially covered villages/habitations. *	34360	41488	70156
	(* As per recent survey, the number of 'No source' and 'Partially covered' villages/habitations have gone up to 1.40 lakh and 3.67 lakh respectively. The aim in the Eighth Plan would be to cover all the no-source villages/habitations alongwith selected partially covered and quality problems one.)					
(ii)	Rajiv Gandhi National Drinking Water Mission					
(a)	Guinea Worm Eradication programme.	1831 villages affected & 566 cases were reported. (As on 1.7.92)	Total eradication.	The number of affected villages has been reduced to 803 and number of reported cases to 363.		
(iii)	Rural Sanitation. ** (** With Government initiatives only. (excluding private initiatives.)					
(a)	No. of individual sanitary latrines constructed.	N.A.	N.A.	328113 $ (207850)	315023 $ (398380)	504775 $ (156521)
	($ Excluding coverage under other programmes viz. JRY, IAY and UNICEF assistance, the figures for which are shown in brackets.					
(iv)	Low Cost Sanitation for liberation of scavengers.	50 lakh dry latrines existing + 69 lakh households without any latrine facility.	Conversion of 50 lakh dry latrines into sanitary latrines.	9.63 lakh dry latrines converted into sanitary latrines. (cumulative)		
V	EDUCATION SECTOR					
(i)	Elementary Education					
(a)	Operation Blackboard			0.55	0.53	0.10
1.	(Schools in lakh nos.)	4.14	1.09			
	(Teachers in lakh nos.)	1.2	0.33	0.11	0.15	900

ANNEX – 4.8 Contd.

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)	Achievement		
				1992-93 (Actual)	1993-94 (Anticipated)	1994-95
1	2	3	4	5	6	7
2.	i) Expanded operation blackboard	8th plan initiative			1692	14000
	– Third teacher	"	42000 teachers		1692 teachers	7382 teachers
	– Upper Primary Schools	"	14000 schools		7335 Schools	
(b)	Non-Formal Education (No. of centres in lakhs)	2.72 lakh centres	3.50 lakh centres			
	1. State Sector			1.36	1.29	1.27
	(co-educational centres)					
				0.79	0.98	0.97
	(Girls centres)					
	2. Voluntary Agencies			0.23	0.27	0.28
(c)	District Primary Education Programme for districts having female literacy below national level.		110			42
(ii)	Secondary Education					
	Vocationalisation of Secondary Education	4.8 Lakh Students (1993-94)	8.22 Lakh Students 5701 Schools	7.13	2.08	0.83
(iii)	Adult Education					
	NATIONAL LITERACY MISSION					
(a)	Total Literacy Campaign	271 districts	345 districts	58	108	60

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PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)	Achievement 1992-93 (Actual)	1993-94 (Anticipated)	1994-95
1	2	3	4	5	6	7
(b)	Post Literacy & Continuing Education (No. of centres)	25 districts (Jana Shiksha Nilayam) 32,000		41 22000	20	105
(iv)	Enrolment in Elementary Education (in lakh)					
(a)	Classes (I-V)					
	1. Boys	592.2	138.9	13.5	17.3	18.5
	2. Girls	423.6	120.9	17.8	24.1	24.6
	3. Total	1015.8 (Cumulative)	259.8	32.5	41.4 (Additional)	43.1
(b)	Classes (VI-VIII)					
	1. Boys	214.5	90.1	10.5	11.3	8.3
	2. Girls	129.9	86.1	14.4	14.2	11.9
	3. Total	344.4 (Cumulative)	176.2	24.9	25.5 (Additional)	20.2
(v)	Reduction in Drop-out Rates					
(a)	Classes I - V	45%	20%		36.32%	
(b)	Classes VI - VIII	60%	40%		52.80%	
(vi)	Teacher - Pupil ratio					
(a)	Primary	1:43	1:40	1:45	1:50	
(b)	Upper Primary	1:38	1:40	1:43	1:38	
(vi)	Eradication of Adult Illiteracy (In lakh) (Persons made literate by the end of 1991-92)	70	1000	159.5	311.1 (Enrolments)	320.6

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)	Achievement 1992-93 (Actual)	1993-94 (Anticipated)	1994-95
1	2	3	4	5	6	7
VI	MINIMUM NEEDS PROGRAMME		(in lakh)			
(i)	Elementary Education		437	57.5	66.94	N.A.
(ii)	Adult Education		1000	159.45	311.14	N.A.
(iii)	Rural Health		(in Nos.)			
(a)	Sub-Centres		17030	147	18	-
(b)	PHCs		4450	335	174	N.A.
(c)	CHCs		1269	84	71	N.A.
(iv)	Rural Water Supply	Villages / Habitations	3000 No source village ** + 1.50 lakh partially covered villages / habitation	34360	41488	70156
	(* Besides this 1.40 lakhs no source village/habitation identified subsequently after validaton survey 1991-93, are also planned to be covered.)					
(v)	Rural Roads No. of villages with population of 1000 & above connected		@	1186	1355	N.A.
	(@ To cover all villages with population 1000 & above and also connect villages with small population in backward and tribal areas.)					
(vi)	Rural Electrification					
(a)	Villages Electrified	Nos.		1917	2195 * [Anti. Ach.]	
(b)	Pumpsets Energised	Nos.		8777	9900 * [Anti. Ach.]	
(vii)	Rural Housing					
(a)	House Sites	No. of families in lakh	40.10	8.88	9.21	6.73
(b)	Construction Assistance	-do-		5.34	4.66	3.13 (Jan'95)
(viii)	Environmental Improvement of Urban Slums.	No. of slum dwellers in lakh -do-	254.00	11.62	12.58	10.60 (Jan'95)
(ix)	Nutrition					
(a)	SNP(Total coverages)	Million Nos.	Target are not fixed.	18.59	19.32	20.55
(b)	MDM(Total coverages)	-do-		-	20.49	-

ANNEX - 4.8 Contd.

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)	Achievement		
				1992-93 (Actual)	1993-94 (Anticipated)	1994-95
1	2	3	4	5	6	7
(x)	Rural Domestic Cooking Energy					
(a)	Improved Chulhas	Lakh nos.		19.75	24.26	-
(b)	Rural Fuelwood Plantation Scheme	HCC		87227	50000	-
(xi)	Rural Sanitation	No. of latrines (in lakh)	Target is fixed at 5% cumulative population coverage and not in terms of no. of latrines	3.28	3.15	5.05
(xii)	Public Distribution System $ ($ Targets are not fixed.)		Target are not fixed		4.11	

ANNEX – 4.8 Contd.

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)		Achievement		
					1992-93 (Actual)	1993-94 (Anticipated)	1994-95
1	2	3	4		5	6	7
VII	WELFARE OF MARGINALISED GROUPS						
(i)	Scheduled Castes (SC) development						
(a)	Special Central Assistance to Sub-component Plan for SCs.		125 Lakh families	No. of families in lakh	20.66	23.24	26.78
(b)	National Scheme for Liberation of Scavengers		3.5 Lakh training beneficiary, 4 lakh rehabilitated	Trained	15578	23070	42332
				rehabilitated	18913	31309	143946
(c)	Post Matric Scholarship scheme for SC/ST		61 Lakh beneficiaries	Lakh nos.	15.31	16.75	14.38
(ii)	Tribal Development						
	Special Central Assistance to Tribal Sub-Plan		46.50 lakh families	No. of families in lakh	8.88	10.42	9.39
(iii)	Development of Minorities						
	Pre-examination coaching for Weaker Section based on economic criteria.		32000 beneficiaries		300 beneficiaries	1500 beneficiaries	3600 beneficiaries
(iv)	Social Welfare						
(a)	Welfare of the Disabled				4.31 / 323.22	4.45 / 337.6	N.A.
	Employment of Handicapped out of registered persons.	4.16 / 313.89					
(b)	Social Defence Programme						
	Prohibition Drug Abuse Prevention scheme.		Opening 150 centres.		32	22	
(v)	WOMEN & CHILD DEVELOPMENT						

ANNEX – 4.8 Contd.

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)		Achievement 1992-93 (Actual)	1993-94	1994-95 (Anticipated)
1	2	3	4		5	6	7
	Programme Goal		Universalisation of ICDS Programme				
(a)	Welfare and Dev. of Child						
1.	Creches/Day Care centres	12389 creches 3.10 lakh benefici.		Creches beneficia-ries in lakh	12470 3.12	12389 3.10	
2.	training of non-ICDS (Balsevika Trg. programme)		125 courses 6000 trainees		25 1272	25 1229	
3.	training of ICDS functionaries		1180 CDPOs. 4200 Supervisors		335 1014	417 768	
4.	ICDS incl. IMY	612 (1993-94)	1100 Projects		300	312	
5.	World Bank Assisted ICDS	131 (1993-94)	331 new blocks.		65	66	
6.	Balowadi Nutrition Programme (BNP)	5641 Centres (1992)		Centres	5641	5641	
7.	Early Childhood Edn.	4365 centres (1992)		Centres	4258	4224	
(b)	Welfare & Development of women						
1.	Hostels for working women		200 Hostels 11250 beneficiaries 250 projects		30 2182	30 2069	
2.	NORAD			Centres Benefici-aries	53 7162	56 6000	
3.	STEP		25000 beneficiaries	Centres Benefici-aries	5 11350	6 12000	
4.	Rashtriya Mahila Kosh		30 projects 50000 beneficiaries			37066	
5.	Mahila Samriddhi Yojana		200000 beneficiaries			5.4 lakh	
6.	Education & Vocational courses		6000 courses		1380	1393	

ANNEX - 4.8 Concld.

PHYSICAL PROGRESS OF NATIONAL PROGRAMMES FOR SOCIAL DEVELOPMENT

S.No.	Programme	Status at the outset of the 8th plan	Target for 8th Plan (1992-97)	Achievement		
				1992-93 (Actual)	1993-94 (Anticipated)	1994-95
1	2	3	4	5	6	7
7.	Aid to Vol. Organisation		150000 beneficiaries	34500	34825	
			20000 vol. Organisation	3237	3484	

Annex - 4.9

Inter-State Variation in Selected Indicators of Social Development

S.No.	States	Crude Birth Rate				Crude Death Rate			
		1971	1981	1991	1993	1971	1981	1991	1993
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Andhra Pradesh	34.8	31.7	26.0	24.3	14.6	11.1	9.7	8.6
2.	Bihar	32.8	39.1	30.7	32.0	14.2	13.9	9.8	10.6
3.	Gujarat	40.0	34.5	27.5	28.0	16.4	12.0	8.5	8.2
4.	Haryana	42.1	36.5	33.1	30.9	9.9	11.3	8.2	7.9
5.	Karnataka	31.7	28.3	26.9	25.5	12.1	9.1	9.0	8.0
6.	Kerala	31.1	25.6	18.3	17.4	9.0	6.6	6.0	6.0
7.	Madhya Pradesh	39.1	37.6	35.8	34.9	15.6	16.6	13.8	12.6
8.	Maharashtra	32.2	28.5	26.2	25.2	12.3	9.6	8.2	7.3
9.	Orissa	34.8	33.1	28.8	27.2	15.5	13.1	12.8	12.2
10.	Punjab	34.2	30.3	27.7	26.3	10.4	9.4	7.8	7.9
11.	Rajasthan	42.4	37.1	35.0	35.1	15.6	14.3	10.1	9.4
12.	Tamil Nadu	31.4	28.0	20.8	19.5	14.4	11.8	8.8	8.2
13.	Uttar Pradesh	44.9	39.6	35.7	36.2	20.1	16.3	11.3	11.6
14.	West Bengal	28.0	33.2	27.0	25.7	12.6	11.0	8.3	7.4
	All India	37.2	33.9	29.5	28.7	15.0	12.5	9.8	9.3

Annex – 4.9 Contd.

Inter-State Variation in Selected Indicators of Social Development

S.No.	States	Infant Mortality Rate				Female Literacy Rate			Percent of Households having			
									Pucca House		Dringkin Water	
		1971	1981	1991	1993	1971	1981	1991	1981	1991	1981	1991
(0)	(1)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1.	Andhra Pradesh	109	86	73	64	15.75	24.16	33.70	26.22	38.41	25.89	55.08
2.	Bihar	165	118	69	70	8.72	16.52	23.10	23.64	30.18	37.64	58.76
3.	Gujarat	144	116	69	58	24.75	38.46	48.50	46.96	56.93	52.41	69.78
4.	Haryana	90	101	68	66	14.89	26.93	40.90	39.82	50.14	55.11	74.32
5.	Karnataka	93	69	77	67	20.97	33.17	44.30	29.33	45.55	33.87	71.68
6.	Kerala	60	37	16	13	54.31	75.65	86.90	38.80	55.97	12.20	18.89
7.	Madhya Pradesh	145	142	117	106	10.92	19.00	28.40	25.02	30.47	20.17	53.41
8.	Maharashtra	107	79	60	50	26.43	41.01	50.50	39.63	52.20	42.29	68.49
9.	Orissa	134	135	124	110	13.92	25.14	34.40	13.00	18.71	14.58	39.07
10.	Punjab	112	81	53	55	25.90	39.70	49.70	58.12	76.97	84.56	92.74
11.	Rajasthan	127	108	79	82	8.46	14.00	20.80	49.08	56.13	27.14	58.96
12.	Tamil Nadu	114	91	57	56	26.86	40.43	52.30	36.62	45.54	43.07	67.42
13.	Uttar Pradesh	183	150	97	94	10.55	17.19	26.00	29.29	41.03	33.77	62.24
14.	West Bengal	129	91	71	58	22.42	36.07	47.10	28.40	32.61	69.65	81.98
	All India	129	110	80	74	22.00	29.85	39.40	32.67	41.61	38.19	62.30

Annex - 4.9 (Concld.)

Inter-State Variation in Selected Indicators of Social Development

S.No.	States	--Electricity-- 1981	1991	Per Capita SDP (Rs.) 1971	1980-81	1990-91	1992-93
(0)	(1)	(21)	(22)	(23)	(24)	(25)	(26)
1.	Andhra Pradesh	21.41	46.30	585	1380	4731	5767
2.	Bihar	9.20	12.57	402	917	2650	3280
3.	Gujarat	44.81	65.93	829	1948	5850	7586
4.	Haryana	51.53	70.35	877	2370	7516	9171
5.	Karnataka	32.98	52.47	641	1527	4631	6443
6.	Kerala	28.78	48.43	594	1508	4032	5713
7.	Madhya Pradesh	17.11	43.30	484	1358	4021	4733
8.	Maharashtra	40.65	69.40	783	2435	7598	9628
9.	Orissa	17.75	23.51	478	1231	3596	3963
10.	Punjab	60.90	82.31	1070	2674	8423	11106
11.	Rajasthan	20.54	35.03	651	1222	4035	5035
12.	Tamil Nadu	37.21	54.74	581	1498	4619	6205
13.	Uttar Pradesh	12.91	21.91	486	1278	3557	4280
14.	West Bengal	21.09	32.90	722	1612	4791	5901
	All India	26.19	42.37		1630		6234

Source: 1. Col.2 to 13 - Sample Registration System, Office of Registrar General & Census Commission of India.

2. Col.14 to 22 - Census of India, Office of Registrar General & Census Commission of India.

3. Col.23 to 26 - National Accounts Statistics, Central Statistical Organisation.

Annex - 4.10

Progress Under Family Welfare Programme During Eighth Plan Period

(in Lakh)

Plan period		Immunisation Coverage										Ante natal carc	
		Polio		BCG		Measles		DPT		T.T			
		Target (Lakh)	Ach. %	Target (Lakh)	Ach. %	Target (Lakh)	Ach. %	Target (Lakh)	Ach. %	Target (Lakh)	Ach. %	Proph. Nutritional Anaemia	
1		2	3	4	5	6	7	8	9	10	11	12	13
Eighth Plan													
1992-93	**	243.0	91.0	242.9	96.5	242.9	85.8	242.9	80.5	270.0	79.4	242.9	58.2
1993-94	**	247.9	89.2	247.9	92.6	247.9	84.8	247.9	88.8	275.0	96.2	275.5	61.5
1994-95		247.7	* 90.4	247.7	* 95.3	247.7	* 82.2	247.7	* 90.0	275.0	* 79.1	275.3	* 78.4
1995-96		263.0		263.0		263.0		263.0		281.0		281.0	

* Provisional
** Excluding Arrears
Figures in bracket indicate R.E.

Annex 4.11

Enrolment Ratio of girls at the Elementary stages by States/UTs ranked by Female Literacy Rate percent in 1991

Rank	States/UTs with Literacy rate	Literacy Rate 1991. Female	Male	Enrolment Ratio as on 30.9.1993 Primary Boys	Girls	Upper Primary Boys	Girls
Group A States (Greater than 50%)							
1.	Kerala	86.17	93.62	104	101	108	106
2.	Mizoram	78.60	85.61	139	132	112	103
3.	Chandigarh	72.36	82.04	66	64	62	63
4.	Lakshdweep	72.89	90.18	154	129	125	97
5.	Goa	67.09	83.64	102	94	104	89
6.	Delhi	66.99	82.01	86	87	82	78
7.	A&N Island	65.46	78.99	102	86	84	75
8.	Pondicherry	65.63	83.68	146	134	139	126
9.	Daman & Diu	59.40	82.66	-	-	-	-
10.	Nagaland	54.75	67.62	111	102	70	69
11.	Himachal Pradesh	52.13	75.36	127	112	124	98
12.	Tamil Nadu	51.33	73.75	149	141	111	91
13.	Maharashtra	52.32	76.56	124	115	89	72
14.	Tripura	49.65	70.58	141	119	93	72
15.	Punjab	50.41	65.66	93	98	72	63
Group B States (40%-50%)							
16.	Manipur	47.60	71.63	100	96	78	68
17.	Gujarat	48.64	73.13	131	106	83	56
18.	West Bengal	46.56	67.81	125	123	98	89
19.	Sikkim	46.69	65.74	124	111	60	59
20.	Meghalaya	44.85	53.12	78	72	43	38
21.	Karnataka	44.34	67.26	124	115	72	57
22.	Assam	43.03	61.87	134	125	89	66
23.	Haryana	40.47	69.10	110	95	82	59
Group C States (Below 40%)							
24.	Orissa	34.68	63.09	117	78	68	47
25.	Andhra Pradesh	32.72	55.13	116	100	74	53
26.	Arunachal Pradesh	29.69	51.45	133	99	63	46
27.	Madhya Pradesh	28.85	58.42	117	91	83	50
28.	D&N Haveli	26.98	53.56	126	93	58	37
29.	Uttar Pradesh	25.31	55.73	104	73	72	35
30.	Bihar	22.89	52.49	96	54	47	21
31.	Rajasthan	20.44	54.99	120	61	77	29
32.	Jammu & Kashmir	-	-	104	73	80	49

Source:-

1. Education for All; The Indian Scene; Department of Education (Government of India, 1993)
2. Literacy figures are from Statistical Database for Literacy National Institute of Adult Education, New Delhi, 1992.
3. Enrolment data is from Annual Report, 1994-95, D/O Education, Ministry of Human Resources Development, New Delhi.

ANNEX 4.12

Plan Outlay and Expenditure under MNP during 8th Plan, 1992-93, 1993-94 and 1994-95

(Rs. Crores)

Sl. No.	MNP Components	8th Plan Approved Outlay			1992-93 Approved outlay			
		State	Centre	Total (C+S)	State	Centre	Total (C+S)	Act.Exp. (C+S)
1	2	3	4	5	6	7	8	9
1.	Elementary Education	6056.46	2880.00	8936.46	928.02	284.00	1212.02	1080.11
2.	Adult Education	394.44	1400.00	1794.44	80.66	120.00	200.66	157.73
3.	Rural Health **	2250.38	0.00	2250.38	391.03	0.00	391.03	300.82
4.	Rural Water Supply	4954.52	5100.00	10054.52	847.12	460.00	1307.12	1305.37
5.	Rural Roads	3066.10	0.00	3066.10	508.31	0.00	508.31	446.41
6.	Rural Housing	N.A.	N.A.	N.A.	107.30	0.00	107.30	N.A.
7.	Rural Elctrification	N.A.	N.A.	N.A.	145.00	0.00	145.00	91.78
8.	E.I.U.S.	N.A.	N.A.	N.A.	79.64	0.00	79.64	N.A.
9.	Nutrition	1786.31	0.00	1786.31	281.29	0.00	281.29	204.61
10.	Rural Domestic Cooking Energy							
	i) Improved chulahas	0.00	80.00	80.00	0.00	16.00	16.00	17.75
	ii) Rural Fuelwood Plantation Scheme	0.00	N.A.	N.A.	29.20	29.20	58.40	59.63
11.	Rural Sanitation	294.23	380.00	674.23	50.45	20.00	70.45	68.16
12.	Public Distribution System	127.10	21.07	148.17	21.74	4.27	26.01	35.73
	Total	18929.54	9861.07	28790.61	3469.76	933.47	4403.23	3768.10

Plan Outlay and Expenditure under MNP during 8th Plan, 1992-93, 1993-94 and 1994-95

(Rs. Crores)

Sl. No.	MNP Components	1993-94 Approved outlay				1994-95 Approved outlay			
		State	Centre	Total (C+S)	Anti.Exp. (C+S)	State	Centre	Total (C+S)	Anti.Exp. (C+S)
1	2	10	11	12	13	14	15	16	17
1.	Elementary Education	1133.25	442.20	1575.45	1493.29	1267.86	523.00	1790.86	N.A.
2.	Adult Education	76.71	177.97	254.68	254.32	102.45	214.00	316.45	N.A.
3.	Rural Health **	403.67	0.00	403.67	312.78	386.18	0.00	386.18	N.A.
4.	Rural Water Supply	948.15	740.00	1688.15	1517.16	1054.95	890.00	1944.95	N.A.
		-100.00		-100.15		-102.00		-102.00	
		848.15		1588.15		952.95		1842.95	
5.	Rural Roads	511.72	0.00	511.72	421.40	610.99	0.00	610.99	N.A.
6.	Rural Housing	275.73	0.00	275.73	251.25	251.53	0.00	251.53	N.A.
7.	Rural Elctrification	160.00	0.00	160.00	160.00	160.00	0.00	160.00	N.A.
8.	E.I.U.S.	74.33	0.00	74.33	62.84	78.47	0.00	78.47	N.A.
9.	Nutrition	355.65	0.00	355.65	293.68	425.77	0.00	425.77	N.A.
10.	Rural Domestic Cooking Energy								
	i) Improved chulahas	0.00	19.80	19.80	16.52	0.00	21.00	21.00	N.A.
	ii) Rural Fuelwood Plantation Scheme	48.27	30.10	78.37	78.84	32.55	34.00	66.55	N.A.
11.	Rural Sanitation	50.21	30.00	80.21	65.28	56.73	60.00	116.73	N.A.
12.	Public Distribution System	25.74	11.76	37.50	36.26	25.65	12.35	38.00	N.A.
	Total	4063.43	1451.83	5515.26	4963.62	4453.13	1754.35	6207.48	0.00

** The Family Welfare Deptt. and Health Deptt. provide personal commodity and operational cost for specific programmes operating at Primary Health Care level in rural areas, but these figures are shown under each programme and not separataly under rural/urban health.

* includes Rs. 100.00 crores for Annual Plan 1993-94 provided outside MNP for a project of laying pipeline for Saurashtra and Kutch region in Gujarat.

$ includes Rs. 102.00 crores for Annual Plan 1994-95 provided outside MNP for a project of laying pipeline for Saurashtra and Kutch region in Gujarat State.

Annex 4.13

Population having Electricity, Safe Drinking Water and Toilet facilities: 1991 (per cent)

	Scheduled Castes	Scheduled Tribes	Other Social Groups
Rural	1.86	1.14	4.88
Urban	28.08	25.64	54.57
Total	6,62	3.23	19.83

Source: 1991 census

Annex 4.14

Educational Attainment

Per thousand distribution of literates by broad education levels 43rd and 47th round surveys

Sex	NSSO Round	primary below	middle	Sec & higher sec.	Graduate & above	Total
			Rural			
Male	43	671	186	118	25	1000
	47	580	227	162	32	1000
Female	43	765	150	73	12	1000
	47	582	202	105	11	1000
			Urban			
Male	43	497	185	221	97	1000
	47	398	220	256	125	1000
Female	43	575	174	183	68	1000
	47	474	221	223	82	1000

Source: Draft Report No.394, NSSO, 47th Round
Note : 43rd Round 1987-88
47th Round 1991

ANNEX 4.15

Financial Pattern of Information and Broadcasting Sector at Constant Prices.

(Rs crore)

Media	Eighth Plan Outlay (1992-97)	1992-93 Expendtr.	1993-94 RE	1994-95 Antcptd Expndr.	Total (1992-95)	Balance for (1995-97)	%age Utilisation (1992-95)
1. Information	75.40	4.00	5.29	8.12	17.41	57.99	23.09
IR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BS	75.40	4.00	5.29	8.12	17.41	57.99	23.09
2.Films	123.65	13.61	12.07	15.20	40.88	82.77	33.06
IR	15.00	2.59	2.11	2.94	7.64	7.36	50.91
BS	108.65	11.01	9.97	12.26	33.24	75.41	30.59
3. Akashvani	1134.95	104.66	131.24	102.27	338.17	796.78	29.80
IR	NA	98.68	110.18	94.54	303.41	NA	NA
BS	76.97	5.97	21.06	7.73	34.76	42.21	45.16
4. Doordarshan	2300.00	160.96	145.48	197.87	504.31	1795.69	21.93
IR	NA	160.14	128.21	184.09	472.44	NA	NA
BS	155.98	0.82	17.27	13.77	31.87	124.11	20.43
Total	3634.00	283.22	294.09	323.45	900.76	2733.24	24.79
IR*	3217.00	261.42	240.50	281.57	783.49	2433.51	24.35
BS	417.00	21.81	53.59	41.88	117.27	299.73	28.12

* Total IR figure includes Rs.15 crore of NFDC during the Eighth Plan.

ANNEX 4.16

Mediawise Expenditure/Outlay of Information, Publicity and Films Media at Constant Prices.

(Rs crores)

Media Units	8th Plan (1992-97) Outlay	1992-93 Actual Expndr	1993-94 RE	1994-95 Antcptd Expndr	Total (1992-95)	% age Utilisan (1992-95)	Balance for (1995-97)
(A) Information Media							
1. Press Information Bureau	14.00	0.33	0.79	1.16	2.28	16.29	11.72
2. Publications Division	2.50	0.00	0.05	0.15	0.20	7.90	2.30
3. D.A.V.P.	5.00	0.46	0.25	0.93	1.64	32.74	3.36
4. Song & Drama Division	10.00	0.70	1.17	1.58	3.45	34.51	6.55
5. Dte. of Field Publicity	11.00	0.91	0.61	1.51	3.04	27.59	7.96
6. Photo Division	4.00	0.16	0.44	0.40	1.00	24.88	3.00
7. Registrar of Newspaper for India	0.50	0.31	0.08	0.04	0.42	84.99	0.08
8. Indian Instt. of Mass comm.	7.00	0.40	0.65	0.85	1.90	27.15	5.10
9. Soochana Bhawan	11.20	0.66	0.16	0.29	1.10	9.85	10.10
10 Main Secretariat	10.20	0.02	0.01	1.22	1.25	12.23	8.95
TOTAL (A)	75.40	3.95	4.21	8.12	16.27	21.58	59.13
(B) Films Media							
1. Films Division	34.00	2.30	1.41	3.23	6.94	20.41	27.06
2. National Film Archive of India	6.00	0.71	0.62	1.24	2.57	42.87	3.43
3. Film & TV Instt. of India Calcutta	29.50	0.32	0.30	2.07	2.69	9.13	26.81
4. Film & TV Instt. of India Pune	8.00	0.91	0.63	3.86	5.41	67.62	2.59
5. National Centre of Films for Children & Young People	10.00	1.07	0.94	0.77	2.78	27.85	7.22
6. NFDC	20.00	4.87	3.79	1.55	10.20	51.02	9.80
7. Dte. of Film Festivals	15.00	3.29	2.27	2.32	7.87	52.48	7.13
8. Film Socities Movement	0.15	0.03	0.03	0.02	0.08	50.57	0.07
9. Central Board of Film Cert.	1.00	0.16	0.10	0.13	0.39	38.77	0.61
TOTAL (B)	123.65	13.65	10.09	15.20	38.94	31.49	84.71
TOTAL OF A&B (Inform.&Publicity)	199.05	17.60	14.30	23.31	55.21	27.74	143.84

Note : NFDC's outlay/expenditure figures also include its internal Resource

ANNEX 4.17

Schemewise Physical Targets/Achievements - Sound Broadcasting (AIR)

(Nos.)

Sl. No.	Items	Unit	Target 8th Plan	1992-93 Achievements	1993-94 Achievements	1994-95 Target	1994-95 Ancptd Achvmnts	Total Achvmnt during (92-95)	Balance for 2 yrs. (95-97)	% age Utilisation (92-95)
1.	No. of Broadcasting Centres									
	a) Fulfledged	Nos.	69.00	20.00	33.00	10.00	7.00	60.00	9.00	86.96
	d) Relaying Centres	Nos.	16.00	1.00	3.00	4.00	2.00	6.00	10.00	37.50
		Total	85.00	21.00	36.00	14.00	9.00	66.00	19.00	77.65
2.	No. of Radio Transmitters									
	a) Medium wave (MW)	New	20.00	1.00	6.00	8.00	4.00	11.00	9.00	55.00
		Upgradn.	40.00	2.00	9.00	27.00	19.00	30.00	10.00	75.00
		Total	60.00	3.00	15.00	35.00	23.00	41.00	19.00	68.33
	b) Shortwave (SW) transmitters	New	12.00	-	11.00	-	-			
		Upgradn.	22.00	2.00	5.00	6.00	5.00	12.00	10.00	54.55
		Total	34.00	2.00	16.00	6.00	5.00	23.00	11.00	67.65
	c) VHF (FM)	New	92.00	24.00	28.00	21.00	15.00	67.00	25.00	72.83
		Upgradn.	-	-	1.00	3.00	3.00	4.00	-	-
		Total	92.00	24:00	29.00	24.00	18.00	71.00	21.00	77.17
	Total	New	124.00	25.00	45.00	29.00	19.00	89.00	35.00	71.77
		Upgradn.	62.00	4.00	15.00	36.00	27.00	46.00	16.00	74.19
	Grand	Total	186.00	29.00	60.00	65.00	46.00	135.00	51.00	72.58
3.	Studios									
	Provision of permanent/ Upgradation of Auxilary Studios		14.00	2.00	6.00	2.00	2.00	10.00	4	71.43

Annex 4.18

Scheme-wise Physical Targets/Achievements - Doordarshan

(Nos.)

Sl. No.	Items	Position upto 31.3.93	Target 8th Plan (1992-97)	1992-93 Targets	1992-93 Achvmnts	1993-94 Targets	1993-94 Achvmnts	1994-95 Targets	1994-95 Ancptd Achvmen	1995-96 Prposed Target
1.	TV Programme production Centres									
	a) Studio centres	18	12	4	2	4	-	4	4	-
	b) PGF centres	7	18	5	3	2	1	1	1	1
	c) II Channel Studios	2	2	2	-	2	-	2	2	-
2.	Transmitters									
	a) HPTs (10KW/1KW)	67	58	11+3@	4+3@	8	4	8	9+1@	6+1@
	b) LPTs (100W)	372	273	21	16	43	26	200	160	40
	c) VLPTs (2x10 watts)	80	104	5	4	20	2	106	59	36
	e) Transposers	23	22	2	-	2	-	2	1	1
	Total	571	457	36+3@	24+3@	71	32	314	228+1 @	82+1@
3.	Coverage (%) $									
	i) Area	63.5	*	66	63.5	66.7	66.7	67.6	68.3	69.5
	ii) Population	82.9	*	83.4	82.9	84.5	84.5	85.1	85.3	86
	a) Urban	94.1	*	94.5	94.1	94.5	94.6	94.8	95	95.5
	b) Rural	79.8	*	80.1	79.8	81.4	81.4	82.1	82.3	83

$ Coverage figuers are cumulative and based on the fringe coverage.

* Locations of transmitters have yet not been finalised, the coverage Could not be computed.

@ Interim Set-up

CHAPTER 5

AGRICULTURE AND ALLIED ACTIVITIES

SECTION - 1

Overview

5.1 Significant strides have been made in agricultural production since 1949-50. The development process could be seen as falling into two phases. During the period 1949-50 to 1964- 65, the contribution to incremental production was largely from area expansion, particularly under foodgrains which went up from a level of 992.8 lakh hectare to 1181.1 lakh hectare. However, thereafter there has been considerable deceleration of the growth rate in area and in the more recent years the area under crops has fluctuated between 1260 and 1280 lakh hectare, partly influenced by the annual variability in the rainfall pattern. In the later phase, it is the enhancement of productivity that has been primarily responsible for additional production. The introduction of high yielding dwarf varieties of paddy in the medium duration range and dwarf varieties of high yield potential in the case of wheat since the mid-sixties has brought about not only spectacular increase in yields, but also in production due to change in cropping pattern in several States in favour of cereal crops. This is also reflected in the changes in contribution of different regions to the total production.

5.1.2 Cropwise and broad region-wise the significant factors in regard to agricultural production and productivity can be summarised as under:

(i) Cereal production has significantly improved in the irrigated and agro climatically well endowed areas.

(ii) In the North Western States of India, namely Punjab, Haryana and Western U.P. the area increases in rice and wheat have been at the expense of pulses and oilseed crops.

(iii)Large contribution of additional rice production in many States, particularly West Bengal has been due to increase in the area under summer rice, where the yields are almost similar to Punjab, Haryana, etc.

(iv) In the peninsular states, there has been either stagnation in the area under cereals or even decline as in the case of rice crop in Kerala.

(v) Large fluctuations in area is a major feature of coarse cereals like jowar, bajra, ragi, etc. Yields have also been showing large fluctuations, reflecting the rainfall pattern.

(vi) Wide fluctuations in prices, yields, etc. have not been conducive for motivating the farmers to raise coarse cereal crops under irrigated conditions as witnessed from the insignificant proportion of the area brought under irrigation, except in respect of maize.

Strategy

5.2 The strategy for agricultural development in the Eighth Plan aims at not only achieving self-sufficiency in food but also generating surpluses of agricultural commodities for export. Though the progress of agriculture in the period prior to the 8th Plan has been satisfactory, there are striking regional and crop imbalances. Productivity varies considerably from one region to another. The benefits of Green Revolution which remain confined, at present, to the north and north-west must spread to other regions, more particularly to the eastern and north-eastern regions which have adequate rainfall, fertile soil and vast scope for stepping up agricultural production. Since two-thirds of the cultivated area is still unirrigated, a more balanced regional development would call for a greater emphasis on dry land/rainfed farming. Even though the progress in oilseeds production has been significant, there is no room for being complacent, keeping in view increasing demand for edible oils. A concerted effort towards increasing oilseeds production is therefore essential. Agriculture and allied activities on which two-thirds of the workforce are still dependent, must continue to receive a major emphasis in our planning effort.

Thrust areas

5.3 The main thrust areas identified during Eighth Plan period are as follows:

(i) **Acceletrated growth in areas which have relatively lower growth** - Primarily efforts in the Eastern India and hill regions will be required to concentrate on raising the productivity of principal crops in these regions through programmes initiated earlier with appropriate strengthening.

(ii) **Development of rainfed areas** - Adoption of dryland farming system approach in the rainfed areas to make scientific and optimum use of land and water resources.

(iii) For small and marginal farmers, **diversification** into other allied activities capable of generating higher incomes such as animal husbandry and dairy, horticulture, both irrigated and unirrigated, sericulture, fisheries, agro-forestry, etc.

(iv) **Increasing productivity in irrigated areas** - Effective water management through timely application of the minimum required volumes of water in the light of the prevailing climatic conditions and enhance productivity through dissemination of improved technologies amongst the entire farming community.

(v) **Input Management** - Efficient use of chemical fertilisers, recycling of organic wastes and use of bio-fertilisers have an important place in sustainable agricultural development and greater attention is to be paid to integrated pest management in tune with the environmental needs.

(vi) **Marketing Infrastructure**- The marketing infrastructure to be further augmented and streamlined, especially in respect of perishable commodities for meeting the requirement of diversification and to enable farmers to realise a fair share of the price paid by the consumers.

(vii) **Expansion of agro-based industries** - Efforts will be made for induction of latest technology in processing and better packaging so that the processed foods can compete in the international market, besides catering to the growing market within the country.

(viii) **Enhanced agricultural exports** - Apart from maximising production of the traditional export commodities, efforts will also be directed towards producing non-traditional commodities like flowers and different types of vegetables for export on sustainable basis.

(ix) **Role of Non-Governmental Organisations** - Peoples' participation and involvement of Non-Government Organisations (NGOs) will be given greater emphasis in areas like integrated development of rainfed areas on watershed management principle, agricultural extension and organisation of provision of services.

(x) During the Eighth Plan, emphasis is to be given on development of resources in **agro-climatic zones**, and their optimum utilisation in an integrated and sustainable manner for constituent subsectors in the State plans covering activities in crop and non-crop sectors.

Approach for operationalising the plan strategies and thrusts

5.4 Taking into consideration the strategies and thrust included in the Eighth Plan and the various factors identified in raising production, the following approach has been evolved over time for achieving the desired results:

(i) Large potential still exists for enhancing productivity of crops like wheat and rice even in the regions like Punjab, Haryana, Uttar Pradesh, Andhra Pradesh (rice), Tamil Nadu (rice), where current yields are of the order of 3 to 3.5 tonnes per hectare (rice) through cultivation of hybrids of rice and universalizing the level of adoption of technology in the entire region.

(ii) Several areas like Eastern U.P., Bihar, and Northern Madhya Pradesh have substantial scope for increasing wheat yields through better agronomic practices, say fertilizer consumption, where the present levels of application per hectare are very low. Early planting of wheat through earlier transplantation of preceding paddy crop, can assist in achieving higher yields.

(iii) There is a very large area under rice crop in the eastern parts of India, namely, eastern UP, Bihar, West Bengal, Orissa, eastern Madhya Pradesh, Assam as well as in Maharashtra. In these States summer rice crop has been producing very high order of yields, almost at the same level as Kharif yeilds in north western region of the country. There is substantial scope of increasing the area under summer rice in several of the States through augmentation of irrigation facilities, particularly exploitation of ground water resources in an optimal fashion. There is tremendous unexploited underground water potential in eastern UP, Bihar, West Bengal, Assam, Orissa, etc. The utilisation of underground water can enlarge substantially the irrigated areas in these States.

(iv) A much more extensive network of rural electrification in many of the eastern States is necessary for proper utilisation of ground water resources.

(v) Fertilizer consumption is quite low in eastern India compared to other States. Fertilizer wholesale and retail distribution network arrangements will have to be expanded using public sector, cooperative and private trading channels. Unlike in the high consumption areas, risk of carry over of stocks can be substantial arising from fluctuating demands in the light of agro-climatic conditions, especially aberrant rainfall pattern with consequent moisture stress conditions, floods etc. As a result these areas are not being able to secure adequate volume of supplies in time. For this the States' role should be to promote adequate stocking of fertilisers before the commencement of the principal crop season.

(vi) Seed replacement rates are low, nor is there adequate spread of high yielding varieties.

Programmes

5.5.1 Many of the programmes and schemes would be continued from the previous Plans with necessary refinement/modifications in keeping with the changing scenario of agricultural development in different areas of the country. The agriculture sector is expected to grow at an average annual rate of little more than 4 per cent in terms of gross value of output and 3 per cent in terms of value added.

5.5.2 Keeping in view the Eighth Plan strategy and thrust areas, a number of new initiatives were taken as well as some of the on-going schemes were re-designed. These are briefly highlighted:

5.5.2.1 Development of rainfed areas has been the top priority in agriculture development since the Seventh Plan. However, in the Eighth Plan, the priority has been matched equally with the fund allocations. In the Seventh Plan a new Centrally Sponsored Scheme of National Watershed Development Programme for Rainfed Areas (NWDPRA) was launched with an outlay of Rs. 239 crore. However, in the Eighth Plan, the scheme has been re-structured and a provision of Rs. 1,100 crore has been made. Now greater emphasis is being given on peoples' participation and involvement of Non-Governmental Organisations in the implementation of watershed development plans. Out of 127 agro-climatic sub-zones in the country (as identified by ICAR), the NWDPRA is being implemented in 115 zones. Model watershed plans for 115 agro- climatic sub-zones have been technically approved.In all 2456 number of micro watershed projects covering an area of 3841 lakh ha. have been sanctioned and are at different stages of implementation.

5.5.2.2 For increasing the productivity in irrigated areas providing sustainability to crop production, the on-going Centrally Sponsored Schemes on Cereals and Commercial Crops have been modified from 1993-94/1994-95 with an objective of increasing overall production and productivity through development of cropping system under crop based cropping system. A component of sprinkler irrigation has been added as water saving device. Total Plan outlay of Rs. 1000 crore has been provided for crop-oriented and related schemes.

5.5.2.3 For efficient use of chemical fertilizers, programmes of balanced and integrated use of fertilizers (Rs. 26.01 crore outlay), National Project on Development of Fertilizer Use in Low Consumption Rainfed Area (Rs. 10.20 crore outlay) have been taken up during the Plan period. The National Project on Development and Use of Bio-fertilisers has been given greater importance for better management of soil health with a plan outlay of Rs. 8.00 crore. The major thrust in the activities relating to plant protection has been on Integrated Pest Management (IPM) having an Eighth Plan outlay of Rs. 45.00 crore and expansion of plant quarantine factilities with an outlay of Rs. 34.53 crore. These would help in reducing pesticides pollution and to regulate the import of commodities to prevent entry of exotic pests into India. Similarly, exporters would be helped by providing necessary phytosanitary certificates.

5.5.2.4 In order to enhance agricultural exports, a programme has been worked out under Export Enhancement programme for Horticultural Produce. Under this, the on-going schemes of Ministry of Agriculture, Commerce and Food Processing Industries are being coordinated with a view to boost the export of agricultural commodities by taking care of all aspects, from production to all necessary infrastructural needs. Horticulture development has been given a major thrust and against an outlay of Rs. 24 crore in the Seventh Plan, Rs. 1,000 crore has been provided in the Eighth Plan. A number of on-going schemes have been strengthened and new programmes have been launched to cover temperate, tropical and arid zone fruits, spices, medicinal and aromatic plants, tuber crops, mushrooms, vegetables, floriculture, etc. For better water management, large-scale use of drip irrigation in horticulture has been introduced. Tissue culture and Green House Technology have been encouraged with incentives.

5.5.2.5 In order to encourage involvement of people in transfer of technology, two new schemes have been initiated in 1994-95. A beginning has been made by way of two schemes, viz. providing, (a) Extension through Voluntary Organisations with an outlay of Rs. 1.00 crore and (b) Women in Agriculture, with provision of Rs. 1.65 crore.

5.5.2.6 In animal husbandry and dairy development schemes have been taken up related to (i) Milk and Milk Product Order having plan outlay of Rs. 1.00 crore, (ii) Technology Mission on Dairy Development with a plan outlay of Rs. 44.00 crore and (iii)Integrated Dairy Development Project in Non-Operation Flood, Hilly and Backward Areas. The Eight Plan outlay for this scheme is Rs. 200.00 crore.

5.5.2.7 The ICAR-SAU system has given thrust and new directions in many production system areas, particularly in areas of horticulture research have been given. A new project on DNA finger printing has been initiated in 1994-95 to meet the requirements under post-GATT scenario.

5.5.2.8 A new scheme on 'Small Farmers Agri-business Consortium' with Rs. 5.00 crore plan outlay has been launched from 1994-95 to oversee the district plans in this respect.

Table 5-1

Targets of Area, Production and Yield of Principal Crops for 1996-97

Area in lakh hectare
Yield in Kg./hectare

Sl. No.	Commodity	Output Unit	8th Plan 1996-97			Annual Growth* in Production
			Area	Prod.	Yield	(%)
1.	Rice	L.T.**	435.0	880.0	2023	3.95
2.	Wheat	,,	242.5	660.0	2722	3.34
3.	Coarse Cereals	,,	377.5	390.0	1033	5.40
4.	Pulses	,,	245.0	170.0	694	3.96
5.	**All foodgrains**	,,	**1300.0**	**2100.0**	**1615**	**4.01**
6.	Oilseeds	,,	245.0	230.0	930	5.62
7.	Sugarcane	,,	39.0	2750.0	70513	3.19
8.	Cotton	LB(170)	75.0	140.0	317	5.92
9.	Jute & Mesta	LB(180)	10.0	95.0	1710	1.09
10.	Other Crops		237.0			
11.	**All Crops**		**1906.0**			

LB(170) = Lakh Bales of 170 Kg.each * Compound
LB(180) = Lakh Bales of 180 Kg.each ** L.T=Lakh Tonnes

Table 5-2

Targets of Key inputs-Eighth Plan

Sl. No.	Item	Unit	Plan Target 1992-97 (8th Plan)
I.	Certified Seeds Distribution	Lakh Quintals	70.00
II.	Fertilizer Consumption		
	i) Nitogenous	Lakh tonnes	115.0
	ii) Phosphatic	,,	50.0
	iii) Potassic	,,	18.0
Total - N + P + K			**183.0**
III.	Pesticides (Technical grade material)	000 tonnes	97.80
IV.	HYV Programme		
	i) Paddy	Lakh hectare	339.0
	ii) Wheat	,,	238.0
	ii) Jowar	,,	86.0
	iv) Bajra	,,	66.0
	v) Maize	,,	38.0
	vi) Other (Ragi)	,,	13.0
Total HYV		,,	**780.0**

HYV = High Yeilding Variety

Table 5-3

Central Sector Outlays for Agriculture & Allied Activities for the Eighth Plan (1992-97)

(Rs in crore)

Sl. Sub-Head of Development	8th Plan Outlay	1992-93 Revised Estimates	1993-94 Revised Estimates	1994-95 Revised Estimates	1995-96 Approved outlay
1. Crop Husbandry	4681	619.25	804.98	877.40	926.92
2. Soil & Water conservation	800	80.58	102.97	124.26	125.00
3. Animal Husbandry	400	57.24	73.57	72.94	93.25
4. Dairy Development	900	148.97	273.59	261.95	250.00
5. Fisheries	400	84.33	106.31	104.04	111.15
6. Plantations	190	48.16	65.94	82.14	92.03
7. Food storage Warehousing	424	79.36	60.74	65.77	67.80
8. Agricultural Research and education	1300	183.95	249.95	274.95	309.90
9. Agricultural Financial Institutions	234	99.89	92.64	341.00	476.38
10 Cooperation & credit	1550	215.30	210.82	342.93	350.60
11 Other Agri cultural programmes	100	305.12	135.55	41.36	7.25
TOTAL	10979	1922.15	2177.06	2588.74	2810.28

Targets and outlays

5.6.1 Targets for agricultural production in respect of foodgrains and some other important crops are presented in table 5-1.

5.6.2 The targets of key inputs for the Eighth Plan on the basis of which the production targets are to be achieved are shown in table 5-2:

5.6.3 The Central sector outlays for the Eighth Plan are given in table 5-3.

various factors like regional disparity in food crops production, low productivity of some crops, agro- climatic factors, input problems, etc.

Crop Production Performance -Targets and Achievements

5.7.2.1 Targets and achievements of production of major crops during 1992-93, 1993-94 and 1994-95 are given in table 5-4.

5.7.2.2 The first three years of the Eighth Plan

Table 5-4

Physical Targets & Achievements during Eighth Five Year Plan

(In Lakh Tonnes)

(Production of Cotton in lakh bales of 170 Kg each

(Production of Jute & Mesta in lakh bales of 180 Kg each.)

Name of Crop	8th Plan Target (1992-93)	1992-93 Tar.	1992-93 Ach.	1993-94 Tar.	1993-94 Ach.	1994-95 Tar.	1994-95 Ach. (Likely)
1	2	3	4	5	6	7	8
1. Rice	880.0	772.5	728.6	780.0	789.7	785.0	810.2
2. Wheat	660.0	570.0	572.1	585.0	591.3	585.0	601.8
3. Coarse Cereals	390.0	342.5	365.9	360.0	309.2	365.0	308.2
4. Pulses	170.0	145.0	128.2	155.0	131.0	155.0	143.3
5. **Total Foodgrains**	**2100.0**	**1830.0**	**1794.8**	**1880.0**	**1821.2**	**1890.0**	**1863.5**
6. Oilseeds	230.0	190.0	201.1	210.0	214.8	220.0	223.5
7. Sugarcane	2750.0	2430.0	2280.3	2500.0	2270.6	2500.0	2502.1
8. Cotton	140.0	120.0	114.0	125.0	107.1	125.0	116.2
9. Jute & Mesta	95.0	92.0	85.9	93.0	84.8	93.0	92.3

Performance in the first three years

5.7.1 Per capita availability of food grains increased from 395 grams per day(g.p.d.) in 1951 to 510 g.p.d in 1991. However, thereafter, it showed a decline, falling to 468 g.p.d. in 1992 and further to 464 g.p.d. in 1993. But it slightly improved to 474 g.p.d. in 1994. Pulses form an important segment of our staple food and are perhaps the main source of protein for vegetarians and for the poor in particular. There has been a reduction in per capita availability of pulses; it has come down to 42 g.p.d. in 1991 from a level of 61 g.p.d. recorded in 1951 and 75 g.p.d. in 1958.It works out to 38 g.p.d. in 1994. Food supply is restrained by

have been marked by a fairly consistant level of agricultural production in the range of 18 to 18.5 crore tonnes with the production reaching a new peak of about 18.6 crore tonnes in the year 1994-95. Nevertheless, the incremental production has not kept pace with the targets set out for the Eighth Plan. While there has been some debate on the demand for foodgrains, it is accepted that there is a substantial need for not only increased productivity per unit of land, but overall production of agricultural commodities, particularly foodgrains, keeping in view the growing population and improvement in per capita expenditure as the economy achieves a higher growth path.

Yield performance of Major Crops

5.7.3.1 The Eighth Plan targets and actual yields of principal crops during 1989-90 to 1993-94 are given in the table 5-5.

Table 5-5

Productivity of Principal Crops in India

(in kg. per hectare)

Name of Crop	7th Plan 1989-90	1990-91	1991-92	Projected for 1996-97	1992-93	1993-94
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Rice	1745	1740	1751	2023	1744	1879
Wheat	2121	2281	2394	2722	2327	2373
Coarse Cereals		900	778	1033	1063	935
Pulses	549	578	533	694	573	584
Total Food grains	**1349**	**1380**	**1382**	**1615**	**1457**	**1487**
Oil Seeds	742	771	719	939	797	801
Sugarcane*	66	65	66	71	64	67
Cotton	252	225	216	317	257	248
Jute & mesta	1646	1634	1662	1710	1658	1713

* 000 Kgs.

5.7.3.2 The achievement of targets in the Plan, besides a favourable weather situation depends very much on the availability of irrigation facilities and fertilizer as well as other inputs. As per present aassessment, the targets of fertilizer consumption and irrigation fixed for 1992-93 and 1993- 94 were not achieved.Taking into consideration the availability of fertilizers as also its present level of consumption under given fertilizer scenario, no significant increase in fertilizer consumption is anticipated in the remaining two years of the Plan to reach to the targetted levels.

High Yielding Varities

5.7.4.1 The coverage under high yielding varities (HYV) is given in table 5-6.

5.7.4.2 The production and distribution of breeder, foundation and certified seeds have shown increasing trends as given below:

Evaluation of the Irrigation and Fertilizer Scenario

5.7.5.1 Agricultural production represents a complex picture with production as an outcome of several variables, such as the land brought under cultivation under different cropping systems, extent of irrigation, application of improved technologies of production of agricultural commodities, particularly in terms of several key inputs, such as the use of improved seeds for achieving a varietal diversification, nutrient management, pest management, etc. Of these, irriation and use of chemical fertilizers have played a major part in achieving incremental production. For the period 1980-81 to 1992-93, the annual compound growth rate in foodgrains production of 2.94% was largely derived by the improved productivity, which has shown an annual compound growth rate of about 3.75%. Changes in productivity levels in the first three years of the Eighth Plan have not been marked, except in the case of rice. However, the relative levels of productivity changes in the short time-frame of two to three years is not a good indicator, and this has to be seen as a part of time series.

5.7.5.2 Improved production, particularly by way of improved productivity, is essentially a reflection of levels of adoption of technology

Table 5-6

Area under High Yielding Varieties Targets and Achievements of major cereals

(in lakh hectare)

Name of crop	8th Plan Target (1992-97)	1992-93 target	1992-93 Ach.	1993-94 Tar.	1993-94 Ach.	1994-95 Tar.
1	2	3	4	5	6	7
1. Paddy	339.0	304.0	275.0	310.0	289.0	328.0
2. Wheat	238.0	230.0	217.0	228.0	220.0	233.0
3. Maize	38.0	28.0	26.0	35.0	27.0	29.0
4. Jowar	86.0	79.0	69.0	90.0	68.0	70.0
5. Bajra	66.0	59.0	56.0	69.0	51.0	62.0
6. Ragi	13.0	12.0	11.0	11.0	12.0	13.0
7. Total- HYV	780.0	712.0	654.0	743.0	666.0	735.0

and how widespread is the extent to which improved technologies have been adopted by farmers. While different elements of crop production technology have their own importance, nevertheless these do get reflected in terms of increases in the gross cropped area, use of chemical fertilizers, etc. These are facilitated by the crucial element of the spread of irrigation. In fact, bulk of the production enhancements are expected to arise from the increase in the gross cropped area, improvements in the irrigated area, and use of chemical fertilizers. Introduction and adoption of short-duration varieties of crops could enable raising of multiple crops even in the rainfed situation, with a second crop following the principal Kharif crop, based on residual moisture for sustaining the crop. It has, thereofre, been an important element of strategy to increase the gross cropped area even under rainfed conditions. Similarly, in the case of irrigated areas, achievement of a high order of cropping intensity is aimed at, while keeping in view the need for raising annual and perennial crops also under irrigated conditions for meeting societal demand for a diversified mix of agricultural commodites, such as sugarcane, fruits, etc. Improved productivity arises from varietal diversifiaction, i.e. replacement of local varieties with improved varieties with high yield potential and better response to applied inputs. To some extent, the use of fertilizers and nutrients has been taken as an indicator of the extent to which adoption of technologies are taking

Table 5-7

Production and Distribution of Seeds

Seed	1991-92	1992-93	1993-94	1994-95 Anti.
Production of Breeder Seed (000'Qtl.)	33.90	35.98	36.82	44.50
Production of Foundation Seed (lakh Qtl.)	3.74	3.93	4.00	4.73
Distribution of Certified/ Improved Seed (Lakh Qtl.)	57.50	60.33	61.00	65.00

place and incremental production is seen as a result of the response to fertilizer application in terms of additional production of agricultural commodities arising from incremental use of fertilizers. Therefore, changes in the Irrigation and Fertilizer scenario as a part of the implementation of the Eighth Plan are discussed as critical elements of the agricultural development process in the following paragraphs.

Irrigation

5.8.1 The salient points of progress of irrigation and CAD are analysed below. The full details of irrigation and CAD are to be found in Section-II.

5.8.2 The financial performance in the Major & Medium, Minor Irrigation, CAD and Flood Control Sector during the first 3 years of the 8th Plan has been of the order of 47% against the prorata of about 60%. Apparently there has been substantial shortafall in the financial outlays during the first 3 years of the Eighth Plan which needs to be made up in the balance two years of the Eighth Plan. So far as major & medium and minor irrigation programmes are concerned, the shortfall in the first 3 years has been of the order of Rs.1,657 crore compared to the approved outlays in the corresponding period.

5.8.3 In case of major irrigation projects, there has been increase in the spill over cost of about Rs. 9500 crore during the first 3 years whereas allocation per annum is of the order of Rs. 3,000-3,500 crore per annum. Apparently substantially higher outlays need to be provided for timely completion of major irrigation projects as the present trend of provision of outlays is able to meet only escalation in costs. Due to time and cost overruns, only 33% of the target of completion of 362 major & medium irrigation schemes could be achieved during the first 3 years of the 8th Plan.

5.8.4 The potential likely to be created during the first 3 years with respect to Eighth Plan target is only 43.3% against the pro-rate of about 60%. The shortfall in achievement was mainly due to inadequate funding by the States.

5.8.5 The percentage of outlay in the irrigation sector during the Fifth Plan with respect to all sectors was 23.25% which has declined to only 14.08% during 1994-95 (revised approved) against the Eighth Plan priority of 18.48% Hence there is need to have mid-course correction in the funding policy to the irrigation projects. There is a need to have rigorous inter-se prioritisation of the projects as well as phased execution programme so as to derive optimal benefits from the investment to be made during the remaining period of the Eighth Five Year Plan. Adequate outlays need to be provided by the States in regard to externally assisted project on the basis of the provisions in the agreement signed with the donor agencies. It may be worthwhile to mention that highest priority in funding was given by the States to schemes in advanced stages of construction where the expenditure is more than 75% of the estimated cost (the likely expenditure in first 3 years with respect to Eighth Plan outlays,is 73.3% for major and 77.85% for medium irrigation projects).

5.8.6 Regarding Command Area Development Programme, in most of the States, construction of field channels and Warabandi are the only activities being undertaken by the CADA States . There is need to re-orient the programme so as to make it a more effective instrument for ensuring speedy transit to irrigated agriculture and optimising water use efficiency. There is urgent need for multi-disciplinary units to be set up by the States and to have detailed monitoring by the Centre as well as to provide incentives for formation of Water Users' Associations for turning over the irrigation systems to them initially below distributories/minors for attending to equity, adequacy and timeliness effectively in providing irrigation to the beneficiaries on the one hand and reduce the establishement cost on the other. It may be worthwhile to mention that the total coverage by water users association is only 0.33% so far. Efforts have been initiated to take maximum advantage of on going crop oriented and related schemes in the command areas of the irrigation projects already completed.

5.8.7 There is need for substantial step up in the outlays for modernisation of major & medium irrigation schemes in the remaining two years of the Eighth Plan so that the assets created are not lost for want of proper maintenance of the canal system, adequate fund is available for works and the available resource is not consumed only for paying salary to the staff.

5.8.8 Based on the presently estimated ultimate irrigation potential in the country regionwise present status of overall irrigation development shows that water resource development in North-eastern region through major, medium and minor schemes is only at the level of 32.77% whereas in the Northern Region, it has reached about 97.87% (may vary when the ultimate potential figure through ground water is revised). This indicates a wide regional variation. The other region i.e.Eastern, Southern and Western are at the level of 62.15%, 69.21% and 56.82%, respectively which are progressing well.

5.8.9 It is estimated that total unrecovered costs on account of major and medium irrigation was increased more than 5 fold in a 10 year period from Rs.280 crore in 1977-78 to Rs.1,525 crore in 1986-87. Most of the states have not revised the water rates since the mid 70s. Only three states namely Maharashtra, UP and Haryana have recently revised the water rates. A Group of officers was set up by the Planning Commission to examine the recommendations contained in the report of the Committee on Pricing of Irrigation Water (1992). The group has taken a view that water charges should be appropriately raised by the States so as to meet at least operation and maintenance costs of the projects in the next five years.

Fertilizers

5.9.1.1 Incremental use of fertilizers results into additional production. In case of food-grains generally this ratio is taken as 1:7.5. This may, however, vary under different agro-climatic and management conditions for various crops.

Table 5-8

Fertilizers Consumption Target for the Eighth Plan

		(lakh tonnes)
1. Nitrogeneous	(N)	115.0
2. Phosphatic	(P)	50.0
3. Potassic	(K)	18.0
Total (N+P+K)		183.0

Targets

5.9.1.2 Target of Consumption of Chemical Fertilizers in the 8th Plan are given in Table 5-8.

5.9.1.3 In the '80s, consumption of chemical fertilizers significantly increased from 51.6 lakh tonnes to 115.9 lakh tonnes registering a growth rate of 8.6% p.a.(between 1980/81 to 1989/90). During 1989-90 to 1991-92 the growth rate came down to about 5.0% and it further fell to 3.5% during the period 1991-92 to 1994-95. The actual consumption of fertilizer which stood at 127.3 lakh tonnes in 1991-92 declined to 121.5 lakh tonnes in 1992-93 and is anticipated to increase to 140.6 lakh tonnes in 1994-95. The details of consumption chemical fertilisers during the Eighth Plan period are given in Table 5-9.

5.9.1.4 The decline in fertilizer consumption was mainly because of substantial rise in the prices of phosphatic and potassic fertilizers. The estimated consumption of phosphate and potash nutrients during 1994-95 is 31 and 11 lakh tonnes respectively, was lower than the pre-control levels of 33.2 and 13.6 lakh tonnes attained in 1991-92, while the consumption of

Table 5-9

Consumption of Chemical Fertilizers

(in lakh Tonnes)

Fertilizer	8th Plan	1991-92	1992-93	1993-94	1994-95 (anti)
Nitrogenous (N)	115.0	80.5	84.3	87.9	99.0
Phosphatic (P)	55.0	33.2	28.4	26.7	31.0
Potassic (K)	18.0	13.6	08.8	09.1	11.0
Total (N+P+K)	183.0	127.3	121.5	123.7	141.0

Nitrogen is estimated to have increased from 80.5 lakh tonnes to 99 lakh tonnes during this period. The gap between the controlled price of urea, and decontrolled prices of phosphatic and potassic fertilizers increased created imbalance in their use. Against the optimum N,P and K ratio of 4:2:1 and an actual ratio of 5.9:2.4:1 just before the decontrol, the ratio has now become adverse as 9.5:3.1:1. This imbalance in the use of different nutrients may have serious adverse implications for soil fertility and productivity. Urgent steps are called for to correct this imbalance in fertilizer use.

5.9.1.5 Slow release fertilizers increase the efficiency of fertilizer use. Increased manufacture and use of slow release fertilizers would be in the overall national interest and need to be encouraged through an appropriate package of incentives. Efforts need to be intensified to promote balanced and integrated use of fertilizers and also to increase fertilizer consumption in low consumption rainfed areas. The Department of Agriculture & Cooperation has also proposed a Technology Mission on Bio-fertilizers to step up the use of bio-fertilizers through establishment of bio-fertilizer centres and programmes.

Capacity & production

5.9.1.6 Targets of Capacity and Production of Chemical Fertilizers for the Eighth Plan(1992-97) are given in Table 5-10.

5.9.1.7 Potassic Fertilizers at 18.00 lakh tonnes are to be imported in 1996-97 as there is no indigenous capacity for production.

5.9.1.8 At the beginning of the Eighth Plan, the installed capacity of fertilizer was 82.4 lakh tonnes of Nitrogen and 27.52 lakh tonnes of Phosphate. The Eighth Plan envisaged an additional capacity of 27 lakh tonnes of Nitrogen and 4.5 to 5 lakh tonnes of phosphate. Against this, an additional capacity of only 9.54 lakh tonnes of Nitrogen and 0.72 lakh tonnes of phosphate has been created during the first three years of the plan. Thus, there is going to be a significant shortfall in the targetted capacity materialization.

Seed

5.9.2.1 In order to restructure and create necessary infrastructure for seed industry, National Seed Project Phase-III was launched in March, 1990 at a cost of Rs.236.01 crore with World Bank assistance. The main objectives of the Projects are:

(i) Assist public Sector Corporations through financial restructuring;

(ii) Enable private sector seed industry to establish seed production(processing) facilities;

(iii) To assist state agencies concerned with promotion of seed industries such as seed certification, quality control and production of foundation seed in state farms.

5.9.2.2 The project has assisted National and State Seed Corporation under various project component to strengthen and enhance their capabilities in seed sector. One issue of seed replacement rate is important from increasing area under improved seed. The desired seed replacement rate will have to be assessed in terms of crops or group of crops. Therefore, there is need for a fresh look at the manner in which we seek to promote achieving higher seed replacement rate. It has been argued that the supply push of certified seed could be a better method of ensuring larger off-take of the certified seed rather than providing flat rate of seed in respect of basic cost5 of the seed, seed replacement rate, etc. It is felt that the ICAR and DAC should have better linkages in this regard. The new Plant Variety Protection Rights would require to augment facilities to enable registration of varieties under the post-GATT period..

Table 5-10

Indicative Target(1992-97)

(Lakh tonnes)

Fertilizer	Capacity	Production
1. Nitrogen Fertilizer	109.40	98.00
2. Phosphatic Fertilizer	31.00	30.00

Plant Protection

5.9.3.1 The major thrust in the activities relating to plant protection has been on Integrated Pest Management (IPM) and expansion of Plant Quarantine facilities. For the IPM it is essential to upgrade the skills of field workers as well as the farmers to make them aware of the economic threshold. Another important aspect is the use of biotic agents. It is important that in the future, production, distribution, etc. of biotic fertilizers are taken care of under the programmes. The role of aerial operation in the IPM also needs to be clearly defined to have a growth of need based safer plant protection chemicals also. The present status of pesticides residuals in the agricultural produce requires immediate attention to provide Indian Standards adoption of a particular chemical. The continued use of banned chemicals in agriculture is an area to be taken seriously for obvious reasons. In view of this, there is need for strengthening of pesticides residuals laboratories.

Soil & Water Conservation

5.9.4.1 Various soil and water conservation programmes which are continuing from the Seventh Plan aim at enhancing and sustaining productivity of available land stock, controlling watershed degradation caused by deforestation , soil erosion, sedimentation, and degradation and hydrologic deterioration and locating, reclaiming and developing degraded land to meet the increasing and competing demand for additional land stock.

5.9.4.2 The All India Soil and Land Use Survey has so far covered 1155.74 lakh ha. under priority delineation survey and 85.65 lakh ha. under detailed soil survey. A new scheme entitled "Application of Remote Sensing Technology for Soil Survey and Land Use Planning" during the Eighth Plan has been launched. The objectives include digitization of priority delineated areas in the catchments of River Valley Project (RVP) and Flood Prone Rive(FPR), generation of thematic maps of land degradation; development of Geographic Information System (GIS) and Soil Information System (SIS).

5.9.4.3 The Seventh Plan on-going Centrally Sponsored Schemes of Soil Conservation in the catchments of River Valley Projects (RVP) and Integrated Watershed Management in the catchments of Flood Prone Rivers (FPR) are being continued in the Eighth Plan. During 1993-94 a new catchment of Thein Dam in Punjab, J&K and Himachal Pradesh has been added in RVP and Ghaggar catchment in Haryana, Himachal Pradesh and Punjab have been included under FPR. During 1994-95, Narmada Sagar for Maharashtra and Kosi catchment in Bihar have been approved.

5.9.4.4 For the reclamation of alkali soils, the Seventh Plan Centrally Sponsored Schemes are being continued in the Eighth Plan in the States of Haryana, Punjab and Uttar Pradesh and the States of Madhya Pradesh, Gujarat and Rajasthan have been included. Another scheme is being implemented in Uttar Pradesh and Bihar with EEC assistance. A target of 8.70 lakh hectare has been fixed for the Eighth Plan with an outlay of Rs 150 crore.

5.9.4.5 For the control of shifting cultivation in seven North- eastern States a new scheme has been introduced from 1994-95 as Central Assistance to these States, and it will be implemented by the Deptt of Agriculture and Cooperation on the guidelines of NWDPRA.

5.9.4.6 The Seventh Plan Programme of Rainfed Farming is being continued in the Eighth Plan as a modified National watershed Development project for Rainfed Areas(NWDPRA). Under this a comprehensive, holistic approach has been adopted to treat all the special components of watersheds, viz. arable land, non- arable land and drainage lines as one organic geo-hydrological entity. Out of 127 agro-climatic zones in the country the project is being implemented in 115 agro-climatic zones in 25 states and 2 UTs. Model Plans for all 115 agro-climatic zones have been technically approved by the Government of India. Based on these approved plans, a total of 2477 micro watershed projects(excluding special problem area) out of 2556 projects identified for development during the plan have been approved by the State Level Sanctioning Committees covering an area of about 39.4 lakh hectare with an estimated cost of about Rs.1,100 crore.

5.9.4.7 Besides 20 NWDPRA special problem Area Projects covering an area of 0.95 lakh hectare with an estimated cost of Rs.27.9 crore. Thus the total number of projects are 2497 (including special problem area projects)with an area of about 40.35 lakh hectare. with an estimated cost of Rs.1128.5 crore. A total number of 2,968 composite kissan/Government owned nurseries have been established under NWDPRA. A sum of Rs. 712.80

crore(including unspent balance of Seventh Plan) has been released to the participating States/UTs from 1990-91 to 1994-95 that comes to 62% of the total cost of the projects sanctioned so far. A sum of Rs 542.72 crore has been reported as expenditure incurred upto January, 1995 since inception of the project. Allocation made under the project for 1995-96 is of the order of Rs. 188 crore.

Agricultural Research

5.9.5.1 To achieve the Eighth Plan objectives, the following priorities and thrust areas for agricultural research, education and extension have been identified:-

- Preparation of inventory of natural resources
- Conservation and planned exploitation of germ plasm
- Enhancing productivity through new high yielding hybrids
- Development and refinement of dry land farming systems
- Improvement in nutrient management systems
- Development of Integrated Pest Management
- Diversification of agriculture
- Research on export-oriented commodities
- Energy management in agriculture
- Post Harvest Technology for Horticulture Crops, Oilseeds and pulses
- Fostering excellence in research and education and livestock production
- Transfer of Technology & Informatics
- Human Resource Development
- Breeder seed production

5.9.5.2 The research activities in Crop Science have been organized under the programmes, viz a) Plant Genetic Resources (b) Food Crops, (c) Forage Crops (d) commercial crops (e) oilseeds and pulses (f)plant protection (g) Hybrid Research and Seed Development (h) Genetic Engineering and Biotechnology (i) Seed Technology reaserch (j) Breeder Seed Production.

5.9.5.3 One of the major achievements under food crops is the release of hybrid varieties of rice for commercial cultivation in different states. These are APHR -I, APHR-II, KHR-I and MGR-I. In case of oilseeds, high yielding hybrids have been developed especially in castor and sunflower which would help in increasing the productivity of these oilseeds. In plant protection, the All India Coordinated Research Project on Biological Control has been upgraded to Project Directorate on Biological Control to give more emphasis on biological control of insects. Two new centres have been provided to All India Coordinated Research Project on Agricultural ornithology at Trichur and Solan, which would further strengthen the research activities. In order to provide support for raising honey Bee population so as to improve crop production, research centres at Trivandrum and Pantnagar have been approved. IPM approaches have been worked out for the major nematode pests in a number of crops. The project has demonstrated the effectiveness of Trichnogramma for the suppression of lepidopter pests on crops like sugarcane, maize, tomato and cotton.

5.9.5.4 In the case of maize, 3 superior hybrids having cold tolerance have been identified. In case of Cotton, new hybrids have been released for cultivation in Punjab, Haryana and Rajasthan. In case of rabi sorghum hybrids, no variety has yet been released. There is a need to accelerate research efforts to improve the productivity of rabi sorghum with the help of better planting material.

Agricultural Education

5.9.6 A scheme of human resource development in agriculture education with assistance of World Bank has been initiated for implementation in the plan period.

Agricultural Extension

5.9.7.1 In order to encourage the involvement of people in transfer of technology, two new schemes have been initiated from 1994-95. These are :i) Extension through Voluntary Organisation and ii) Woman in Agriculture. Under these schemes training courses and demonstration would be conducted and under 'Women in Agriculture' identification of Farm Women Groups and Training for Facilitators would also be taken up. Agriculture extension should be concentrated on marginal farmers, women cultivators and those below poverty line as for the application of Science and Technology is concerned.

5.9.7.2 Under the ongoing schemes, two new programmes, 'Media Support in Agriculture' and International Agriculture Fate AGRI-

EXPO-95 have been undertaken to promote awareness, effective use of electronic media and information about India,s potential in agriculture sector, with a view to promote export and find new commercial partners. During the Eighth Plan the six schemes of the ICAR implemented through the Agricultural Extension have been integrated and put under the canopy of Krishi Vigyan Kendra(KVK). At present, 183 KVKs and 8 Trainers Teaching Centres are in operation. During the Eighth Plan 78 new KVKs with a financial commitment of Rs.54.70 crore have been approved and the sanction has been issued in September, 1994. In the Eighth Plan, a new scheme of NRC for women in Agriculture has been approved with a total plan allocation of Rs.2.18 crore.

5.9.7.3 Under KVKs it is important to assess the impact of the implementation of the scheme to know about the diffusion of technology in various fields of agriculture in the area of influence of KVKs. There should be better linkages with the development programmes so that extension of technology is transferred to the farmers quickly and in a cost effective manner.

Agricultural Implements and Machinery

5.9.8.1 To supplement the efforts of the Farm Machinery Training and Testing Institutes of the Department of Agriculture and Coopera-tioin, financial assistance has also been extended initially to 7 State Agricultural Universities to upgrade the training and testing facilities. In Rajasthan and Tamil Nadu, Farm Machinery Training and Testing Institutes have been approved. A new scheme of Development of Prototype of Industrial Designs of Agricultural Implement has been initiated during 1994-95 for mass production and commercialization of new agricultural implements which have been developed by research organization.

5.9.8.2 Equipments have been developed for harvesting and handling of fruits. Similarly, studies have also been conducted on garlic and onion storage. Under post harvest technology, 70 agro-processing model centres have been established.

Agricultural Credit

5.9.9.1 Credit disbursement in agriculture has increased considerably in recent years from Rs.11,507 crore in 1991-92 to an estimated level of Rs.16,700 crore in 1994-95. Easy access to credit is more important for farmers than concessional terms of credit. Faster growth in credit can not be sustained unless the viability of credit disbursing institutions is ensured. Expansion of credit flows to the agricultural sector has been hampered by the poor recovery performance. Credit Structure needs to be revamped to increase the flow of credit for agricultural production purposes. The co-operatives, which play a dominant part in production credit, ought to be efficient or commercially viable through larger deposit mobilization, diversification of levels and sufficient volume of bussiness,while progressively reducing their dependence on refinance

Table 5-11

Agricultural Credit by Cooperatives and Commercial Banks

(Rs.Crore)

	1991-92	1992-93	1993-94	1994-95 Ant.Achiev.
A. Cooperatives				
(i) Short Term	3950	4900	6000	6600
(ii)Medium Term	391	182	461	
(iii)Long Term	1005	1213	2039	3000
Sub-Total(A)	5347	6295	8500	9600
B. Commercial Banks/RRBs				
(i) Short Term	2711			
(ii)Medium Term	3449	6705	6600	7100
Sub-Total(B)	6160	6705	6600	7100
C. Grand Total (A+B)	11507	13000	15100	16700

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from higher level institutions. The table 5-11 gives the disbursement of agricultural credit by cooperatives and commercial banks.

Cooperatives

5.9.10.1 Cooperatives play a critical role in our efforts towards correction of regional imbalances in the development particularly in the agricultural sector by making credit and inputs available and by promoting and financing development of cooperative marketing, processing, storage and supplies. However, there is need for structural reforms to enable cooperatives to play a definite and effective role in a more competitive environment. There is a need for revitalisation of Cooperatives to provide the needed infrastructural support. A model Cooperative Bill has been prepared and circulated to the States to make suitable amendments in the State Cooperative societies Acts. The Government has also prepared a Draft National Policy on Cooperatives which seems to encourage the cooperatives to grow as self reliant grass root democratic institutions owned, managed and controlled by the members. The cooperatives may be given highest priority in agro- processing, cottage industries, marketing and export of agricultural commodities and should act as an effective instrument for price stabilisation, consumer protection and Public Distribution System.

Agricultural Diversification

5.10.1 Diversification in agriculture sector has been recognised as one of the important objectives of the plan. The main aim is to provide sustainability in agriculture development to make best use of the available resources under a given agro- climatic condition. In view of this, strategy of agricultural diversification should encourage diversification of crop husbandry and other allied activities like livestock, fisheries, processing of agricultural produce, etc. for higher productivity, better income and employment generation in rural areas.

Horticultural Development Including Spices, Plantations, Medicine Plants and Floriculture

5.11.1 The main thrust areas for the development of horticulture are:

(i) Production of quality planting seed /materials and population of hybrid seed and tissue culture technique;

(ii) Area expansion by bringing under horticulture new and traditional areas ideally suitable for growing crops like fruits, spices, plantation crops, vegetables, medicinal plants, etc.

(iii) Rejuvenation of old and uneconomic orchards/ plantations, removal of senile plants and replanting, etc.;

(iv) Improved water management by adoption of drip irrigation system thereby conserving water and optimising the use of fertilisers;

(v) Promotion of increased use of green house technology for cultivation of high value / off-season crops under controlled climatic conditions;

(vi) Special development programme for horticulture for North-Eastern States.

5.11.2.1 Area under fruit crops increased by 11.5% from 28 lakh hectare in 1991-92 to 32 lakh hectare in 1992-93. The production in the same period registered a 15.1% increase from 286 lakh tonnes to 329 lakh tonnes. In case of vegetables there was 8.8% reduction in area but production increased by 21.2% from 585

Table 5-12

A=Area,P=Production

Unit	1991-92	1992-93	1993-94
Cashew			
A lakh ha.	5.30	5.60	5.60
P lakh tonnes	3.04	3.49	3.48
Spices			
A lakh ha.	20.0	22.0	21.0
P lakh tonnes	19.5	21.8	22.0

lakh tonnes in 1991-92 to 710 lakh tonnes in 1992-93. The position with regard to cashew and spices (15 major spices) is given in Table 5-12.

5.11.2.2 To augment horticultural production, drip irrigation system has been propagated as an appropriate method of irrigation. The area under drip irrigation, increased (with subsidy) from 13,300 hectare in 1992-93 to 14,000 hectare in 1993-94. So far total area covered under drip irrigation system is about 84,000 hectare.

5.11.2.3 The progress under horticultural schemes of National Horticulture Board is given in Table 5-13.

5.11.2.4 The Horticulture Development Programmes under Central Sector as well as State Sector have to be monitored closely. The database of horticultural crops needs to be strengthened.

5.11.2.5 Among technology achievements, 3 hybrids in mango and one in grape (a black seed-less hybrid) have been identified; tissue culture plants of banana and mango have been generated. Under NRC-Mushroom, single spore isolates and hybrids of the white button mushrooms having much higher yield than the old strains have been evolved for the first time in India.

Plantation Crops

5.11.3.1 Plantation crops include tea, coffee, rubber and spices. Eighth Plan targets set for productions and exports of plantation crops are indicated in the table 5-14.

Tea

5.11.4.1 Tea production has increased from 7210 lakh kg. to 7301 lakh kg. from 1992-93 to 1993-94 and expected to be 8000 lakh kg. in 1994-95. Tea export has declined from 1681 lakh kg. in 1992- 93 to 1543 lakh kg. in 1993-94. As a result of increasing domestic demand,for tea over the years there is a decline in tea export. In order to maintain India's share in the global tea trade and at the same time to meet fully growing domestic demand, it is crucial that tea production is stepped up considerably. Tea Board has drawn up a 10 year Perspective Plan which seeks to achieve a production target of 100 crore kg. by 2000 AD. This is expected to be achieved both through improved productivity from the existing land by adopting measures like replanting and replacement of uneconomic tea sections, gap filling and consolidation, rejuvenation of aged bushes, irrigation and drainage and adoption of improved cultural practices as also through expansion of tea cultivation in both traditional and non- traditional areas.

Table 5-13

	1993-94	1994-95
i) Grading and Packing Unit (Nos.)	26	57
ii) Pre-cooling Units (Nos.)	10	38
iii) Cold Storage (Nos.)	5	37

Table 5-14

The Eighth Plan Targets
for Production and Export of Plantation Commodities

	Unit	Production	Exports
Tea	lakh Kg	9500	3000
Coffee	'000 Tonnes	220	125
Spices	'000 Tonnes	2076	163
Rubber	'000 Tonnes	600	

Coffee

5.11.5.1 Coffee Production has increased from 1615 lakh kg. to 2080 lakh kg.from 1992-93 to 1993-94 and is expected to be 1800 lakh kg.in 1994-95. Coffee export has increased from 1136 lakh kg in 1992-93 to 1313 lakh kg in 1993-94. Anticipated export will be 1500 lakh kg. in 1994-95. As a result of depletion of world coffee stock, there has been a spurt in international coffee prices. In order to boost the growth of coffee sector, policy on free sale quota(FSQ), has been liberalised as follows;

a) small growers whose holding is less than 10 hectare will be allowed 100%FSQ. Thus, 98% of all registered growers will be covered by this liberalisation

b) The remaining growers will be allowed an FSQ of 70%. They would have to pool the remaining 30% with the Coffee Board.

c) Besides, Coffee Board will also undertake a direct purchase programme and purchase a reasonable quantity of coffee at prevailing market prices.

d) Coffee Board will use the pooled and purchased coffee for market intervention according to the needs of the situation. Coffee will be suplied through the Board's own outlets.

5.11.5.2 Consequent to liberalisation of the coffee market India would be benefitting as a participant in the global market. Accordingly, the Perspective Plan for coffee production has been revised upward to 3 lakh tonnes by 2000 AD.

5.11.5.3 The Eighth Plan objective has been to improve productivity of coffee to 1000 kg/ha. by 1996-97. The productivity achieved in 1993-94 is estimated to be 860 kg/ha. The progress during 1993-94 of the programmes to increase productivity like intensive cultivation, water augmentation, area expansion and quality improvements has remained satisfactory. There is, however, some sluggishness in the progress of replantation programme. The possibility of area expansion in coffee both in the Western Ghats Region of Maharashtra and in the North Eastern Region (with the assistance of the centrally sponsored scheme of control of shifting cultivation) may be explored. There is also a need to set up a bio-technology centre for coffee to facilitate research.

Spices

5.11.6.1 The current annual level of production of all varieties of spices is about 20 lakh tonnes. Export has increased from 1.267 lakh tonnes in 1992-93 to 1.755 lakh tonnes in 1993-94. The anticipated export in 1994-95 could be 1.65 lakh tonnes. Export of spices registered a growth of 38.41% during 1993-94 and exceeded the Eighth Plan target. This was achieved through various developmental programmes relating to improvement of productivity and market development undertaken by the Spices Board. Programmes like Logo Promotion, Quality Improvement, etc. have visible influence on export development.

Rubber

5.11.7.1 Production of natural rubber has increased from 3.935 lakh tonnes in 1992-93 to 4.352 lakh tonnes in 1993-94 and is expected to be 4.74 lakh tonnes in 1994-95, registering a growth of 8.92 per cent. Domestic demand for rubber in the years 1992- 93, 1993-94 and 1994-95 was 4,14,105 tonnes, 4,50,580 tonnes and 4,85,000 tonnes respectively. About 97% of domestic demand is met by local production and the gap is met from imports. Estimated demand for rubber in 1996-97 will be 565,000 tonnes. The strategy to enhance rubber production in the Eighth Plan includes: (i) Expansion of area under rubber with thrust in non- traditional regions, (ii) Replanting of old and low yielding areas with high yielding varieties; and (iii) Improving the productivity of existing areas by popularising adoption of modern cultivation and production practices. The yield of rubber has recorded a moderate growth of 3.69% per annum from 1130 kg/ha. in 1991-92 to 1215 kg/ha. in 1993-94 and is estimated to go up by 4.5% to 1270 kg/ha. in 1994-95.

Post Harvest Infrastructure/ Technologies

5.12.1 Under Post Harvest Technology of Horticultural crops, designing of mango harvester, grader, solar dehydrator and cooker and CFB (Corrugated Fibre Board) boxes have been carried out successfully.

5.12.1.2 Some of the issues which need attention in the horticulture sector relate to post harvest infrastructural facilities like scientific plucking, cleaning/washinhg, grading, cold storage, packing, pre-cooling conditions etc.

Storage and Warehousing

5.12.2.1 The additional storage capacity for foodgrains proposed to be constructed during the Eighth Plan by FCI, Central Warehousing Corporation and State Warehousing Corporations was estimated at 14 lakh tonnes. Besides, additional storatge capacity of 20 lakh tonnes for storage of fertilizer and agriculture inputs, jute, cotton, etc was also contemplated during the Eighth Plan. Specialized storage facilities for specific commodities including horticulture and other agricultural products for exports were also required to be built up.

Food Corporation of India(FCI)

5.12.3.1 The FCI had proposed construction of additional godown capacity of 10 lakh tonnes during the Eighth Plan period (1992-97) keeping in view the increase in population and the consequent pressure on public distribution system, increase in procurement in certain states on account of change in procurement policy and certain capacity that has been rendered infructuous etc. The FCI now expects to construct a total additional godown capacity of 6.60 lakh tonnes only during the entire Eighth Plan period due to lack of availability of funds and also on account of the fact that certain centres earlier identified by the Corporation for construction of godowns having been dropped on account of priority indicated by the Working Group. These capacities at the selected centres are planned to be created on the basis of micro level review with emphasis on creation of storage capacities in the hilly and North-Eastern areas and also at certain centres in plain areas with a view to removing regional imbalances and to cater to the changing procurement scenario. During 1992-93 and 1993-94, the Corporation had created capacity of 2.68 lakh tonnes and by 1994-95, the total capacity was expected to be 3.35 lakh tonnes.

Central Warehousing Corporation

5.12.4.1 The Central Warehousing Corporation had a target of 12.50 lakh tonnes warehousing facilities to be created during the Eighth Plan period. The target of additional capacity for the entire Eighth Plan period has been reduced to 4.51 lakh tonnes from 12.50 lakh tonnes on account of the Central Warehousing Corporation being required to act on business principles. Therefore, construction of warehouses would have to be economically viable ensuring adequate rate of return. It has been experienced that operations of the agricultural warehouses do not give adequate rate of return. Therefore, the Corporation has planned to construct capacity more for industrial warehousing and container freight stations rather than the agriculture warehouses. However, during 1992-93 and 1993-94, the capacity realized by Central Warehousing Corporation was 1.91 lakh tonnes. The target for the remaining three years of the Eighth Plan is 2.60 lakh tonnes(including 0.70 lakh tonnes for the year 1994- 95).

Fisheries

5.13.1 The major objective of fisheries development during the Eighth Plan is to increase productivity from fresh water and brackish water resources through extensive and semi-intensive/intensive fish/prawn culture. The other objectives are

employment generation, improving the socio-economic status of fishermen, increased export of marine products, etc.

5.13.2 During the period from 1990-91 to 1993-94, the annual growth rate of fish production was 6.22%, production being estimated 46.81 lakh tonnes (26.88 lakh tonnes of marine and 19.93 lakh tonnes of inland in 1993-94). Production exceeded the target each year. With the continuation of the same trend, the envisagedd target of 55.00 lakh tonnes is likely to be achieved by the terminal year of Eighth Plan.

5.13.3 There has been significant increase in the export of marine products both in terms of quantity and value. Marine products export which was at a level of 1.72 lakh tonnes valued at Rs. 1,375 crore at the beginning of Eighth Plan has reached a level of 2.44 lakh tonnes valued at Rs. 2,504 crore in 1993-94. It is likely to exceed the envisaged target by the end of Eighth Plan.

5.13.4 Fish seed production reached a level of 1350 crore fry in 1993-94 from a level of 969.1 crore fry at the end of Seventh Plan period. However, technology improvement in case of prawn seed hatcheries needs attention to cope with the demand.

5.13.5 Significant progress has been achieved in the productivity level of fish ponds under the Fish Farmers Development Agency (FFDA). The average productivity which was about 50 kg. per ha. per annum in 1973-74 has risen to the level of 2105 kg. per ha in 1993-94.

5.13.6 Major fisheries harbours have been constructed at Madras, Cochin, Vishakapatnam, Roychowk, Sasson dock (Bombay). Work is in progress for the major harbour at Paradeep. Besides, about 37 minor harbours and 130 Fish landing Centres (FLCs) have been commissioned. However, maintenance of harbours is to be given due attention.

5.13.7 Coastal fisheries have already reached a saturation point in most parts of the coast. To prevent over exploitation of stock leading to decline of catch in future, it is necessary to enact suitable legislative measures and to implement them. The programme of motorisation of craft needs to be monitored closely to check indiscriminate exploitatgion of marine fish resources etc.

5.13.8 Indiscriminate growth of brackish water farms through semi intensive and intensive technique may cause environmental degradation. Therefore, an environmental action plan needs to be introduced to ensure measures for developing brackish water aquaculture as eco-friendly activity.

5.13.9 Inland fish marketing to the interior places has not yet been taken up in spite of adequate central assistance for this purpose.

5.13.10 There is a need to intensify R&D activies relating to capture fisheries both inland and marine fisheries as well as fisheries technology relating to fishing methods, processing and value addition etc.

Animal Husbandry

5.14.1 The Eighth Plan strategies aim at consolidating the gains made till Seventh Plan and Annual Plans 1990-91 and 1991-92 in improving productivity of milch animals, sheep and goats and other livestock to enhance the average availability of milk, meat, eggs, draught power, wool and various by-products. The increase in production of milk, eggs and meat etc. so far achieved through appropriate farmer organisations, better pricing and organised marketing has reached a level where further increase can only be achieved through application of advanced scientific breeding, feeding and management practices. The emphasis thus is placed on bio-techological aspect of livestock production so as to achieve a better mix of low and high productive animals to capitalise on existing resources and increase total

5.14.2 The strategies further aim at dovetailing the resources and energies of the various agencies engaged in the development of this sector so as to achieve better coordination of efforts including development of feed and fodder and to improve the nation's animal health system.

5.14.3.1 The production of major livestock products and growth rates may be seen from the tables 5-15 and 5-16.

5.14.3.2 The significant achievement in the production of milk is the result of Operation Flood Programmes being undertaken by the States through strengthening cooperative institutions and infrastructure. The country produced 539 lakh metric tonnes of milk during 1990-91 and it increased to about 602 lakh metric tonnes in 1993-94. Artificial Inseminations (AI) which stood at 315.22 lakhs in 1991-92 have increased to about 320.00 lakhs during 1993-94.

5.14.3.3 Egg production which was 2198.3 crore numbers during 1991-92 has risen to 2377.2 crore numbers (Anticipated) by 1993-94. Similarly wool production has increased from 399 lakh kgs (Provisional) in 1992-93 to 412 lakh kgs. (Anticipated) in 1993-94.

5.14.3.4 Keeping in view the priority of crop production, there is very limited scope of increasing the area under fodder, thus necessitating the increase in productivity and availability of forage resources per unit area and also introduction of suitable fodder crops on fallow lands to increase bio-mass production in community waste lands and common village grazing lands.

5.14.3.5 Animal Health Services play a vital role in obtaining the desired results through improved genetic make up of the vast livestock and poultry population and to prevent production losses of the precious livestock wealth. The number of veterinary poly-clinics/hospitals/dispensaries were 19791 during 1992-93. In addition, more than 20,000 Veterinary Aid Centres / Mobile dispensaries have also been established. Apart from the services provided by these institutions, veterinary-aid in Operation Flood areas are provided by mobile veterinary dispensaries which cover about 170 milk sheds. Due to the concerted efforts made by these institutes, the incidence of diseases has substantially been reduced.

5.14.3.6 The neccessary research support is provided by Agricultural Universities, Veterinary Colleges and Indian Council of Agricul-

Table 5-16

Production of Major Livestock Products - Percentage Growth Rate

Period	Milk	Eggs	Wool
1950-51 to 1960-61	1.64	4.63	0.43
1960-61 to 1973-74	1.15	7.91	0.37
1973-74 to 1980-81	4.51	3.79	0.88
1980-81 to 1990-91	5.50	7.70	2.60

tural Research through the network of research institutions. Research on genetic improvement of various livestock through cross-breeding and selection, revealed that Frieswal cows and Jamunapari breed of goats have performed significantly well. A new geno-type of sheep "KERI" a cross of malpura and black faced Marwari/Jaisalmeri sheep yields about 1.-2 kg medium carpet type wool. In the poultry sector "ILI-80" layers are found to be superior to number of internationally reputed commercial layers.

5.14.3.7 The method for Oestrum Synchronization and Super- ovulation standardisation in sheep and goats have made a significant strides in the Multi-Ovulation Embryo Transfer (MOET) Technology.

5.14.3.8 Standarisation of a monoclonal based Avidian-Biotin ELISA test for comparative sero-epidemiological monitoring of recently recognised Peste Pestis des Ruminants (PPR) and Rinderpest by using India-88/1 and Kabate"o" viruses respectively has been developed.

5.14.3.9 Though the production of major livestock products have shown an increasing trend and there is every likelihood that the Eighth plan target of producing 700 lakh tonnes milk and 300 lakh of eggs would be achieved, but in terms of production of wool, it appears that the target of producing 500 lakh kg. of wool will not be achieved. Added attention needs to be focused on improvement of the genetic stock through cross breeding/upgrading and commercial sheep farming on scientific lines. More emphasis shold be given to the setting up of small dairies, poultry farms and piggeries for those below the poverty line. Dairy Development Corporation should take up big projects for DRDA beneficiaries so as to help them to get higher income and come up above poverty line.

5.14.3.10 Two detailed studies on the development of livestock sector as a whole are being undertaken with the assistance of World Bank and the Swiss-Development Corporation (SDC). These studies will involve inputs from experts throughout the country and the reports will go through a series of workshops before they are finalised. The reports are expected to provide useful input for a livestock policy perspective, enabling consideration of a number of investment proposals which will enable the country's livestock sector to make further significant strides.

Investment in Agriculture

5.15.1 There has been decleration in agricultural investment during the 1980s. The total gross investment (at 1980-81 prices) in Agriculture declined from Rs.4,636 crore in 1980/81 to Rs.4,345 crore in 1989-90 and recovered to some extent to Rs.4,595 crore in 1990-91. Thereafter it showed a decline, reaching low level of Rs.4,567 crore in 1992-93. There was a perceptible decline in public sector investment in agriculture from Rs.1,796 crore in 1980-81 to Rs.1,032 crore in 1992-93. In the case of public sector, capital formation relates primarily to departmental irrigation works by Central and States Governments. However, private sector investment showed an up trend from Rs.2,840 crore to Rs.3,535 crore during this period. The estimates of capital formation in the private sector relate to build up of assets by household sector and plantation companies in the private corporate sector.Trend in the growth of agricultural investment during 1981-1992-93 is illustrated in the table 5-17.

Table 5-17

Growth of Gross Capital Formation in Agriculture

(Rs.in crore)

Year	Agriculture - Total		Agriculture	Public Sector
	at current prices	at 1980-81 prices	at current prices	at 1980-81 prices
1980-81	4636	4636	1796	1796
1981-82	5104	4499	1934	1779
1982-83	5715	4575	2109	1725
1983-84	5615	4097	2246	1707
1984-85	6475	4551	2463	1673
1985-86	7037	4322	2642	1516
1986-87	7079	4015	2701	1428
1987-88	8446	4418	3114	1461
1988-89	9120	4349	3219	1364
1989-90	10086	4345	3049	1157
1990-91	11674	4595	3284	1155
1991-92	13338	4581	3440	1025
1992-93	15633	4567	4682	1032

* Quick estimates

5.15.2 To achieve a growth rate of 4 percent per annum call for substantial stepup of investment in agriculture. The private sector which accounts for about two thirds of the investment in agriculture has, therefore, an important role in coping with the situation. encouragement would need to be given to accelerate the level of investment by the private sector for higher growth of agriculture and also to induce the farmers to intensify their efforts and investments in agriculture. The 8th plan has earmarked substantially higher allocation for agriculture which would lead to an acceleration in capital formation in agriculture.

Agricultural Exports

5.16.1 Exports of agriculture and allied products continue to show a promosing picture. Agro-exports include coffee, tea, oil cake, tobacco, cashew, peanuts, spices, sugar and molasses, raw cotton, rice, wheat and wheat products, fish and fish preparations, miscellaneous foods, etc. The exports increased from Rs.2,057 crore in 1980-81 to Rs.8,228 crore in 1991-92. It continued to maintain the trend and increased to Rs.9,459 crore in 1992-93 and further to Rs.13,021 crore in 1993-94. In terms of US $ exports increased from $2601 million in 1980-81 to $4151 million in 1993-94.

5.16.2 The share of agriculture in total exports came down from 27.70% in 1985-86 to 18.67% in 1993-94. Details of the exports are given in Table 5-18.

5.16.3 The constraints operating on the agro-exports are volume insufficiency, quality deficiencies, procedural bottlenecks in functions of various departments like AGMARK, EIA, Customs, etc, non-availability of germ plasm of important flowers and plants which have an export market. Lack of adequate post harvesdt infra-structure covering the areas of refrigerated transport, storage and packing. Lack of infra-structural facilities at air- port/sea-ports and inadequacy of modern abattoirs etc.

5.16.4 In the changed scenario of economic reforms, liberalisation and globalisation of Indian economy, sustained development, growth and creation of further momentum is required to strengthen the competitiveness of agro-exports in the global market. Emphasis has to be given to short term and long term considerations with regard to

(i) development and promotion of markets and products, brand name and dissemination of information among exporters

(ii) improvement in quality and packaging keeping in view the health, sanitation and international standards

(iii)encourangement to export-oriented/100% EOUs,

(iv) development of cold chain system

(v) creation of infra-structures at air- ports/sea-ports

(vi) integrated long term policy to improve the production, productivity, cropping pattern, as well as processing to augment value-added products etc, increasing use of bio- fertilisers and bio-pesticides to ensure quality of products.

Employment in Agriculture

15.16.5 Eighth Plan has a major focus on generation of employment opportunities so that by the turn of century near full employment situation could be created. The main objective of the strategy is to generate sufficient job opportunities to absorb unemployed and under-employed persons in agriculture and also to provide jobs to new entrants to the labour force. It is also obvious that for creating larger growth of employment, agriculture sector provides the best avenue. There is higher relative potential for employment generation in the States like Andhra Pradesh, Bihar, Tamil Nadu, Maharashtra, West Bengal, Madhya Pradesh, Orissa and Uttar Pradesh. Special cell should be set up to monitor progress of the eight States where maximum employment generation can take place through improvement in agriculture. There is a need to draw up State-wise strategy along with package of assistance specific to the problems of these States.

Agro Climatic Regional Planning Project

15.17 The Agro Climatic Regional Planning Project was initiated by the Planning Commission in 1988. The Project has now completed about 6 years of activity. This distinctive planning approach has been recognised widely as an innovative paradigm of planning. The essence of the approach lies in obtaining an effective trade off between short term and long term. It has been adequately documented that the worth of the ACRP exercise stems from the fact that it is not limited to the dimensions of the crop sector, but includes the entire gamut of land and water resource based activities and their use, viewed in a dynamic sense. The ACRP approach tries to capture the issue of sustainability not only in a physical sense, but also with its financial, institutional and social implications. In the operationalisation experience of ACRP, the emphasis has been more on capacity building with specific reference to local strengths and constraints, rather than providing an alternate plan in a prescriptive or hierarchial manner.

Experimental Projects & Institutionalisation Exercise

5.17.2.1 The last 6 years of ACRP activity may be broadly delineated into 2 phases. One, the initial phase of research encompassing detailed inventorying of resource endowments and other socio-economic parameters, building strategic options, refining strategies through a sensitive feedback mechanism and formulating an Agro-climatic plan for a region, reflecting its natural strengths and weaknesses, needs and priorities, social and political systems. This phase of the exercise proved in unequivocal terms, the superiority of

Table-5-18

Growth of Agro-Exports during 1980-81 to 1993-94

Year	Rs.crore	$million
1980-81	2057	2601
1985-86	3018	2467
1990-91	6317	3521
1991-92	8228	3338
1992-93	9457	3265
1993-94	13021	4151

this approach in land and water resource planning and its feasibility in integration with the existing planning process at different levels.The second phasee may be said to have began about 2 years back, with the introduction of the 5 Experimental Projects; in Sami-Harij Talukas of Mehsana(Gujarat), Puri Sadar Block of Puri District(Orissa), Kashipur Block of Purulia District(West Bengal), Hirehalla Watershed area of Shimoga District(Karnataka) and Manikandam Block of Tiruchirapalli District(Tamil Nadu) and Institutional Exercise, in selectred states. The genesis of this new phase of work was brought about by the felt need at Planning Commission to replicate the ACRP methodology on a country wide scale. It was believed that in order to replicate, it would be neceesary for the existing multi-tier planning and implementing machinery to internalise the essential components of the new planning approach.

5.17.2.2 To achieve this end, the Planning Commission adopted two pronged strategy . The Experimental Projects being implemented through local authorities at 5 different locations in the country are the first level of influencers, designed to serve the purpose of internalising the new plan paradign through a demonstrative effect.

5.17.2.3 The other is the institutional exercise, which is a package of awareness programmes, training , workshops, exchange visits and planning assignments that are collectively expected to ensure a high level of assimilation of the ACRP methodology.

5.17.2.4 Most crucial exercise which attempts to internalise the experiences in terms of its approach and its application pertaining to land and water related activities within the existing and emerging planning and development system. The 73rd Constitution Amendment explicitly provides for a comprehensive district planning system and the ACRP is to provide a building block between the decentralised planning process with technical/scientific input. The exercise has been initiated at State and District level in Tamil Nadu, West Bengal, Assam and Orissa and is in pipeline in Karnataka, Bihar and Gujarat. In Madhya Pradesh and Punjab the exercise is being initiated in selected districts.

5.17.2.5 The States of Tamil Nadu, Orissa, West Bengal and Assam have already incorporated the ACRP approach in their plan documents for Agriculture and Allied Sectors. Karnataka, Gujarat & Bihar are in the process of formulating plans based on ACRP strategies.

Agro Planning & Information Bank (APIB):

15.17.3.1 The agricultural economy involves diverse group of actors ranging from individual farmers to cooperatives, banks and other financial institutions and Government. Access to information and knowledge base is becoming an increasingly important instrument for planning and development of this sector, particularly in the context of process of decentralisation and wider participation of private sector. Having developed an extensive information base covering both agro-climatic and socio- economic parameters in course of the implementation of ACRP project, it was considered appropriate to set up a single window storage and dissemination mechanism for addressing to the issues of access to Agro Planning Information Bank (APIB) is being set up on pilot scale in ISRO Banglore covering selected sub-regions of Karnataka. The intrinsic advantage of ISRO in using the satellite based information and its pioneering effort in developing district modules for sustainable development of agriculture has been the rationale for locating this centre under ISRO Banglore. It is expected that APIB would develop effective channels of communication to various group of users both at micro and macro level by making best use of existing channels and infrastructure(e.g. NIC, ICAR) as also developing new ones.

National Documentation and Dissemination Centre(NCDC):

5.17.4.1 While the APIB has been designed to address a wide group of users, there is a distinct need to also orient government functionaries, who are by far the biggest facilitators in the agriculture economy. Such orientation directed at policy makers of both centre and states would be more intense and personalized. The concept of the NDDC attempts to address this need.

5.17.4.2 There are many ways in which information can be packaged for effective dissemination. Currently ARPU has no set up whatsoever for this purpose. There is a need to look at all possible ways of packaging the information including small colourful brochures, abridged versions of certain reports, computer based slide shows, forms based on

DTP and graphics tools, and finally forms based on latest technologies like multimedia technology.

5.17.4.3 The Centre is proposed to be established in the Central Support Cell of the Project at Ahmedabad in Sardar Patel Institute of Economic & Social Research(SPIESR) during the year 1995-96 with initial technical support of Indian Institute of Management(IIM), Ahmedabad.

Informatics for Sustainable Agricultural Development

5.17.5.1 During Eighth Plan, the main objective for sustainable agricultural development centers around to assist farmers in collaboration with the State Governments, ICAR Institutes, State Agricultural Universities (SAU), Non-Government Organisations (NGOs) etc., in order to maximise the crop, livestock and fishery production in a sustainable and eco-friendly manner for catering to the needs of the increasing population and compete in international markets to earn foreign exchange. In the face of shrinking size of average agricultural holdings, special needs of inputs, capital, processing and marketing for small land holdings should be paid due attention. Therefore, special emphasis in the collection/processing and dissemination of adequate, accurate and timely information on the above needs at grass-root level is inevitable for effective planning, implementation and monitoring the agricultural production programmes in order to achieve sustainable agricultural development. All these require quick and effective modes of communication to and from the farmer. New information technologies, particularly, computers and their communication networking, have great relevance and promise, in this context.

5.17.5.2 Informatics and its applications have great potential to create major transformation in achieving the sustainable agricultural development. Informatics for sustainable agricultural development requires coordinated inter-sectoral approach and application of appropriate Information Technology (IT) tools. With the NICNET facilities of National Informatics Centre (NIC), it has been possible to develop inter-sectoral information systems and databases for inter-ministerial coordination, research and management.

5.17.5.3 In order to give a coordinated approach for the development of informatics in the agricultural sector, a conference on Informatics for Sustainable Agricultural Development (ISDA-95) was organised by NIC, in collaboration with the Ministry of Agriculture, Department of Fertilizers and Ministry of Rural Areas and Employment, in the month of May, 1995 at New Delhi. The main aim of this conference was to bring awareness and to promote the spread of informatics for agricultural research, production and extension, to facilitate harmonious development of land, water, vegetation, livestock, fishery and other resources of the country, in a sustainable and eco-friendly manner, at grass-root level.

5.17.5.4 The major theme of the conference was "Informatics for Sustainable Agricultural Development". This included the development of (i) Data-bases, (ii) Expert Systems & Knowledge bases, (iii) Networking, (iv) Model basis, (v) GIS, (vi) Application and Remote Sensing Data and (vii) Multi-Media Information System for the following sixteen major areas of agriculture and allied sectors : - Agricultural Research, Agrometeorology, Crop Production and Protection, Agricultural Engineering and Food Processing, Soil & Water Management, Fertilizers & Manures, Extension & Transfer of Technology, Dairying, Livestock and Animal Husbandry, Fisheries, Environment & Forest, Irrigation & Drainage system, Watershed development, Wastelands Development, Agricultural marketing, Credit & Cooperation and Rural development & Planning.

5.17.5.5 The major recommendations of this conference were :

i) to modernise informatics infrastructure in agriculture sector including introduction of computers and establishment of computer- communication networks for most of the sixteen areas, such as, ARISNET, CROPS-NET, FERT-NET PASHUDHAN-NET and FISH-NET, etc., as Close-User- Group (CUG) on NICNET for agricultural informatics development, through E-Mail and Remote Database access,

ii) to develop integrated information systems cutting across the sixteen areas identified so as to provide a scope for inter-sectoral planning and coordination, and

iii) to provide IT-based manpower training for all agricultural extension workers on a crash porgramme basis, etc.

5.17.5.6 In Collaboration with the Central and State Agricultural Departments, NIC has undertaken the development of NICNET based Information System/Databases in agriculture and allied sectors. Development of district information system (DISNIC) for agriculture and allied sectors has already been taken up in many districts. The Central Ministry of Agriculture has already set up a National Task Force on NICNET based integrated information system for Animal Husbandry and Dairying sector, with a view to provide integrated animal husbandry and dairying informatics in the district/state/central governments. Informatics for micro- level planning (DISNIC-PLAN), to facilitate socio-economic, agro-economic, agro-climatic, infrastructure development, and natural resources management, has been operationalised at district level.

Fertilizer Informatics for Sustainable Agriculture

5.17.6.1 The need for an Integrated Fertilizer Management Information System (IFMIS) was felt necessary by the Department of Fertilizers. The IFMIS has been designed and is being developed by NIC in collaboration with the Department of Fertilizers. The major objective of the IFMIS is to develop an evaluation system which would ensure uniformity in planning and controlling mechanism, incorporating adequate signalling mechanism to highlight deviations from the desired performance indicators of the plants/organisations. The information exchange between the Department of Fertilizers and various fertilizer companies/plants via NICNET has been taken up as an important activity for effective implementation of the project of IFMIS.

5.17.6.2 The informatics support on the Integrated Nutrient Management System (INMS) strengthens and assures an efficient use of fertilizer which :

i) integrates the use of on-farm generated organic manures with inorganic fertilizers and

ii) exploit the natural nutrients supply through bio- engineering and mining of soil resources.

5.17.6.3 The IFMIS also emphasises on congruency among productivity, sustainability, profitability and equity so that environmental as well as economic costs of progress are minimised. Such a process should be system-based and science and knowledge driven and includes development of Databases, Expert systems & Knowledge bases, Networking, Model bases, GIS, Application of Remote Sensing Data and Multi-media Information Systems.

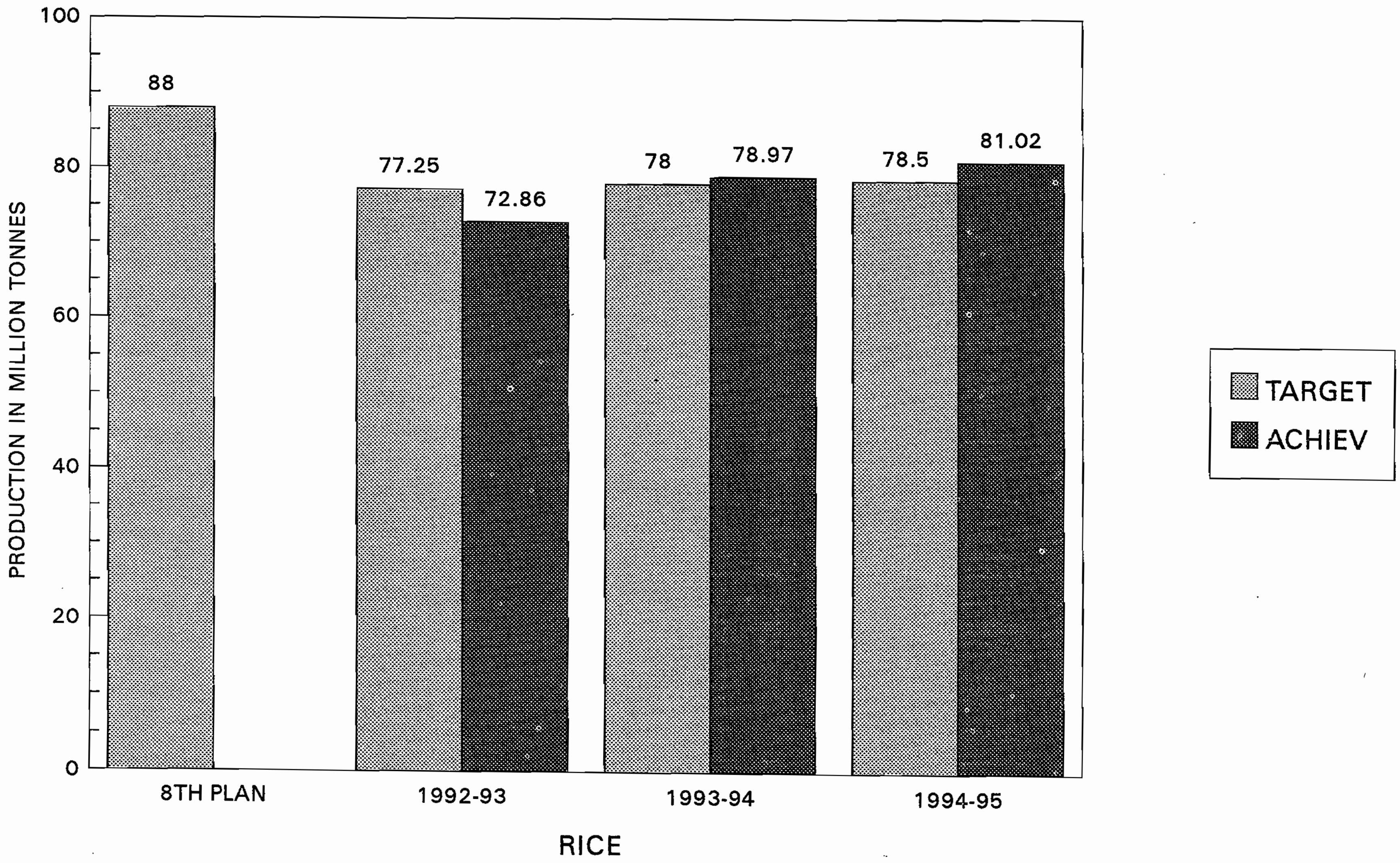
5.17.6.4 In order to realise the potentials of informatics tools for sustainable development a Conference on Informatics for Sustainable Agricultural Development (ISDA-95) was organised by National Informatics Centre in collaboration with the Ministry of Agriculture, Ministry of Rural Areas and Employment and Department of Fertilizers on May 24-25, 1995 at New Delhi. The ISDA-95 conference has recommended among the others :

i) FERTNET : a Close-User-Group (CUG) on NICNET to provide information exchange, among various level, to strengthen Fertilizer informatics;

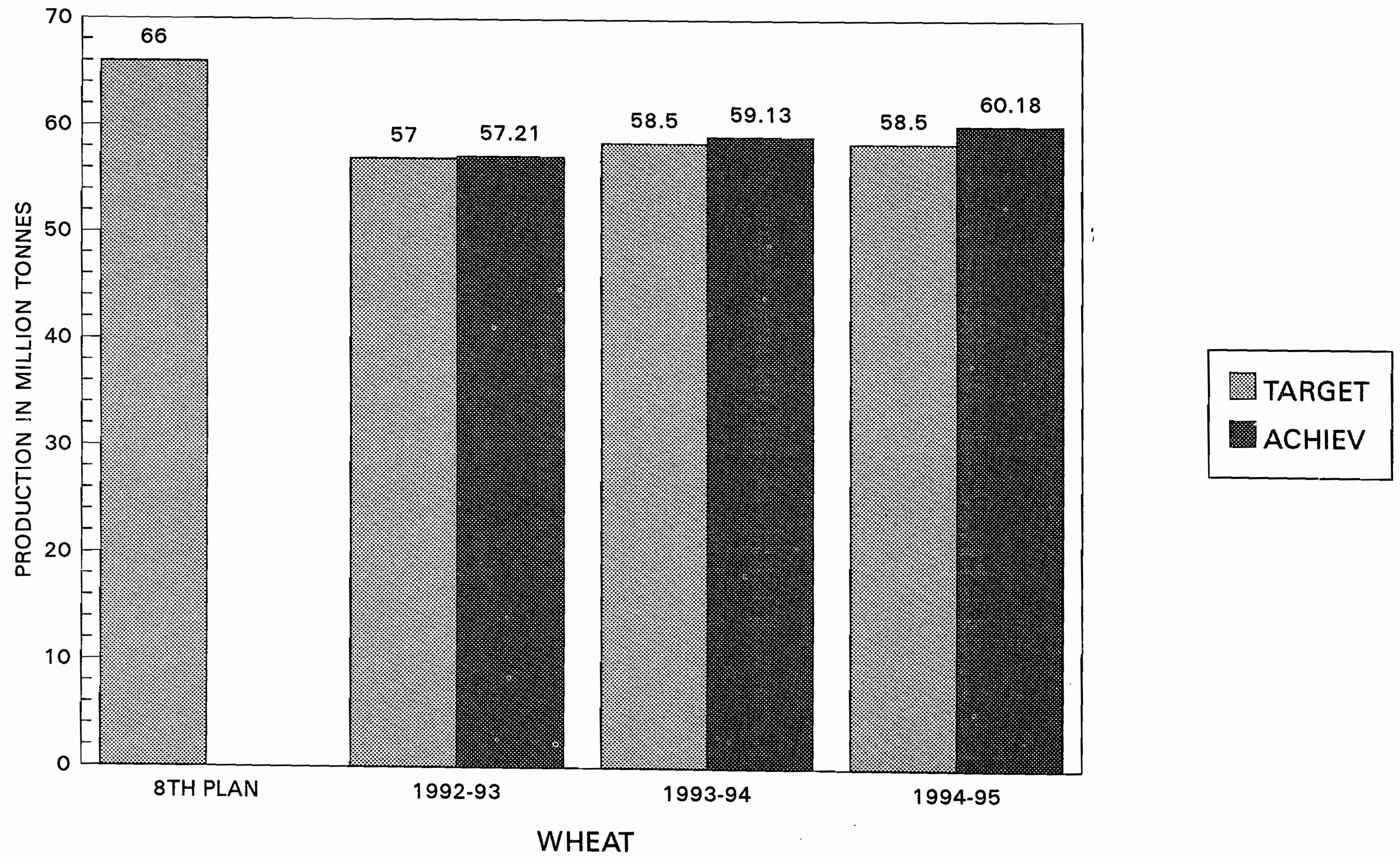
ii) Informatics for Integrated Nutrient Management System at grass root level.

PHYSICAL TARGETS & ACHIEVEMENTS OF RICE PRODUCTION DURING 8TH FIVE YEAR PLAN

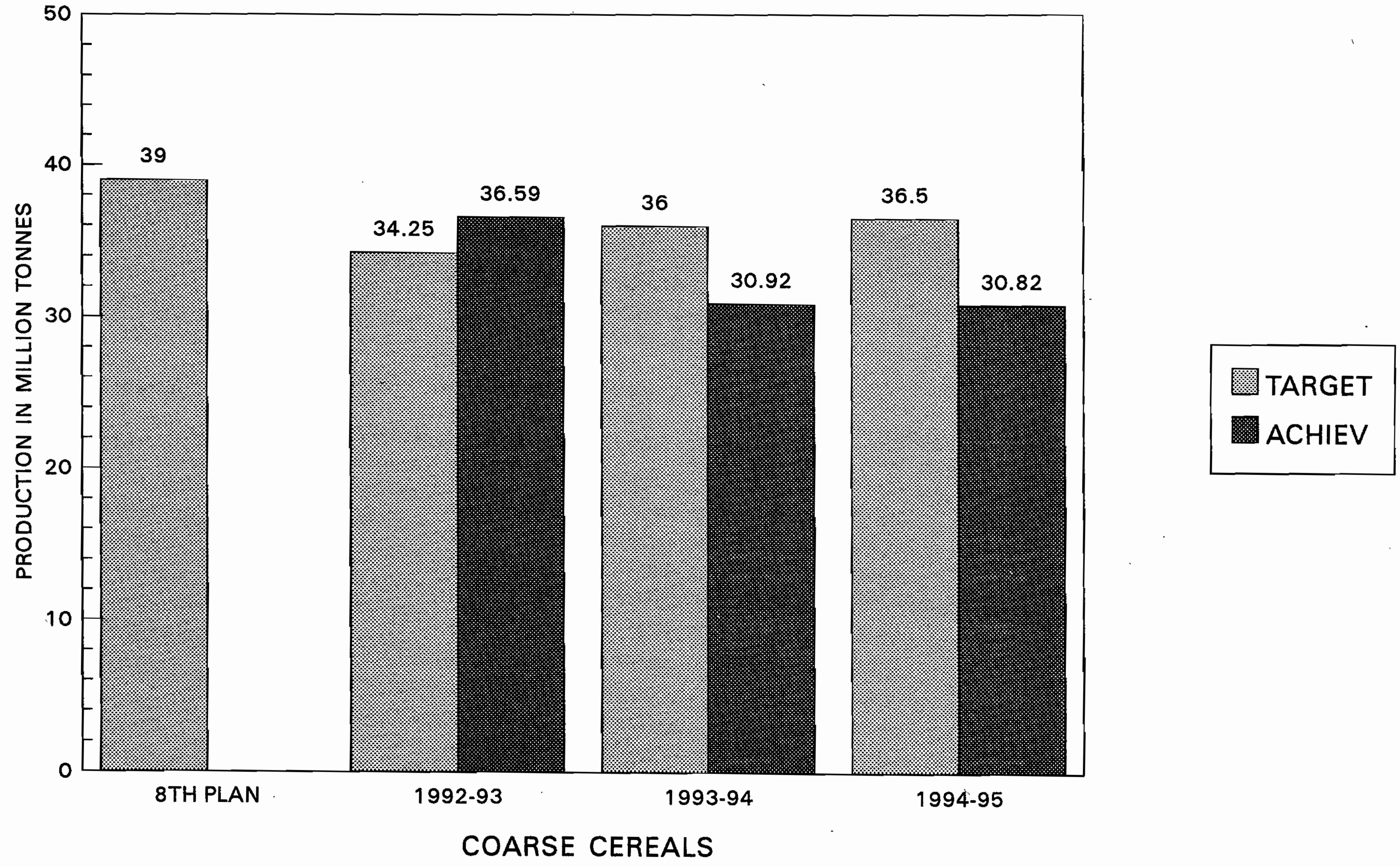
(IN MILLION TONNES)



PHYSICAL TARGETS & ACHIEVEMENTS OF WHEAT PRODUCTION DURING 8TH FIVE YEAR PLAN
(IN MILLION TONNES)

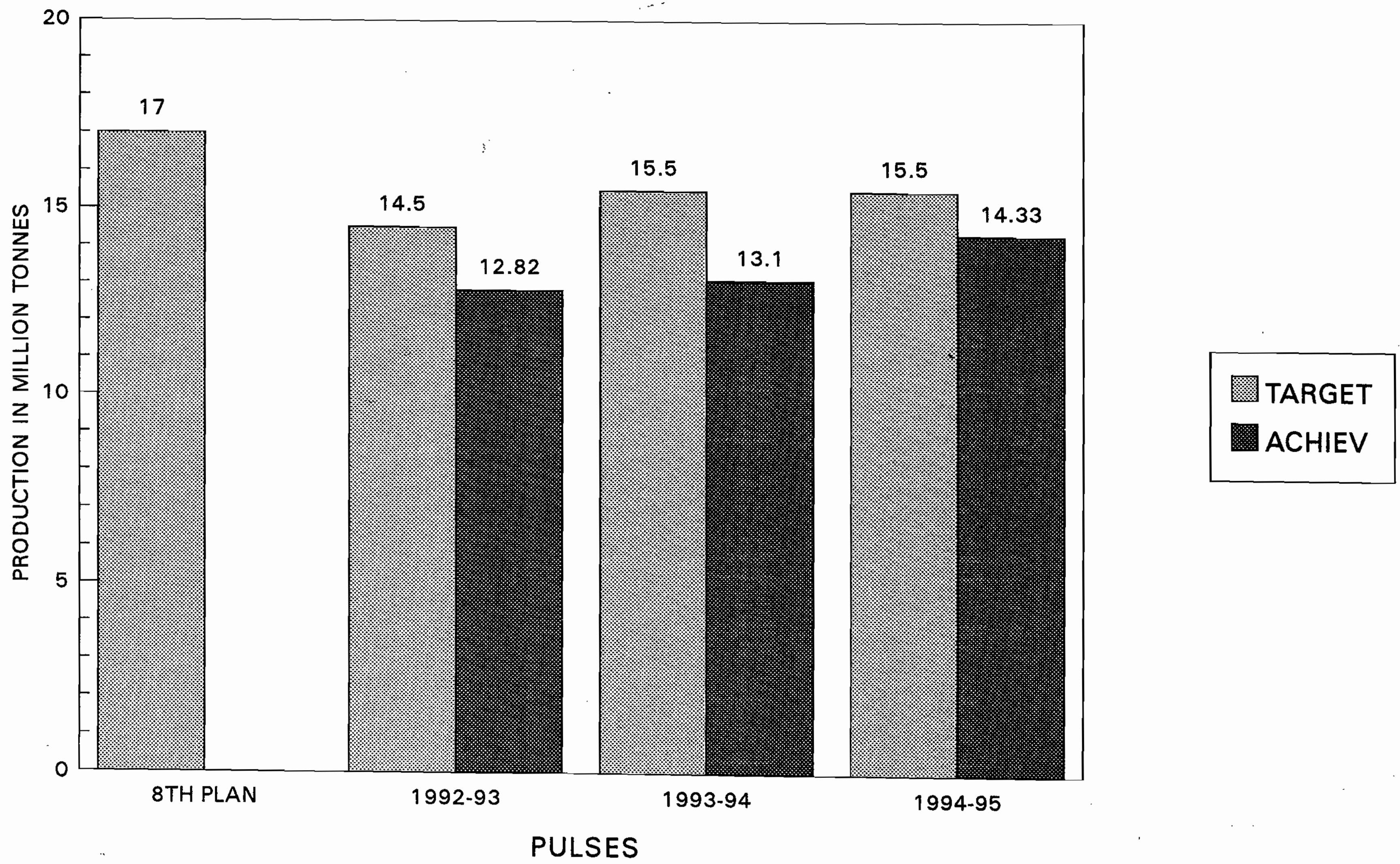


PHYSICAL TARGETS & ACHIEVEMENTS OF COARSE CEREALS PODUCTION DURING 8TH FIVE YEAR PLAN
(IN MILLION TONNES)

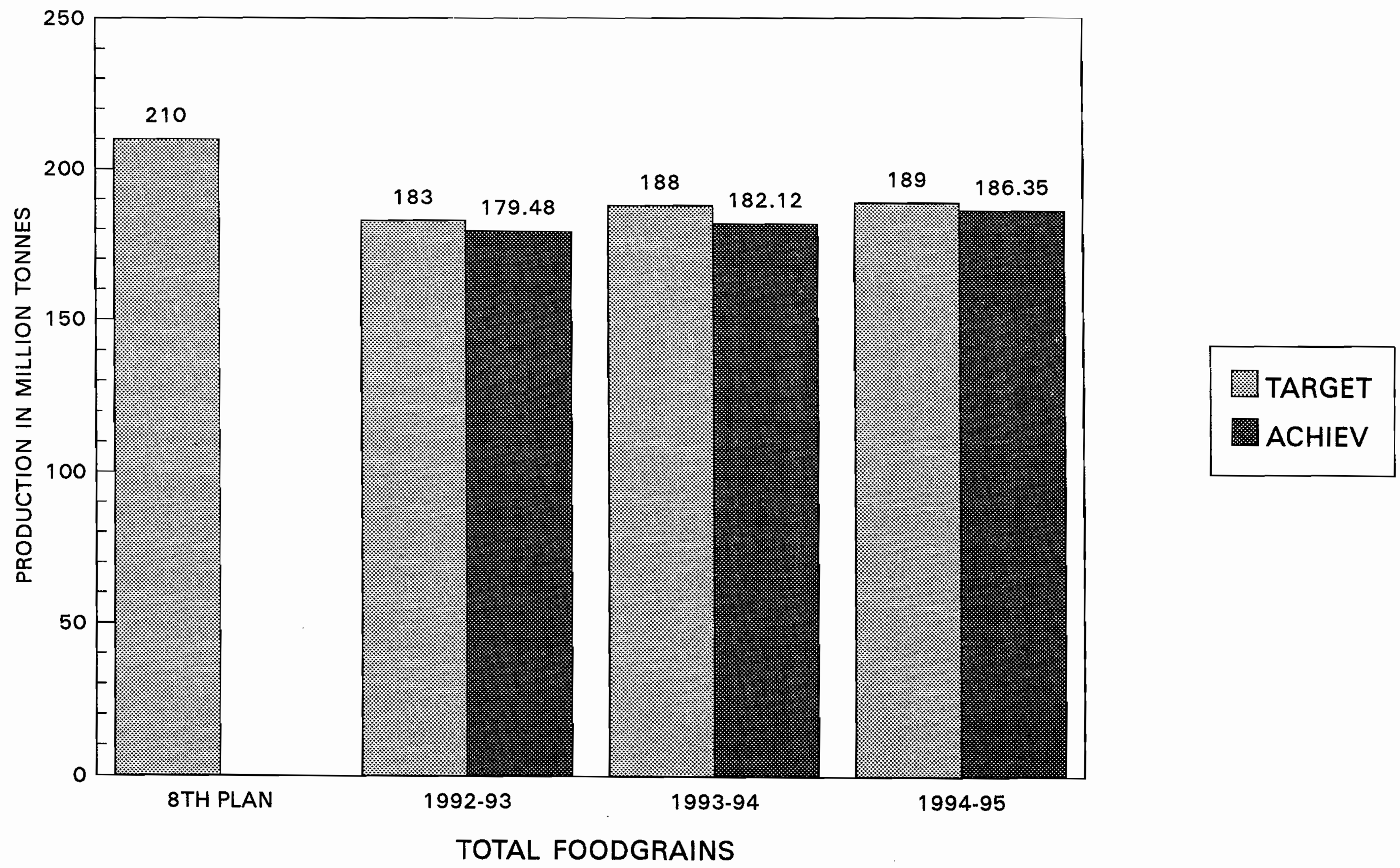


PHYSICAL TARGETS & ACHIEVEMENTS OF PULSES PODUCTION DURING 8TH FIVE YEAR PLAN

(IN MILLION TONNES)



PHYSICAL TARGETS & ACHIEVEMENTS OF TOTAL FOODGRAINS PODUCTION DURING 8TH FIVE YEAR PLAN
(IN MILLION TONNES)



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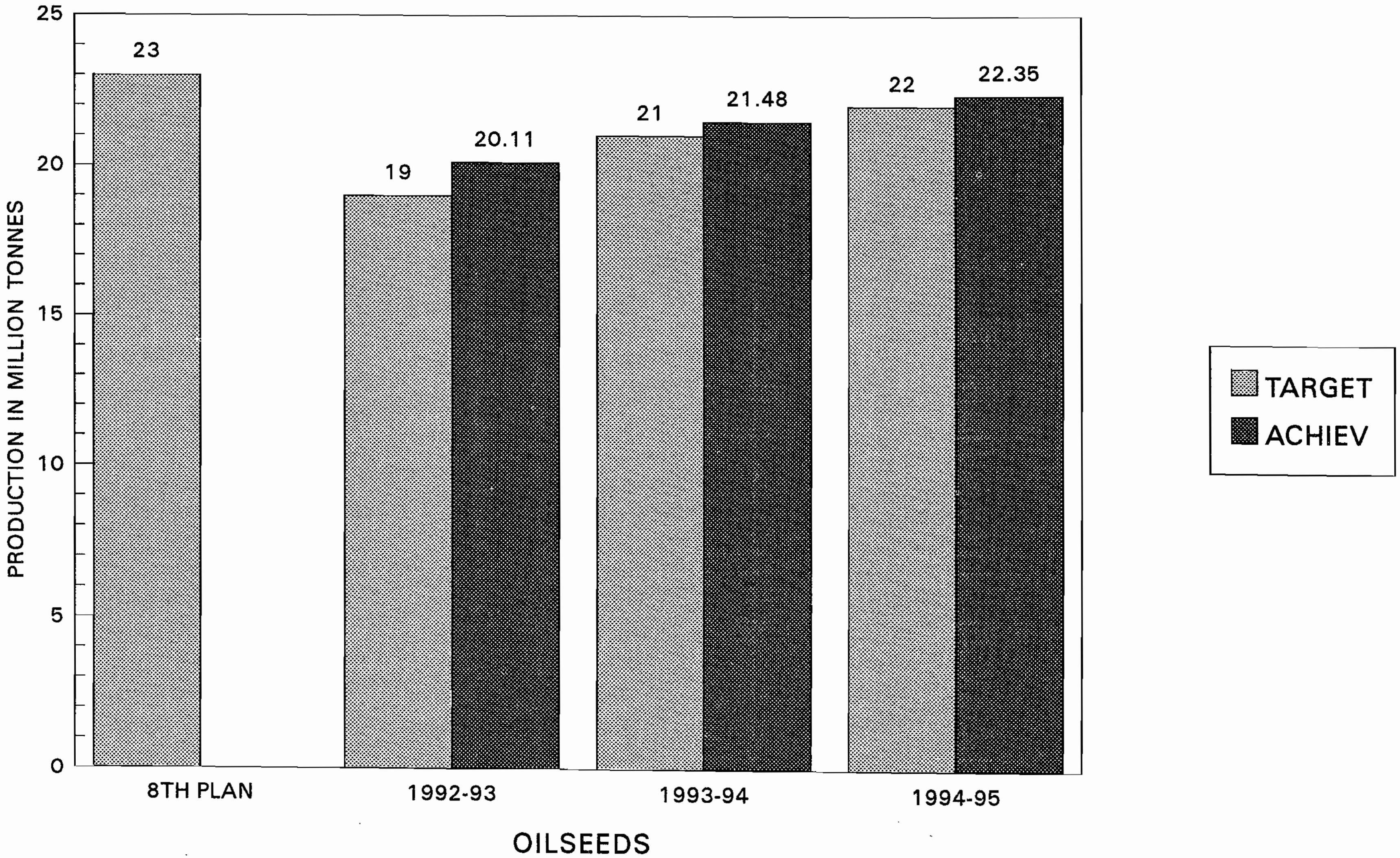
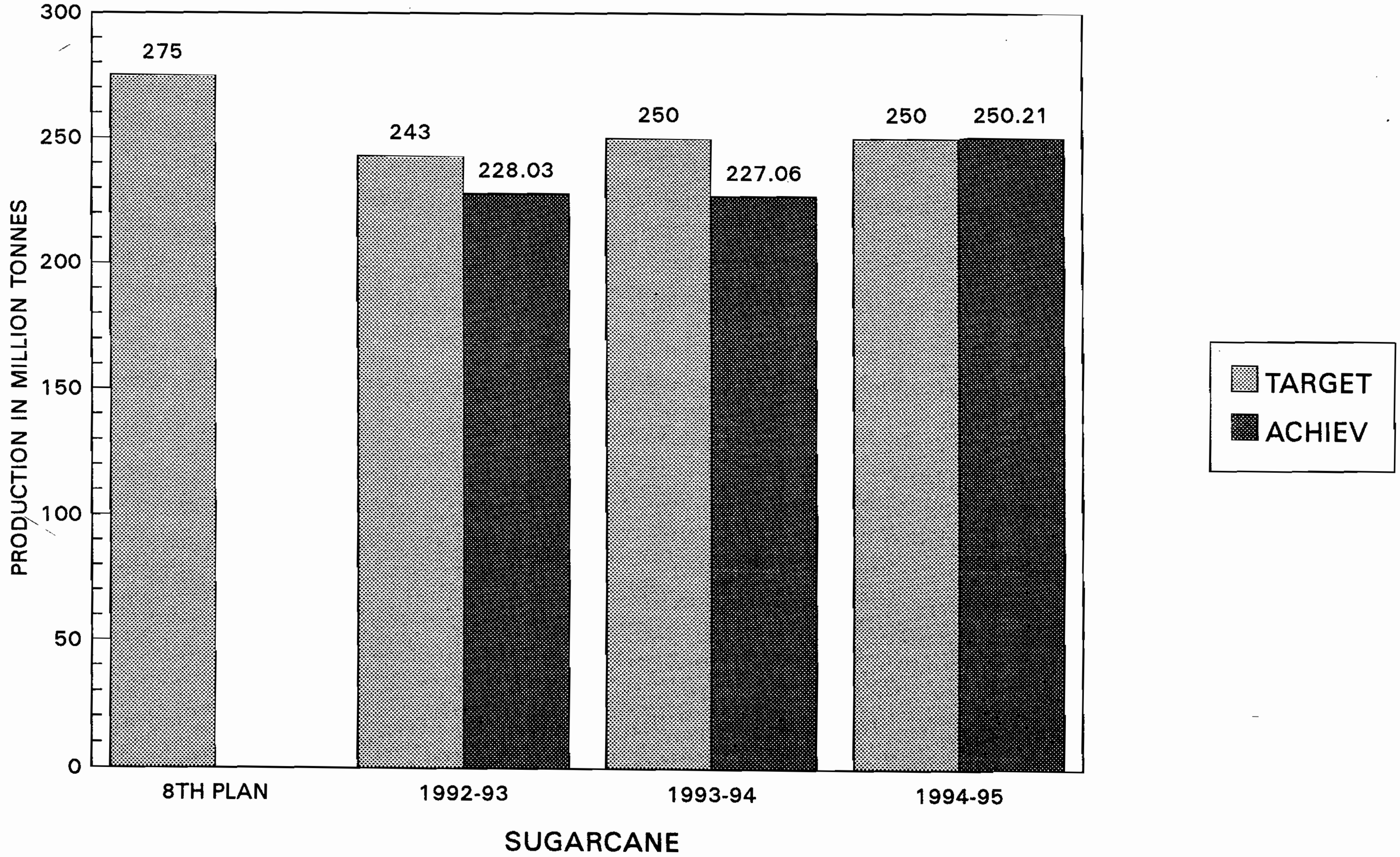
PHYSICAL TARGETS & ACHIEVEMENTS OF OILSEEDS PODUCTION DURING 8TH FIVE YEAR PLAN

(IN MILLION TONNES)



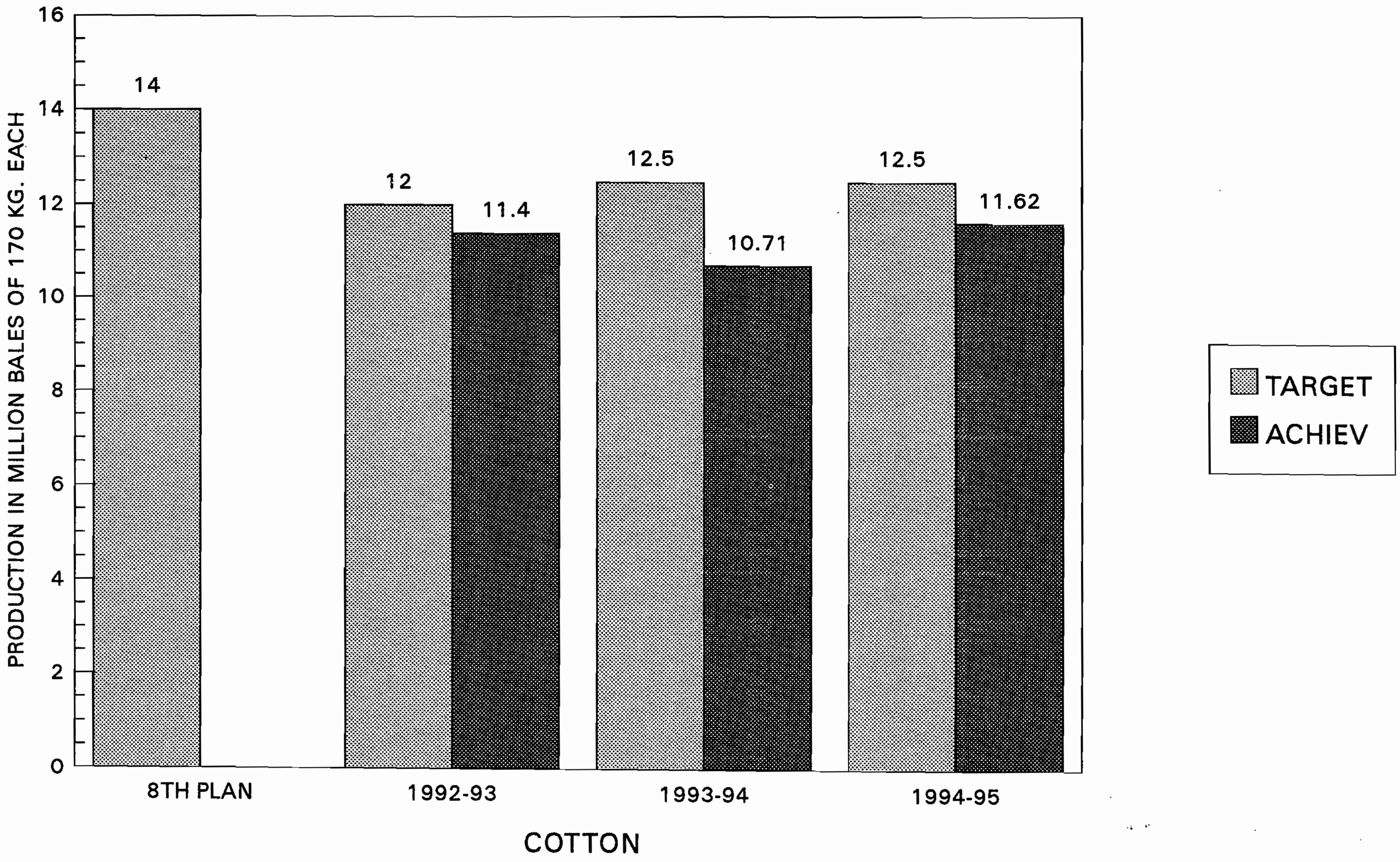
PHYSICAL TARGETS & ACHIEVEMENTS OF SUGARCANE PODUCTION DURING 8TH FIVE YEAR PLAN

(IN MILLION TONNES)



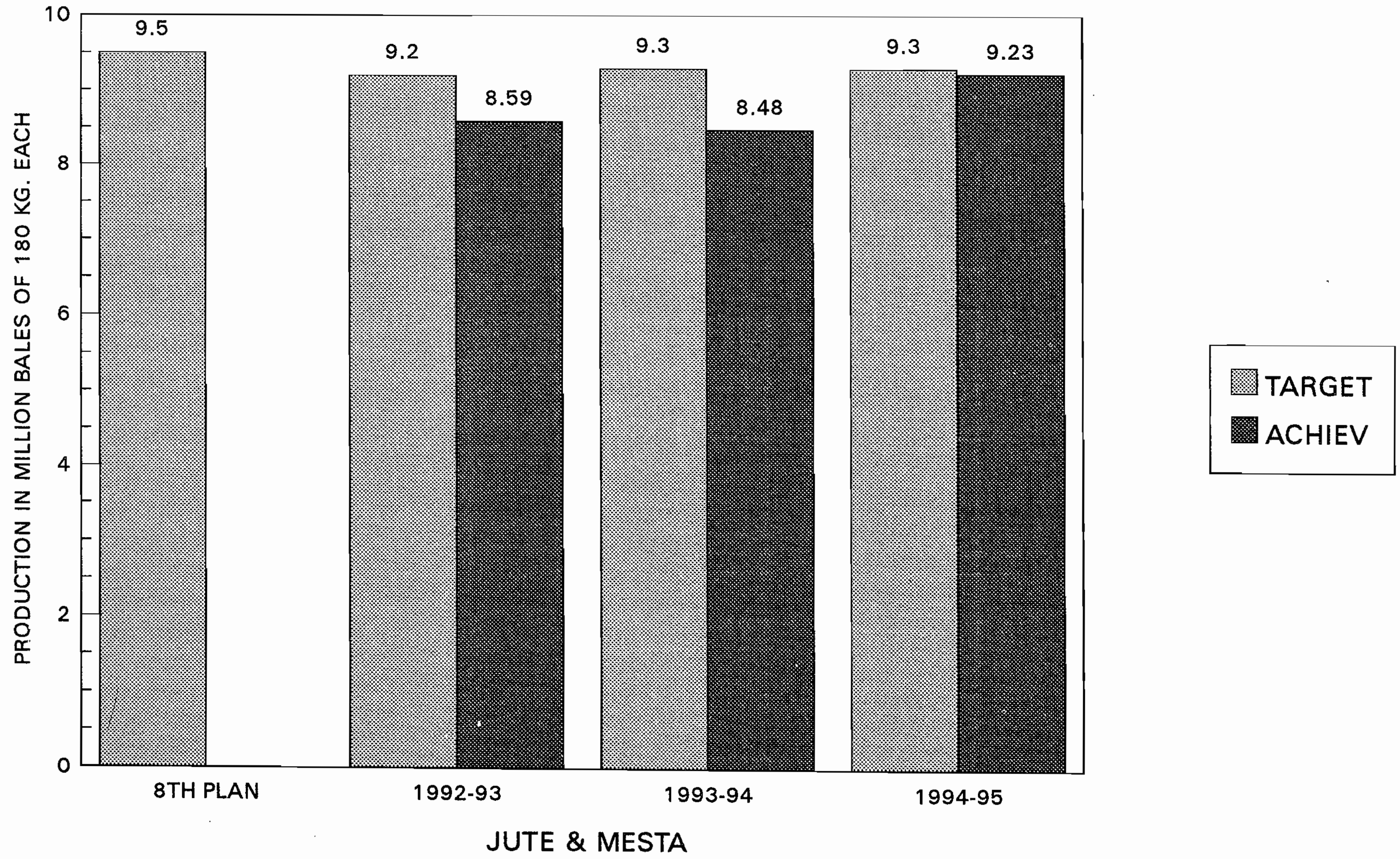
PHYSICAL TARGETS & ACHIEVEMENTS OF COTTON PODUCTION DURING 8TH FIVE YEAR PLAN

(IN MILLION BALES OF 170 KG. EACH)



PHYSICAL TARGETS & ACHIEVEMENTS OF JUTE & MESTA PODUCTION DURING 8TH FIVE YEAR PLAN

(IN MILLION BALES OF 180 KG. EACH)



SECTION 2

IRRIGATION, FLOOD CONTROL & COMMAND AREA DEVELOPMENT

VIIIth Plan Policy Strategy

5.18.1 Following broad starategies have been adopted for the Eighth Plan with respect to various components of water resources development :

Major & Medium Irrigation: Completion of on-going schemes; step up in the programme of modernisation of old projects; greater user participation both at the system level and at the local level and good data base; maintainance of existing irrigation and flood control works; river basin planning; and the need for removing inter-regional disparities to the extent possible to give a sense of equity on macro level.

Minor Irrigation: Speedy completion of large number of on-going surface water minor schemes', exploitation of ground water to be regulated alongwith steps to improve the utilisation of public tubewells sprinkler and drip irrigation in water scarce and drought prone areas to be encouraged; conjuctive use of surface and ground water; and efficiency of pumping system so as to conserve energy in ground water and lift irrigation.

Command Area Development: Bridging the gap between irrigation potential created and utilised, increase in production/ productivity, Command Area Development programme to be reviewed to make it more effective.

Flood Control & drainage: Systematic survey to assess extent, nature and location of waterlogged saline/alkaline lands in the existing irrigation commands, and their reclamation, flood forecasting and warning system to be extended to more areas, and preparation of flood control master plans for various basins; and a step up in Research & Development effort for the removal of alkalinity and solinity in waterlogged areas in general.

Financial Outlays & status of performance

5.18.2 A total sum of Rs.32,525.79 crore have been approved for Irrigation & Flood Control sector which includes Major & Medium, Minor irrigation, CAD Programme and Flood Control, their position in regard to outlays on these as well as percentage of the total in the first 3 years of the 8th Plan are summarised in Table 5-19.

5.18.2.2 It may be seen from the above table that percentage of outlays for Major & Medium, Minor irrigation CAD and Flood Control as compared to the 8th Plan outlays in the first 3 years are of the order of 47.18% against pro-rata of about 60% each of their 8th Plan outlays. The status of performance is even

Table 5.19

Summary of VIII Plan outlays and Likely Expenditure during 1992-95

(Rs.Crores)

Sl. No.	Sub-sector	Outlays for VIII Plan (At 91-92 prices)	Likely Expdr. during 1992-95 (at current prices)	%age of outlays in the first three years w.r.t. VIII Plan outlays
1.	Major & Medium Irrgn.	22,414.53	10146.24	45.26%
2.	Minor Irrgn.	5,977.26	3176.86	53.15%
3.	C.A.D.	2,510.13	1144.53	45.49%
4.	Flood Control	1,623.37	880.01	54.22%
	Total	32,525.79	15347.64	47.18%

Table 5-20

Plan outlay and actual expenditure

(Rs. in Crore at current prices)

Item	VIII Plan	1992-93		1993-94		1994-95		
	outlays (at 91-92 prices)	Approved outlay	Actual Expdr.	Appd. out.	Actual expdr.	Approved outlays	Revised outlays	1992-95 likely expdr.
Major & Medium Irrgn.	22414.53	3127.76	3047.14	3841.74	3501.25	4284.96	3597.85	10146.24
Minor Irrgn.	5977.26*	1088.23	994.59	1222.63	1100.69	1413.21	1079.62	3176.86
Total	28391.79	4215.99	4041.73	5064.37	4601.94	5698.17	4677.47	13323.10

* Excludes Institutional finances.

Table 5.21

Prioritisation in funding of Major Irrigation Project

(Rs. Crore at current prices)

	No.	Spillover into 8th Plan	8th Plan outlay (at 91-92 prices)	Likely expdr. in 92-95	%age of totalexpdr.in 1992-95 w.r.t. spillover cost
Schemes on which expdr. is more than 75% of the cost	49	994.69	884.05	729.51	73.34
Between 50-75%	41	4672.82	2840.33	1593.76	34.11
Between 30-50%	29	5742.96	2678.80	1244.53	21.67
Less than 30%	76	22887.46	7186.31	2317.87	10.13
TOTAL	195	34297.93	13589.49	5885.67	17.16

lower in case of major States Like Bihar, Orissa, Madhya Pradesh and Uttar Pradesh, which were expected to have better performance as these States are yet to develop their sizable water resources. The overall performance in the Major & Medium, Minor, CAD and Flood Control still remains even below 50%

5.18.2.3 The position in regard to Plan outlays and actual expenditure in 1992-93, 1993-94 and 1994-95 is brought out in Table 5-20.

5.18.2.4 Above table shows that during 1992-93, 1993-94 and 1994-95 the reductions in the outlays were about Rs.174 crore, Rs.462 crore and Rs. 1,021 crore respectively, i.e., a shortfall in expenditure of Rs. 1,657 crore on irri-

Table 5.22
Prioritisation of funding of Medium Irrigation Projects

(Rs. in Crore at current prices)

	No.	Spillover into 8th Plan	8th Plan outlay (at 91-92 prices)	Likely expdr. in 92-95	%age of total expdr.in 1992-95 vis-a-vis spillover cost
Schemes on which expdr. is more than 75% of the cost	84	308.87	185.98	240.30	77.85
Between 50-75%	89	618.52	504.60	421.42	88.13
Between 30-50%	43	697.62	501.28	288.34	41.34
Less than 30%	107	1961.47	964.08	477.43	24.34
TOTAL	323	3586.48	2155.94	1427.49	66.21

Table-5.23
Statement of Spillover cost of Major & Medium projects into VIII Plan and their present status

(Rs. Crore at current prices)

	Estimated cost		Spillover cost into 8th Plan		Outlays for 8th Plan (at 91-92 prices)	Likely expdr. in 1992-95
	At the beginnig of 8th Plan	Now (At the end of 94-95)	At the begin. of 8th Plan	Now		
1.	2.	3.	4.	5.	6.	7.
Ongoing Major Irrgn Projects (including externally assisted projects)	57912	68814	35995	45058	17353	8096
Ongoing Medium Irrigation Projects	6165	6943	2999	3730	2161	1430
TOTAL	64077	75757	38994	48788	19514	9526

Table 5-24
Projects for which Additional Central
Assistance was provided during 1992-95

(Rs. Crore at current prices)

Sl.No.	Name of Project/ Programme	1992-93	1993-94	1994-95	Total
1.	IGNP Stage-II (Rajasthan)*	52	52	60	164
2.	Teesta Barrage Project (West Bengal).	20	27	32	79
3.	Renovation & Upgradation of minor irrgn. works in Nagaland.		1	1	2.00
4.	Pigut & Baldeva Irrgn.Schemes in Gujarat			0.8277	0.8277
5.	Protection of Phulwari Town from Brahamputra floods in Meghalaya			10.50	10.50
6.	Const.strengthening & stablisation of Left bank of River Barak at Tarapur - Shibbari area in Silchar Town			0.70	0.70
7.	Kuye Kander flood protection scheme		0.73 (Phase I)	0.90 (Phase II)	16.3
	Total	72.00	80.73	105.9277	258.6577

* Out of BADP grants.

gation programmes. This was mainly due to shortfall in total outlays in various States' Annual Plans. Bihar, Karnataka, Madhya Pradesh, Orissa, and Tripura had substantial reduction in their irrigation sector outlays However, in the States of Andhra Pradesh, Kerala, Maharashtra & Tamil Nadu the actual expenditure during 1993-94 exceeded the approved outlays. (State-wise details available in Annex.-5-II.1 to 5-II.4.

5.18.2.5 The prioritisation in the funding of Major irrigation projects (excluding the EAPs, Direction and Administration, research and Survey and Investigation and modernisation) in various stages of implementation are indicated in table 5-21.

5.18.2.6. With regard to Medium Irrigation Projects, the position is indicated in table 5-22.

5.18.2.7 It may be seen from table 5-22 that the highest priority in funding was generally given by the States to schemes in the advanced stages of implementation, i.e., where expenditure already incurred was more than 75% of the estimated cost and the priority declined in case of projects which were in their initial stages'. This is in agreement with the general accepted principle of financial management as well as the Eighth Plan's envisaged strategy.

5.18.2.8 At the time of the formulation of the Eighth Plan, the spillover cost at the beginning of Eighth Plan, its present status as well as outlay for the Plan etc. for ongoing major and medium irrigation schemes are indicated in table 5.23.

5.18.2.9 It may be seen that there has been an increase in the spillover cost of major irrigation schemes by about Rs.9,063 crore and in case of medium irrigation schemes, of about Rs.731 crore.

5.18.2.10 Planning Commission extended additional Central assistance of about Rs.258 crore to expedite completion of following projects which includes priority projects like Teesta Barrage Project in West Bengal and financial support to Indira Gandhi Nahar Project, Stage-II through BADP. The additional Central assistance provided for these projects is reflected in table 5-24.

Table 5-25
Statement of completion of Projects during VIII Plan period

Details	Major	Medium	Total
Target for VIII Plan	109	253	362
(i) No. of schemes completed during 1992-93	3	6	9
(ii) No. of schemes likely to be completed during 93-94	2	20	22
(iii) No. of schemes targetted to be completed during 1994-95	19	70	89
(iv) No. of schemes likely to be completed during 95-97	33	70	107
(v) Total No. of schemes likely to be completed during 1992-97	57	166	223
Percentage of no.of schemes to be completed during 1992-95 w.r.t. VIII Plan Targets.	22%	38%	33%

Table 5-26
Details of Incomplete Schemes taken up during II, III and IV Plans

(Rs. in crore)

S.No.	Plan period	No.of schemes not yet completed	Aggregated balance cost at the end of March,95 (at current prices)	Remarks
1.	Second Plan (1956-61)	2	95	Very few projects could be started during Annual Plan (1966-69)
2.	Third Plan (1961-66)	9	643	which have been included in S.No.3
3.	Fourth Plan (1969-74)	11	2450	

(a) 2nd Plan:

Nagarjuna Sagar (A.P.) & Khadakvasla (Maharashtra)

(b) 3rd Plan:

Sriram Sagar (Phase-I) (Andhra Pradesh), Western Kosi Canal(Bihar), Malaprabha (Karnataka), Mahanadi Reservoir, Pairy, Sindh(Phase-I), Rangwan H.L.C. Jonk (M.P.) and Warna and Upper Tapi (Maharashtra).

Table-5.27
Targets and achievements of benefits

(In lakh ha.)

Item	Ultimate Irrgn. potential	Anticipated Achv. by end of March 1992		Targets for VIII Plan		Targets for 1992-93		Actual Achv. during 1992-93	
		Pot.	Utl.	Pot.	Utl.	Pot.	Utl.	Pot.	Utl.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Major & Medium Irrgn.	58.5	30.74	26.31	5.08	4.25	0.70	0.69	0.39	0.30
Minor Irrgn.	55.0	50.35	46.54	10.71	9.36	2.00	1.80	1.53	1.36
Total	113.5	81.09	72.85	15.79	13.61	2.70	2.49	1.92	1.66

Targets of benefits during 1993-94		Antc. Achv. during 1993-94		Targets for 1994-95		Likely Achv. during 92-95		%age of potential during first 3 years wrt VIII Plan targets	Cumulative achv. upto 1994-95	
Pot.	Utl.	Pot.	Utl.	Pot.	Utl.	Pot.	Utl.		Pot.	Utl.
11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.
0.708	0.651	0.65	0.55	0.72	0.56	1.76	1.41	34.65%	32.50	27.72
1.977	1.745	1.39	1.21	1.90	1.55	4.82	4.12	47.0%	55.17	50.66
2.685	2.396	2.04	1.76	2.62	2.11	6.58	5.53	43.30%	87.67	78.38

Physical targets and Status of performance

5.19.1 At the time of formulation of Eighth Plan it was anticipated that out of 182 major (including the mega projects like Sardar Sarovar Projects, Indira Gandhi Nahar and Indira Sagar Projects) and 312 medium on-going irrigation projects, 109 major and 253 medium schemes would be completed during the period of Eighth Plan. However, due to increase in estimated cost and inadequate funding for a number of schemes it is expected that only 57 major and 166 medium irrigation schemes would be completed . The table 5-25 gives the number of schemes completed in 1992-93, 1993-94 and anticipated for completion during 1994-95, assessment made on the basis of the available cost estimate of the projects and the expenditure incurred on these.

5.19.2 It is worthwhile to mention that some major irrigation projects which were started as back as in the Second Five Year Plan (1956-61) are still not complete. The state of incompleted schemes from the Second Five Year Plan to the Fourth Five Year Plan as well as their aggregate balance cost at the end of March, 1995 are indicated in Table 5-26. Hence, a view is emerging that all the pre-5th Plan major/medium projects should be closed

Table 5-28
Priority in funding to Irrigation Sector Projects

	Plan	Percentage of outlays on irrgn. sector with respect to all sectors
1.	Fifth Plan(1974-78)	23.25%
2.	Sixth Plan(1980-85)	20.85%
3.	Seventh Plan(1985-90)	17.85
4.	Eighth Plan(1992-97) (Appd.outlay)	18.48%
5.	1992-93 (Actual.Expdr.)	15.94%
6.	1993-94(RE.Appd.)	15.68%
7.	1994-95 (Approved)	15.21%
8.	1994-95(R.E.Appd.)	14.08%

by the end of 8th Plan period. In case of projects where the outstanding works are substantial, a project for the remaining works may be formulated separately after their detailed and updated assessment.

5.19.3 Eighth Five Year Plan had envisaged the creation of additional irrigation potential of 157.9 lakh hectare and utilisation of 136.1 lakh hectare from major, medium and minor irrigation schemes respectively. The table 5-27 shows the likely achievement in the first two years of the Eighth Plan and the targets envisaged for the Annual Plan 1994-95.

5.19.4 Substantial shortfalls are expected in the achievement of benefits during the first three years as compared to the targets for the Eighth Plan besides others mainly due to inadequate funding by the States, delay in environment and forest clearances and rehabilitation and resettlement issues as well as land acquisition.

5.19.5 The region-wise present status of overall irrigation development in the country shows that water resource development in North-Eastern region through major, medium and minor schemes is only at the level of 32.77% whereas in the Northern region, it has reached about 97.87% (may vary when the ultimate potential through ground water is revised) which indicates a very wide variation. The other areas i.e. Eastern, Southern and Western regions are at the level of 62.15%, 69.21% and 56.82%, respectively.

Financial Appraisal

5.20.1 There has been steady reduction (with exceptional increases in case of some States) in outlays under irrigation sector during the successive plans vis-a-vis the total outlays under all sectors. The table 5-28 indicates the declining trend of percentage of outlays on irrigation sector with respect to all sectors.

5.20.2 Major sectoral reductions are in the States of Bihar, Madhya Pradesh and West Bengal. Due to inadequte funding of the projects on the one hand and continuous rise in the establishment costs, the expenditure on actual works are declining and hence the projects are experiencing cost and time over-runs.

5.20.3 Due to constraints of funds, taking up new projects during 8th Plan period has been restricted to only medium projects benefitting tribal and drought prone areas and actually very few ones have been taken up by the States after ascertaining provision of adequate funds to such projects without affecting the envisaged funding pattern of other on-going projects.

Physical appraisal

5.21.1 As discussed in Para 5.19.1 the rate of completion of major and medium projects during the first three years of the Plan is expected to be overall about 33%(22% for major projects and 38% for medium projects). As regards the creation of additional irrigation potential and its utilisation through major, medium and minor irrigation schemes are concerned, the performance had been 34.65% and 47% respectively.

5.21.2 The shortfall in completion of projects as well as achievement of the irrigation potential targets have been mainly due to constraint of resources for such projects which are primarily funded by the States through their respective State Plans. The spillover cost of the ongoing projects into the 8th Plan had been of the order of about Rs.48,788 crore which is almost beyond the capacity of the States to fulfill, given the present resource situation. Consequently the envisaged benefits of such projects are not realised as planned which would otherwise have yielded substantial contribution to the national economy. Huge sums of public money have been locked as a result of this and hence there is a need to extricate the projects from this situation so as to enable the investments made so far in these to turn from a semi-productive stage to an optimum productive one by further investments at appropriate levels.

Command Area Development:

The Command Area Development (CAD) programe was initiated in 1974-75 with a view to cover the gap between the potential created and its utilisation 1993-94) and optimising agricultural productivity through better management of land and water use in the command area served by selected major and medium projects. Now cluster of minor irrigation schemes in hilly States with more than 500 hectare Culturable Command Area (CCA) is also included. Although as per the figures, the gap between the potential creation and its utilisation at the end of 1993-94 is obtained at the level of 87.9 lakh hectare but this figure may not be realistic. The main reason being that States follow different norms with respect to the definition of creation of potential for major and medium schemes on the basis of which the above gap has been arrived. Besides this, the normative figures are adopted in case of minor irrigation works for arriving at irrigated area data through these and not as envisaged in the scheme/actual irrigation. For example, Kerala reports the same figures for potential creation and utilisation for major and medium projects whereas Maharashtra indicates the utilisation as achieved and irrigated while Uttar Pradesh adopts the maximum area irrigated since the inception of the project during rabi or kharif period. Hence a realistic picture may emerge only if the States follow the criteria laid down by the Planning Commission (1973) in which the irrigation potential is created when the distribution system in the project is constructed upto 40 hectare level (now reduced to 5-8 hectare level). Besides this, the area which can be irrigated through a project needs to be precisely re-defined in post-project scenario in view of the development of actual crop pattern on ground and actual water availability rather than adopting the figures, projected at the time of formulation of the scheme. Similarly, the data on irrigation through minor irrigation should be firmed up on the basis of ground verification and not merely on the normative basis as above.

5.22.2 The programme presently covers 181 major and medium projects with a total culturable command area of 211.8 lakh hectare administered through 54 CAD authorities spread to 22 States and two UTs. Total cumulative investment in this programme up to the end of 1994-95 is estimated to be Rs.4317

Table 5-29
Expenditure, Outlay/Antd.Expdr. for CAD Programme

(Rs. Crore at current prices)

Item	VIII Plan Outlay (at 91-92 prices)	1992-93 Approved Outlays	1992-93 Actual Expdr.	1993-94 Approved Outlay	1993-94 Actual Expdr	1994-95 Approved Outlays	1994-95 Revised Appd.
C.A.D.							
States	1679.33	268.29	228.89	341.75	258.47	350.64	311.95
U.Ts.	0.80	0.10	--	--	--	0.05	0.05
Central Sector	830.00	90.00	104.45	115.00	116.22	125.00	124.50
TOTAL	2510.13	358.39	333.34	456.75	374.69	475.69	436.50

crore which includes Rs.1425.65 crore incurred under Central Sector. The major impediment experienced in the spread of CAD activities is the consolidation of holdings due to which On-Farm Development (OFD) works are lagging. On the basis of shortcomings as found during the implementation of this programme over last two decades, it is being reoriented so as to make it more effective instrument for ensuring speedy transit to irrigated agriculture alongwith optimising the water-use efficiency. Experience has been that in most Command Area Development Agen-

Table 5-29

Expenditure, Outlay/Antd.Expdr. for CAD Programme

(Rs. Crore at current prices)

Item	VIII Plan Outlay (at 91-92 C.A.D. prices)	1992-93 Approved Outlays	1992-93 Actual Expdr.	1993-94 Approved Outlay	1993-94 Actual Expdr	1994-95 Approved Outlays	1994-95 Revised Appd.
States	1679.33	268.29	228.89	341.75	258.47	350.64	311.95
U.Ts.	0.80	0.10	--	--	--	0.05	0.05
Central Sector	830.00	90.00	104.45	115.00	116.22	125.00	124.50
TOTAL	2510.13	358.39	333.34	456.75	374.69	475.69	436.50

cies (CADAs) the key problems : lack of single window delivery system; poor maintenance and water management on micro-networks; weak extension for irrigated agriculture; and needs and special efforts to enthuse farmers involvement etc. As such most CADAs have, in effect have been reduced to being agencies for construction of water courses/field channels only.

5.22.3 Some of the shortcomings in the implementation are listed below :

(i) Detailed project reports for a number of ongoing projects are yet to be prepared/submitted.

(ii) The release of central assistance should be based on detailed monitoring by the Centre and unit cost of construction of field channels, land levelling and Warabandi etc. needs to be worked out appropriate to various regions/terrain in the country.

(iii) In the present scope of this progamme only management subsidy is available as an incentive for formation of Water Users' Association (WUAs). It would be desirable if certain guidelines on the composition of the associations (to take care of tail-enders in the command in particular), providing financial autonomy in the working of such associations and certain financial incentives like rebate in the Government water rates in favour of associations, can be laid down by the states so as to have a strong linkage of WUAs with this centrally sponsored programme.

(iv) Eighteen Evaluation studies have been awarded to consulting organisations and their reports are still awaited. Based on these evaluation studies, the CAD programme needs to be reoriented.

Financing Pattern

5.23.1 High priority in allocation of both physical and financial resources is being given to these projects and greater stress is being laid on better and efficient management of the water distribution system, more efficient and timely on-farm water delivery, training of field staff and farmers and involvement of farmers under the command area in the management of water distribution system below the outlet level. Central assistance released so far is 82.5% grant, 15.6% loan and 1.9% special loan out of total central assistance of 1081 crore from 1974 to March 1992. During 1993-94, the total releases were Rs.115.36 crore, consisting of Rs.112.54 crore as Grants and Rs.2.82 crore as loans and during 1994-95 actual releases were Rs.123.70 crore. The financial and physical position of this programme is summarised in Tables 5-29 and 5-30.

5.23.2 The proposals of the Ministry of Water Resources (MOWR) for reorientation of the programme during the reviewing period of 8th Plan have also been finalised in which modified financing pattern, regulation of Central assistance for major activities like Field Channel (FC) and Field Drain (FD), inclusion of reclamation of waterlogged areas as well as non- inclusion of any new CAD project in this programme unless WUAs are formed and Operation & Maintainance (O&M) of distributories/minors of the irrigation systems to be attended to by them with their own resources.

5.23.3 There are fairly good number of schemes for crop production, horticulture plantation and acqua-culture which could be integrated with CAD Programme and States can get assistance from the Ministry of Agriculture for such programmes in addition for assistance from Ministry of Water Resources.

Renovation and modernisation of major and medium projects

5.24.1 One of the major thrust areas of the Eighth Plan in regard to irrigation development is modernisation and improvement of existing irrigation systems including minor irrigation schemes such as lining of channels, better regulatory structures and communications combined with change in the way the water deliveries are regulated, so as to cover as large area under irrigation as possible during the Plan. Considering that about 130 lakh hectare of irrigated area are from projects completed before Independence and another 80 lakh hectare from schemes completed 25 years ago, there is clearly a case for covering more area under this programme. The total estimated cost of modernisation and renovation schemes during the Plan is about Rs.6,000 crore and the outlay is about Rs.1,773 crore against which the likely expenditure in first three years of the Plan is about Rs.787 crore (7.3% of the likely expenditure on Major & Medium Component) Also, the Water Resources Consolidation Project under World Bank assistance is proposed to be taken up in the States of Haryana,(agreement already signed) Orissa and Tamil Nadu. The activities covered by National Water Management Projects have been extended over 10 States from the original 3 states covering some 99 sub-projects and 32.8 lakh hectare command and an investment of Rs. 570 crore against Staff-Appraisal Report (SAR) estimate of Rs.204.1 crore. Credit amount at present price level now values to about Rs.350 crore. The field impact of some substantially completed schemes on agricultural production and water distribution is encouraging.

5.24.2 Encouraged by the results of NWMP Stage-I programme, Government of India and the States are keen to cover more number of irrigation schemes under proposed Stage-II of the NWMP programme(1995-96 onwards). The World Bank is considering intensifying its support towards the Governments objective to improve the productivity of Indian Agriculture through NWMP II. The World Bank has suggested more emphasis to be laid on measures such as increasing efficiency of maintenance management, greater involvement of farmers in irrigation management, planning, and in decisions related O&M, addressing cost recovery, intensification of operational monitoring, greater use of modern tools for planning, design and monitoring such as use of computer aided techniques for design, satellite data for monitoring, establishing wireless communication network and using censors for monitor levels and flow in canal systems.

5.24.3 The Committee on Pricing of Irrigation Water set up by the Planning Commission under the Chairmanship of Dr. A. Vaidyanathan, has in its report of September 1992 inter-alia recommended that at least 10% of Plan provision for major and medium irrigation projects be allocated for renovating and upgrading existing system and that the recovery of accummulated arrears be earmarked towards meeting the cost of deferred maintenance/special repairs in the project concerned. This view has also been endorsed by the Group of Officers constituted by the Planning Commission to go into the recommendation of the Water Pricing Committee recommendations under the Chairmanship of Member Secretary, Planning Commission with nine members from selected states from various regions of the country.

5.24.4 A number of States are not in a position to provide adequate outlays for maintenance of the canal system and whatever amount is being allocated, substantial portion of these are being consumed on establishment and other committed expenditure and very little remains for actual works and as a result the upkeep of canal systems have deteriorated substantially.

TABLE 5-30
Physical achievement on CAD Programme

(In Lakh Ha.)

Sl.No.	Item	Cumulative achievement upto 1991-92	1992-93 Achv.	1993-94 Targets	1994-95 Antcd. Achv.	1994-95 Tgt.	Likely Achievement during 1992-95
1.	Field Channel	12.191	0.365	0.569 +448 KM	0.35 +448 KM	0.505 +448 KM	1.22
2.	Land Levelling	2.002	0.033	0.032	0.035	0.083	0.151
3.	Warabandi	6.119	0.637	1.005	0.512	1.027	2.176

Conjunctive use of surface and ground water

5.25.1 For optimum production, the crops must get requisite quantity of water at various critical stages of their growth. For various crops with different base and critical periods, total requirements are often difficult to meet from either surface or ground water alone especially for high yielding varieties whose water requirements are more exacting. Besides this, with increasing intensity of irrigation and tendency on the part of the cultivators to oversupply irrigation from surface water, the problem of waterlogging and salinity is growing in the irrigated commands. Under such situation, the conjunctive use of surface and ground water holds key to the solution of the problems especially in the Indo-Gangetic Plains, the Coastal areas of Orissa and Andhra Pradesh, the Brahmaputra Valley, the Cauvery delta and parts of the Narmada basin.

5.25.2 About 60 lakh hectare of the area is considered waterlogged out of which as per the estimate about 34 lakh hectare area is by surface flooding mainly in the States of West Bengal, Orissa, Andhra Pradesh, Tamil Nadu, Kerala, Gujarat, Punjab, Haryana, Uttar Pradesh, Bihar and some areas of Rajasthan and Maharashtra. The Central Ground Water Board (CGWB) through observation on 5000 wells in early Eighties estimated that the area with water levels within 2 metres depth below ground level is 363.6 lakh hectare in August which goes on decreasing in subsequent months to 34.22 lakh hectare in April. The simultaneous development of ground water, especially through dug wells and shallow tube wells helps in lowering the water table. However, substantial high incidence of cost of ground water development compared to surface water, lack of regulation by the States on the control and exploitation of ground water on the merit of resource availability and non-availability of power uniformly everywhere at critical requirement periods are the impediments in the conjunctive use.

5.25.3 In addition to private tubewells in large numbers, deep State Tubewells are also being installed by the State Govts./Public Corporation in the river basins outside the canal commands with a view to provide irrigation to the uplands and tail end areas not covered by canal irrigation. There are at present 60,000 State Tubewells (STWs) with additional of about 1000 per year commanding on an average 60-100 hectare with a discharge of about 150 cubic meters per hour. Besides these, construction of augmentation tubewells for increasing the supplies in the canals during summer months have been installed in certain canal systems in the States of Punjab, Haryana, Uttar Pradesh and Madhya Pradesh.

Farmers' participation

5.26.1 Participation of farmers in irrigation management implies a significant role of water users in decision making. It implies an active role of beneficiaries in all the facets of irrigation water management and its attendant forward and backward linkages with main system management in agricultural/agronomic activities. This role is very different from the traditional passive role of farmers to look at the department for irrigation water supply and it distribution. In order that farmers play an active part in the whole gamut of irrigation management there is a need to set up appropriate local organisations. The irrigation agency can clearly facilitate this process by developing a planned interaction/intervention strategy. Farmers' participation is most effective when it takes place from the initial stages of project development, including the stages of project formulation and design. Such involvement is conducive to achieve participation for a true partnership between farmers and the Government. In India, there are successful examples of farmers' associations (which are also known as Water Users' Associations) managing irrigation systems, both traditional as well as contemporary. These are, nevertheless, quite scattered and site specific in the sense that such success experiments have, curiously enough, not spread further to other areas or even in the adjoining block(s) of the same command. There are about 4455 WUAs in various forms and sizes in the States of Gujarat, Kerala, Tamil Nadu and Maharashtra etc.

5.26.2 A special drive may have to be launched with a package for attending to the issue of farmers' participation in the irrigation projects especially at the O&M stage below distributories/minors which may have to be preceded with adequate renovation and upgradation of these to make them salable to the beneficiaries. Initially WUAs may be organised for the areas covered by one cusec outlet (covering about 40 hectare area) which may involve 20 to 30 households a size convenient to organise initially and handle. In the subsequent stage it may move up to the distributory/minor level and finally to the project as a whole.

Legal back up to C.A.D. and Farmer's Partcipation activities

5.27.1 The survey of relevant legal provisions in the existing Irrigation Acts shows that not all State Irrigation Acts provide for peoples' participation in Irrigtion management. For example, the Northern India Canal and Drainage Act 1873, (as applicable to the States of Punjab, Haryana and Uttar Pradesh), the Bengal Irrigation Act 1876, the Bombay Irrigation Act 1979, the Rajasthan Irrigation and Drainage Act 1954, Orissa Irrigation Act and Mysore Irrigation Act 1955, do not contain provision for direct/ effective OFD works as well as involvement of beneficiaries in the overall management and administration of irrigation systems. This is a serious legislative gap. Further, these State Legislations, with the provision for peoples' participation, provide for the same only in small community irrigation systems as also such associations are required to function under the active control of the State Irrigation departments. Therefore, the State Irrigation Acts are required to be suitably amended to cover OFD works and farmer's participation through Water Users' Associations.

5.27.2 A pre-condition for making the Water Users' Association (WUA) successful is an assurance of reliable, predictable and predetermined supply of irrigation water.

Pricing of water

5.28.1 The total unrecovered costs on account of Major and Medium irrigation works increased more than five-fold in a 10- year period from Rs.280 crore in 1977-78 to Rs.1,525 crore in 1986-87. In 1977-78 the implicit subsidies on major and medium irrigation were about one-third of the annual capital investment in this category of works; by 1986-87 the proportion has gone up to 70% and is almost certainly much higher today.

5.28.2 Revision of water rates has been infrequent, hesistant and very much less than the increase in costs. For instance, water rates in Tamil Nadu were last revised 32 years back. In Kerala, Jammu & Kashmir and Himachal Pradesh, there has been no change in rates since the mid-Seventies. Several States (including Andhra Pradesh, Bihar, Gujarat, Karnataka, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal) announced revisions during 1981-86, but in some cases, the implementation of the revised rates was held up by the concerned State Governments. The States of Maharashtra, U.P., Punjab Haryana and Orissa (for Industries) have recently increased the water rates .In view of widespread concern about recurring losses on Irrigation Projects, the Planning Commission constituted in October, 1991, a Committee as an internal Group on Pricing of Irrigation Water to suggest norms for fixing water rates, review the present status of maintenance of irrigation projects etc. The Committee submitted its report in September, 1992. Since the implementation of various recommendations made by the Committee had wide financial implifications, the Planning Commission set up a Group of Officials (GOO) under the Chairmanship of Secretary, Planning Commission to examine the various recommendations and its practibility etc. The GOO has submitted its recommendations which have been circulated to all State Governments for taking further action at their end. The Group of Officers set up by the Planning Commission has recommended that water charges should be appropriately raised by the States, so as to meet operational and maintenance (O&M) cost of the projects in next five Year

Externally Assisted Projects

5.29.1 The Ministry of Water Resources assists the State Governments in obtaining external assistance for Irrigation, Multi-Purpose projects from International agencies viz. World Bank, EEC, USAID, UNDP, etc. Disbursement in Irrigation sector for the year 1992-93 were Rs.965.83 crore including disbursement against Multilateral for Rs.824 crore and bilateral to the tune of Rs.141.83 crore. During 1993-94, utilisation on Externally Aided Projects was Rs.837.95 crore against the budgetted outlays of Rs.782.43 crore. As regard AP 1994-95 is concerned the actual utilisation during 94-95 was Rs.919.79 crores as against budgetted figures of Rs.752.36 crores.

5.29.2 The following problems need to be addressed in order to improve the utilisation of external assistance :

(i) Adequate outlays to be provided as per agreement

(ii) Project implementation in Irrigation sector is affected by serious problems of land acquisition, resettlement and rehabilitation, delays in obtaining forest/environmental clearance and in some cases lack of detailed and physical target oriented planning. A specific time-bound schedule for granting such clearances (R&R, land acquisition and forest & Environment) need to be formulated at the State and Central levels

Sprinkler & Drip Irrigation:

5.30.1 In water scarcity areas, sprinkler and drip irrigation systems are gaining acceptability as under these systems of irrigation, decrease in the water requirement to the extent of 50 to 70% and fertiliser, weedicides, pesticides etc. by about 30% on the one hand and on the other increase in output by 60 to 70% have been experienced. These have added advantage of not requiring OFD works of the order needed in other systems of irrigation and hence have wide acceptability in the undulated terrain of Maharashtra, Gujarat, Punjab, Haryana, Himachal Pradesh, etc for growing high value crops. The drip system has been found more suitated for horticulture crops.

5.30.2 The incidence of cost for sprinkler and drip irrigation is high and may be in the range of Rs. 40,000-60,000 per hectare depending

Table -5-31

Expenditure and Outlays on Flood Control programme

(Rs. Crore at current prices)

	8th Plan	1992-93		1993-94		1994-95	
	outlays (at 91-92) prices	Approved Outlay	Actual Expdr.	Approved Outlay	Actual Expdr	Approved Outlay	Revised Approved
States	1293.09	288.25	280.48	246.16	194.17	255.12	237.56
U.Ts.	48.28	12.13	11.61	14.23	14.17	16.95	16.94
Centre	282.00	59.78	38.07	76.05	37.24	48.81	49.77
GRAND TOTAL	1623.37	360.16	330.16	336.44	245.58	320.88	304.27

Table 5-32

Organisationwise Outlays - Ministry of Water Resources

(Rs.Crore at current prices)

Sl. No.	Sector/Organisation	Eighth Plan 1992-97 Outlay allocated by MOWR (at 1991-92 prices)	Annual Plan 1992-93 (Actual Expdr.)	Annual Plan 1993-94 Actual expdr.	Annual Plan 1994-95 Appd. Outlay (Revised Outlay)	Likely Expenditure 1992-95
1.	Sectt. Economic Services	1.00	0.19	0.37	0.31	0.87
2.	Major/Medium Irrgn.	129.00	31.68	30.02	27.04	88.74
3.	Minor Irrgn.	293.00	15.07	70.91	38.44	124.42
4.	C.A.D.	700.00	104.45	116.22	124.50	345.17
5.	Flood Control	377.00	38.09	37.24	42.97	118.30
6.	Transport Sector	65.76*	9.80	10.70	12.56	33.06
	TOTAL Expenditure	1565.76	199.26	265.46	245.82	712.08 (42.7%)
	Approved Outlays	1565.76	230.71	289.00	275.47	

(*To be provided under Transport Sector)

upon terrain, materials used, source of water as well as type of crop to be grown. Against this, a subsidy of only Rs.15,000 per hectare (about 50% of the estimated cost) is being provided by the Ministry of Agriculture and hence substantial resource input remains to be found out by the farmers themselves. The estimated cost has also since increased as also farmers feel difficulty in getting the loan from the commercial banks due to probably the process, being cumbersome. Hence, the process of giving loans to the extent of Rs.30000-40000 per hectare should be available to the farmers on easy terms as well as easily.

Flood Management

5.31.1 Out of the total geographical area of 3290 lakh hectare roughly about 1/8th (400 lakh hectare) has been assessed as flood prone. Out of this about 320 lakh hectare, 75% of the flood prone area, has been estimated as protectable. From March 1954 to March 1993 works executed have given reasonable protection to an area of about 145 lakh hectare. Since inadequate maintenance of executed flood control works result extensive damage, it is necessary that the State Governments make adequate provision for proper and timely maintenance of flood control works including embankments. It should also be ensured that protection works under construction are completed on a priority basis and for which adequate outlays should be provided in the State Plans. The position of the outlays provided in the first three years of the Eighth Plan are as in Table 5-31.

5.31.2 A number of States havé taken up large number of flood control schemes and the annual allocations being provided by the States are quite inadequate keeping in view the committed liabilities of ongoing flood control schemes. In case of number of States the allocation under flood control is so meagre that this is mostly spent on the salary of the staff rather than creation of permanent assets for flood control.

5.31.3 Various employment generation programmes like JRY, Maharashtra Employment Guarantee Scheme, Special Employment Programme of Gujarat needs to be dovetailed for ensuring proper maintenance of embankments and also for construction thereof. The primary objective of the JRY programme is generation of additional employment of productive works which would either be of sustained benefit to the poors or contribute to the creation of rural infrastructure.

Comprehensive Basinwise Plan approach for flood management

5.32 Flood mangement schemes need to be planned within the framework of a basinwise comprehensive long-term Plan, appropriately incorporating in these phasewise implementation plans also to enable to start accruing part benefits in proportion to the investments in phases keeping in view the growing resource crunch. So far, out of about 400 lakh hectare (nearly one eighth of the country's geographical area as Flood prone areas) only about 145 lakh hectare have been reasonably protected through structural measures which are quite costly. As structural measures like embankments may not be able to provide protection to the entire flood prone area in the country for all times to come as well as these are costly also, there is a need for adopting non-structural measures to help in mitigating the flood damages like regulation of economic activities in the flood plains as well as advance warning to the affected people. A model Flood Plain Zoning Bill had been circulated in 1975 to the States. So far only Manipur State had enacted the legislation on flood plain zoning in September 1973 and started implementation since December, 1985. The Bill is under consideration by the State of West Bengal. Some other States, like Madhya Pradesh and Andhra Pradesh, have also accepted in principle the necessity of enacting the legislation. However to begin with, major flood affected States may initiate preparation of flood risk maps with reference to various frequencies of occurance of floods so as to create awareness in the inhabitants about their extent and severity of vulnerability in a flood plain and the likely damages which may be inflicted on them with various frequencies of flood Again in the flood plains, flood forecasting and early warning to affected areas are among the most inportant and cost effective measures for flood management. The CWC have set up a network of flood forecasting and warning stations at 157 stations, spread over 62 river basin covering most of the inter-State rivers in the country.

Improvement in data base & Project Preparation

5.33 During the Eight Plan the, MOWR has reduced substantially the figures of achievements of potential and utilisation from Major and Medium irrigation schemes by end of the Sixth Plan and the Seventh Plan. In respect to Minor Irrigation schemes, the census data for the year ending 1986-87 has recently been submitted by the MOWR. Based on census data it may be necessary to review the figures of benefits and area going out of use in regard to minor irrigation schemes also. There is need for recasting both at the conceptual and operational level of a statistics irrigated area and productivity. The MOWR have proposed to conduct second census of minor irrigation for the year 1993-94 which is expected to be completed by December, 1995. As far as project prepartion is concerned, efforts are also being made to improve the standards of project preparation and design before the proposals qualify for appraisal. In particular, much attention should be paid at the planning stage to systematic survey of soil conditions, land use capability, crop water requirement, irrigation efficiency and conjuctive use of surface and ground water to ensure that the command area, the distribution network and crop patterns are based on firm data and are mutually consistent. Besides the above, an inbuilt plan for the phasewise implementation of the project with an indication of the resources needed vis-a-vis the accrual of benefits may also be included in the project proposals.

Tank Irrigation

5.33.1 As per Minor Irrigation Census of 1987, the total tank population in the country is put at 5.1 lakh with the concentration in the States of Madhya Pradesh, Andhra Pradesh, Kerala, Karnataka, West Bengal and Tamil Nadu. According to land use statistics, the area under tank irrigation was as high as 47 lakh hectare in the year 1962-63 and progressively came down to 30.7 lakh hectare in 1985-86 although lot of new tanks have been added under the Rural Development Programmes in the country. Thus in a span of 22 years, about 17.1 lakh hectare has gone out of irrigation mainly due to non-maintenance of these tanks. Earlier tanks used to be properly maintained by the beneficiaries themselves but in post-independence era, people's participation in this activity has become almost non-existent. Obviously, there is a strong case for a major effort at renewing and improving the traditional local systems for the maintenance of the above tanks so that these are able to fulfil the envisaged purpose. Hence, there is a need to attend to the maintenance and upgradation of the existing tanks so that these tanks are not only able to restore the level of benefits these were fulfilling earlier but substantial increase in the benefits is also achieved.

Central Sector of Ministry of Water Resources

5.34.1 The oraganisation-wise details of Plan outlays relating to Ministry of Water Resources are indicated in Table 5-32.

5.34.2 It may be seen from the above table that there has been considerable overall shortfall in the Central Plan of MOWR during 1992-95, i.e., three years of the Eighth Five Year Plan as well as every year also.

5.34.3 In order to avoid shortfalls it may be worthwhile if the MOWR could make arrangements for receiving information through NIC network for all central sector schemes and also start monitoring central sector schemes quarterly. A number of schemes (viz. flood proofing in North Bihar, flood proofing in other Ganga basin States, critical anti-erosion works in Ganga basin States, survey & investigation of Kosi-High Dam schemes, etc.) have to be got cleared by the MOWR as per the prescribed procedure.

5.34.4 As indicated in the Ministry's Annual Report 1993- 94, the total staff strength of the Ministry is 19,647 out of which 6242 in Central Water Commission (CWC), 4769 in Central Gound Water Board (CGWB), Farakka Barrage 1574, Rashtriya Pariyojana Nirman Nigam (RPNM erstwhile NPCC) 1588 and remaining staff in various other organisations. Against this the Ministry's proposals for the various schemes envisaged creation of large number of new posts during the Plan period. It is high time that the Ministry should take critical and comprehensive review of staff position in various organisations in order to have an integrated approach of water resources planning in totality i.e. surface and ground water.

5.34.5 Recently the World Bank have agreed to assist National Hydrology Project, formulated for the upgradation of data collection infrastructure for surface and ground water and establish national and State Data Banks to integrate them together at an estimated cost of about Rs.639 crore for a period of six years starting from the year 1995-96. It covers five organisation under the Ministry of Water Resources i.e. CWC, CGWB, CSMRS, NIH and CWPRS and IMD under DST besides 8 peninsular states: Andhra Pradesh, Gujarat, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Orissa and Tamil Nadu. It would be necessary to provide substantially higher outlay in the remaining two years of the 8th Plan in respect of the above Organisations for proper implementation of the above project after the agreement is signed by the World Bank, expected to be done shortly.

Annex 5.II.1

Major & Medium Irrigation Programme

(Rs. Crores at current prices)

Sl. No.	States/U.Ts	8th plan Outlays (At 1991-92 prices)	1992 -93 Approved Outlay	1992 -93 Actual Expdr.	1993 -94 Approved Outlay	1993 -94 Actual Expdr.	1994 -95 Approved Outlay	1994 -95 Revised Approved
1.	Andhra Pradesh	2066.78	255.48	343.47	312.51	534.34	325.55	421.19
2.	Arunachal Pradesh	4.71	1.00	0.50	1.00	0.43	1.00	0.50
3.	Assam	86.11	38.00	23.64	27.00	24.33	25.65	25.65
4.	Bihar	1927.17	303.53	146.30	319.00	140.16	319.00	149.61
5.	Goa	114.70	22.00	22.03	24.10	15.95	29.71	27.71
6.	Gujarat	3426.00	407.08	408.48	437.08	255.00	485.98	485.98
7.	Haryana	446.67	78.00	81.26	96.38	88.67	124.09	106.09
8.	Himachal Pradesh	16.00	2.34	2.69	2.69	2.45	2.74	2.69
9.	Jammu & Kashmir	70.57	16.71	16.93	18.28	15.28	18.71	18.09
10.	Karnataka	1936.09	232.34	294.25	468.67	449.19	628.92	428.92
11.	Kerala	437.00	80.50	80.80	90.00	103.39	104.00	104.50
12.	Madhya Pradesh	1791.29	353.06	314.76	363.55	318.89	362.60	242.10
13.	Maharashtra	2391.54	374.00	457.36	568.23	615.45	618.09	574.82
14.	Manipur	125.00	34.00	20.94	37.10	26.90	32.22	29.71
15.	Meghalaya	11.10	2.60	1.37	2.70	0.95	2.70	0.58
16.	Mizoram	1.00	0.10	0.10	0.10	0.08	0.05	0.04
17.	Nagaland	2.00	0.30	0.00	0.50	0.45	0.80	0.00
18.	Orissa	2614.33	250.43	189.07	260.43	172.42	299.99	172.42
19.	Punjab	257.73	43.33	31.68	41.55	41.67	56.44	57.11
20.	Rajasthan	1310.08	156.14	165.82	199.95	196.69	271.84	272.47
21.	Sikkim	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	Tamil Nadu	260.00	52.98	66.52	61.50	74.04	65.41	62.81
23.	Tripura	35.00	9.00	8.38	9.55	5.36	3.57	3.57
24.	Uttar Pradesh	2599.34	320.10	284.74	395.05	309.00	380.76	300.01
25.	West Bengal	380.00	58.50	50.24	67.02	78.00	101.60	82.60
	TOTAL STATES	22310.21	3091.52	3011.33	3803.94	3469.09	4261.42	3569.17
26.	A & N Islands	-	-	-	-	-	-	-
27.	Chandigarh	-	-	-	-	-	-	-
28.	D & N Haveli	5.23	5.23	3.21	1.14	1.14	1.00	1.00
29.	Daman & Diu	1.60	0.25	0.20	0.35	0.35	0.55	0.55
30.	Delhi	-	-	-	-	-	-	-
31.	Lakshadweep	-	-	-	-	-	-	-
32.	Pondicherry	2.49	0.56	0.72	0.65	0.65	-	-
	TOTAL U. Ts.	9.32	6.04	4.13	2.14	2.14	1.55	1.55
	TOTAL STATES & U.Ts.	22319.53	3097.56	3015.46	3806.08	3471.23	4262.97	3570.72
	CENTRAL SECTOR	95.00	30.20	31.68	35.66	30.02	21.99	27.13
	GRAND TOTAL	22414.53	3127.76	3047.14	3841.74	3501.25	4284.96	3597.85

Annex 5.II.2

Minor Irrigation Programme

(Rs. Crores at current prices)

Sl. No.	States/U.Ts	8th plan Outlays (At 1991-92 prices)	1992 -93		1993 -94		1994 -95	
			Approved Outlay	Actual Expdr.	Approved Outlay	Actual Expdr.	Approved Outlay	Revised Approved
1.	Andhra Pradesh	234.68	41.84	60.53	56.84	95.29	82.99	60.00
2.	Arunachal Pradesh	53.69	11.40	10.77	13.40	12.24	14.20	14.39
3.	Assam	183.45	53.05	44.07	40.00	38.00	38.00	38.66
4.	Bihar	1021.30	172.48	69.47	181.27	35.64	181.27	35.04
5.	Goa	13.10	2.61	3.98	3.75	3.90	3.60	3.60
6.	Gujarat	240.00	53.02	45.61	53.02	45.00	100.00	100.00
7.	Haryana	134.45	1.30	28.49	1.06	32.28	40.54	31.07
8.	Himachal Pradesh	95.25	26.75	21.42	18.15	17.14	23.26	23.55
9.	Jammu & Kashmir	84.20	17.26	16.05	19.91	16.77	19.97	20.37
10.	Karnataka	306.91	45.87	44.05	79.13	61.85	67.03	60.32
11.	Kerala	130.00	20.00	15.03	27.00	27.56	33.50	34.02
12.	Madhya Pradesh	728.37	152.50	125.82	160.50	131.00	166.70	103.23
13.	Maharashtra	612.17	128.05	203.99	202.41	215.03	226.44	210.59
14.	Manipur	25.00	5.50	3.00	5.90	4.75	5.30	5.30
15.	Meghalaya	29.03	6.80	5.78	7.50	4.18	6.63	4.00
16.	Mizoram	11.75	2.54	2.54	2.74	2.60	2.78	2.36
17.	Nagaland	21.00	3.45	2.41	3.40	2.49	2.45	2.25
18.	Orissa	389.40	64.35	53.35	67.85	56.65	80.85	72.02
19.	Punjab	113.20	22.97	17.16	27.73	21.70	28.99	29.84
20.	Rajasthan	171.92	30.15	34.53	32.70	32.01	46.06	39.90
21.	Sikkim	11.50	2.00	2.10	2.15	1.98	1.99	1.99
22.	Tamil Nadu	250.00	45.00	41.63	45.50	40.70	59.14	59.14
23.	Tripura	31.50	9.00	6.59	9.20	4.41	4.41	4.66
24.	Uttar Pradesh	400.60	56.36	70.08	69.35	57.08	39.59	48.66
25.	West Bengal	370.00	57.39	45.27	38.14	62.97	64.25	28.00
	TOTAL STATES	5662.47	1031.64	973.72	1168.60	1023.22	1339.94	1032.96
26.	A & N Islands	4.24	1.99	2.00	1.30	2.16	1.99	1.99
27.	Chandigarh	1.00	0.20	0.21	0.25	0.25	0.25	0.25
28.	D & N Haveli	3.00	0.45	0.81	0.80	0.55	0.85	1.05
29.	Daman & Diu	0.44	0.07	0.03	0.10	0.10	0.10	0.20
30.	Delhi	8.00	2.00	1.32	2.25	2.13	2.50	2.50
31.	Lakshadweep	-	-	-	-	-	-	-
32.	Pondicherry	5.11	1.15	1.43	1.33	1.37	2.20	2.23
	TOTAL U. Ts.	21.79	5.86	5.80	6.03	6.56	7.89	8.22
	TOTAL STATES & U.Ts.	5684.26	1037.50	979.52	1174.63	1029.78	1347.83	1041.18
	CENTRAL SECTOR	293.00	50.73	15.07	48.00	70.91	65.38	38.44
	GRAND TOTAL	5977.26	1088.23	994.59	1222.63	1100.69	1413.21	1079.62

Annex 5.II.3

Command Area Development Programme

(Rs. Crores at current prices)

Sl. No.	States/U.Ts	8th plan Outlays (At 1991-92 prices)	1992 -93		1993 -94		1994 -95	
			Approved Outlay	Actual Expdr.	Approved Outlay	Actual Expdr.	Approved Outlay	Revised Approved
1.	Andhra Pradesh	55.00	7.15	17.66	8.00	24.95	12.75	14.00
2.	Arunachal Pradesh	1.70	0.34	0.34	0.40	0.42	0.42	0.41
3.	Assam	16.79	3.50	2.15	3.50	2.50	3.50	3.50
4.	Bihar	70.65	12.99	10.00	13.65	4.00	13.65	10.91
5.	Goa	6.40	1.28	1.53	1.60	1.60	1.60	1.60
6.	Gujarat	80.00	11.30	9.10	11.30	9.56	9.25	10.08
7.	Haryana	45.77	27.40	7.07	42.62	9.45	12.65	10.65
8.	Himachal Pradesh	2.45	0.49	0.49	0.73	0.65	0.83	0.83
9.	Jammu & Kashmir	10.00	1.69	1.65	1.97	1.93	2.10	2.34
10.	Karnataka	130.00	18.50	14.86	42.20	17.19	30.41	14.92
11.	Kerala	60.00	9.00	8.93	10.00	10.00	11.00	11.00
12.	Madhya Pradesh	128.05	24.91	11.06	18.00	9.60	13.00	13.00
13.	Maharashtra	323.93	43.30	43.30	76.59	67.14	87.98	81.82
14.	Manipur	7.00	1.50	1.16	1.50	0.73	1.33	1.33
15.	Meghalaya	-	-	0.59	0.65	0.48	0.50	0.10
16.	Mizoram	-	-	-	-	-	0.05	0.04
17.	Nagaland	0.50	0.10	0.10	0.10	0.03	0.20	-
18.	Orissa	33.40	5.21	3.68	5.21	3.88	5.21	4.21
19.	Punjab	140.00	12.00	10.56	17.00	10.17	34.32	34.32
20.	Rajasthan	412.69	62.60	58.23	64.23	55.38	81.49	68.49
21.	Sikkim	1.50	0.10	0.00	0.05	0.05	0.05	0.05
22.	Tamil Nadu	45.00	8.06	9.23	8.40	9.74	10.08	10.08
23.	Tripura	0.50	0.10	0.05	0.05	0.02	0.02	0.02
24.	Uttar Pradesh	90.00	15.00	16.29	17.50	17.50	17.50	17.50
25.	West Bengal	18.00	1.75	0.86	1.50	1.50	0.75	0.75
	TOTAL STATES	1679.33	268.27	228.89	346.75	258.47	350.64	311.95
26.	A & N Islands	-	-	-	-	-	-	-
27.	Chandigarh	-	-	-	-	-	-	-
28.	D & N Haveli	0.20	-	-	-	-	0.05	0.05
29.	Daman & Diu	0.60	0.10	-	-	-	-	-
30.	Delhi	-	-	-	-	-	-	-
31.	Lakshadweep	-	-	-	-	-	-	-
32.	Pondicherry	-	-	-	-	-	-	-
	TOTAL U. Ts.	0.80	0.10	0.00	0.00	0.00	0.05	0.05
	TOTAL STATES & U.Ts.	1680.13	268.37	228.89	346.75	258.47	350.69	312.00
	CENTRAL SECTOR	830.00	90.00	104.45	115.00	116.22	125.00	124.50
	GRAND TOTAL	2510.13	358.37	333.34	461.75	374.69	475.69	436.50

Annex 5.II.4

Flood Control Programme

(Rs. Crores at current prices)

Sl. No.	States/U.Ts	8th plan Outlays (At 1991-92 prices)	1992 -93		1993 -94		1994 -95	
			Approved Outlay	Actual Expdr.	Approved Outlay	Actual Expdr.	Approved Outlay	Revised Approved
1.	Andhra Pradesh	143.54	97.90	118.11	62.65	13.44	55.15	40.15
2.	Arunachal Pradesh	4.71	1.00	1.04	1.50	1.42	2.50	2.50
3.	Assam	86.85	20.00	19.38	22.00	17.40	19.80	20.60
4.	Bihar	251.71	42.51	39.08	44.68	30.41	44.68	28.57
5.	Goa	0.90	0.18	0.81	0.20	0.30	0.40	0.40
6.	Gujarat	10.00	1.60	3.62	1.60	2.46	1.60	1.60
7.	Haryana	52.00	8.75	11.33	8.88	12.58	9.08	9.08
8.	Himachal Pradesh	6.00	1.10	1.03	1.15	1.37	1.32	1.54
9.	Jammu & Kashmir	40.75	8.25	8.26	9.55	8.83	10.07	11.28
10.	Karnataka	11.00	5.00	5.64	10.00	9.97	12.10	10.10
11.	Kerala	65.00	10.50	9.32	13.00	21.17	15.00	15.00
12.	Madhya Pradesh	8.53	0.98	0.69	0.98	0.47	1.00	1.00
13.	Maharashtra	1.46	0.31	0.31	0.77	0.31	0.53	0.46
14.	Manipur	20.00	5.00	3.41	5.40	2.61	3.61	5.29
15.	Meghalaya	8.54	2.00	1.07	1.00	0.95	1.00	11.00
16.	Mizoram	0.25	0.15	0.18	0.10	0.98	0.00	-
17.	Nagaland	1.50	0.15	0.20	0.20	0.05	0.25	-
18.	Orissa	42.05	5.00	6.27	5.00	7.79	7.00	7.00
19.	Punjab	125.00	20.00	14.15	12.75	10.84	15.65	13.53
20.	Rajasthan	25.30	3.91	4.41	3.75	5.18	6.99	7.08
21.	Sikkim	0.00	0.15	0.15	0.20	0.12	0.12	0.12
22.	Tamil Nadu	30.00	0.58	0.70	0.60	0.82	1.27	1.27
23.	Tripura	8.00	2.15	2.27	2.20	2.20	2.00	2.00
24.	Uttar Pradesh	70.00	10.58	8.00	8.00	10.50	8.00	11.99
25.	West Bengal	280.00	40.50	21.05	28.00	32.00	36.00	36.00
	TOTAL STATES	1293.09	288.25	280.48	244.16	194.17	255.12	237.56
26.	A & N Islands	0.05	0.01	0.04	0.01	0.01	0.30	0.29
27.	Chandigarh	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28.	D & N Haveli	0.02	0.00	0.00	0.06	0.26	0.00	0.00
29.	Daman & Diu	1.17	0.16	0.20	0.30	0.30	0.35	0.35
30.	Delhi	40.00	10.00	9.02	11.00	10.00	12.00	12.00
31.	Lakshadweep	2.60	0.96	1.25	1.50	1.60	1.55	1.55
32.	Pondicherry	4.44	1.00	1.10	1.36	2.00	2.75	2.75
	TOTAL U. Ts.	48.28	12.13	11.61	14.23	14.17	16.95	16.94
	TOTAL STATES & U.Ts.	1341.37	300.38	292.09	258.39	208.34	272.07	254.50
	CENTRAL SECTOR	282.00	59.78	38.07	76.05	37.24	48.81	49.77
	GRAND TOTAL	1623.37	360.16	330.16	334.44	245.58	320.88	304.27

CHAPTER 6
INFRASTRUCTURE
SECTION - 1
ENERGY

6.1 The production targets for primary commercial energy sources (i.e. crude oil, natural gas, lignite, hydro and nuclear power) in the terminal year of the Eighth Plan were fixed keeping in view the consumption requirements of the various sectors of the economy. The indigenous production of primary commercial energy was envisaged to increase from 161.37 million tonnes of oil equivalent (Mtoe)* in 1991-92 to 227.38 Mtoe in 1996-97 at an implicit rate of growth of 7.1% per annum compound. An import of 34.59 Mtoe was also estimated to be made in 1996-97 in order to meet fully the final energy consumption requirements of the economy; oil and oil products constituting the major share of the primary energy imports. The total requirement of primary commercial energy was thus projected at 260.34 Mtoe in 1996-97.

6.2 The rate of growth in total primary commercial energy requirement works out to 6.67% per annum implying an energy/GDP elasticity of 1.1914 in the Eighth Plan.

Trends in Primary Commercial Energy Supply

6.3 The trends in the primary commercial energy supply during the first three years of the Plan are given in Table 6.1.

6.4 It can thus be seen that the indigenous primary energy supply reached a level of 175.12 Mtoe in 1994-95 registering an annual growth rate of 2.76% during the first three years of the 8th Plan as against the estimated annual growth rate of 7.1% during the five year period. The shortfall has mainly occurred in the hydrocarbon sector, necessitating larger imports of crude oil and petroleum products compared to what were originally planned. The total primary energy availability in 1994-95 was 219.23 MTOE, registering an annual average growth rate of 5.16% during the first three years of the 8th Plan as against the anticipated annual growth rate of 6.67% for the Plan period as a whole.

Requirements of Primary Commercial Energy

(i) Petroleum

6.5.1 As regards demand for gross primary energy, the growth rate for refined petroleum products has been 4.1% in the first three years of the Plan as against the anticipated annual growth rate of 7.34% during five year Plan period. Based on the studies recently carried out by the Oil Coordination Committee, the demand for petroleum products has now been estimated to be 74.33 million tonnes in 1996-97 as compared to the Plan target of 81.19 million tonnes.

6.5.2 The indigenous production of petroleum products from oil refineries is estimated to be 55.70 million tonnes from a crude throughput of 59 million tonnes. The LPG production from natural gas is now assessed at 1.75 million tonnes in 1996-97. The indigenous production of petroleum products is thus likely to be 4.12 million tonnes less than the Plan target and the availability of petroleum products from domestic production is estimated to be 57.45 million tonnes in 1996-97. In order to meet the domestic demand of 74.33 million tonnes in the terminal year of the Plan, the balance 16.88 million tonnes will thus need to be imported.

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* MTOE is derived by calorific correspondence of different forms of energy vis-a-vis crude oil. A standard tonne of crude oil is assumed to have a calorific content of 10 million kilocalories. On this basis, 1 MTOE = 2.27 million tonnes of coal, 4.2 million tonnes of lignite, 1.07 billion cubic meters of natural gas, 11.6 billion kilowatt hours of hydro power etc..

Table 6.1- Trends in Supply of Primary Commercial Energy

(MTOE)

	1991-92	1992-93 (P)	1993-94 (P)	1994-95 (P)
Indigenous Production				
Coal & Lignite	105.35	109.36	112.21	115.38
Crude oil	31.17	27.68	27.76	33.40
Natural gas	17.15	16.61	16.86	17.78
Hydro power	6.26	6.01	6.05	7.10
Nuclear power	1.44	1.76	1.40	1.46
Total	161.37	161.42	164.28	175.12
Net Imports	35.88	42.84	43.79	41.73
Stock Changes	(-)4.78	(-)4.59	0.08	3.83
Intl. Bunkers	(-)0.12	(-)0.12	(-)0.12	(-)0.12
N. Gas Flared	(-)3.86	(-)1.79	(-)1.46	(-)1.33
Total Primary Commercial Energy Availability	188.49	197.76	206.57	219.23

P - Provisional Estimates

6.5.3 The crude throughput in the domestic refineries may be of the order of 59 million tonnes in 1996-97. Keeping in view the indigenous production of 38.465 million tonnes of crude oil likely to materialise in the terminal year of the Eighth Plan, an import requirement of 20.535 million tonnes will arise in that year which is 7.215 million tonnes more than the Plan target.

6.5.4 The total import requirement of crude oil and refined petroleum products thus comes to 38.75 MTOE on the basis of the current assessment of demand.

(ii) Coal

6.6 As regards coal, the annual growth rate in consumption has been 4.3% during 1992-95 as against the growth rate of 6.3 % anticipated during the 8th Plan period. As regards the coming years, there is likely to be a higher demand for thermal power generation in view of the increased PLF. The demand for other consuming sectors like transport and small industries (including brick kilns), however, is unlikely to materialise as per the Plan targets. The additional requirement of coal for power generation compensates the reduced demand from other sectors. The production of coal is likely to be 300 million tonnes in 1996-97 as against the Plan target of 308 million tonnes. However, the consumption requirement remains at 311 million tonnes in the terminal year of the Plan. The target for imports of superior quality coal was initially kept at 3 million tonnes in 1996-97. This has now been revised to 6 million tonnes, thereby increasing the import requirement by 2.1 Mtoe.

(iii) Electricity

6.7.1 As regards electricity sector, the generation target in the utilities was kept at 418.21 billion units in 1996-97. Correspondingly, a capacity addition target of 30,538 MW was envisaged. A capacity addition of 12,647 MW has been realised in the first three years of the Plan. The gross generation level achieved by the utilities during 1994-95 was 351.02 billion units. If the same trends in the growth in generation continue in the remaining period of the Plan, the utilities may generate about 404 billion units of electricity in the terminal year of the Plan. The target set for generation from the non-utilities is likely to be exceeded. In view of this, the demand-supply balance for electricity is likely to undergo change as given in Table 6.2.

6.7.2 It is assumed here that the auxiliary losses and the transmission and distribution losses are 7% and 21% respectively in 1996-97.

Table 6.2
Revised Electricity Demand-Supply Balance(Bkwh)

Sector of Consumption	1991-92 As per 8th Plan	1991-92 Actual	1996-97 As per 8th Plan	1996-97 Revised Estimates
Industry	112.60	110.60	155.00	149.62
Domestic	34.12	35.85	65.46	64.70
Agriculture	53.48	58.56	76.00	81.50
Others	26.14	25.96	39.38	38.78
TOTAL	226.34	230.97	335.84	334.60
Electricity Supply				
Utilities				
1. Generation	286.71	287.03	418.21	404.00
2. Aux. Losses	22.51	21.01	29.27	28.28
3. Net Import	1.43	1.45	2.00	2.00
4. T&D Losses	61.09	61.44	82.10	79.74
5. Supply from Utilities (1-2+3-4)	204.54	205.03	308.84	297.98
Non-Utilities				
6. Generation	24.50	28.60	30.00	42.00
7. Aux. Losses	2.70	3.66	3.00	5.38
8. Supply from Non-Utilities (6-7)	21.80	24.94	27.00	36.62
9. Total Supply (1+3+6)	312.64	315.63	450.21	448.00

6.7.3 The total import requirements of primary commercial energy thus work out to 44.54 Mtoe (including 0.17 Mtoe or 2 billion kwh of electricity from Bhutan) in the terminal year of the Eighth Plan. In view of the total primary energy imports thus estimated, the total primary commercial energy requirements add up to 249.96 Mtoe in 1996-97 as compared to 260.34 Mtoe given in Para 1 above. If the GDP growth remains at 5.6% per annum, the primary commercial energy/GDP elasticity is estimated to be 1.037 for the Plan period. The position is summarised in Table 6.3.

Primary Commercial Energy Requirement in 1996-97

6.8 In view of the above, the revised primary commercial energy balance for 1996-97 vis-a-vis the target set for the Eighth Plan is given in Table 6.4.

Final Commercial Energy Consumption

6.9 The final commercial energy consumption was projected to rise to 172.65 Mtoe in the terminal year of the Eighth Plan. In view of the revised demand estimates the final commercial energy requirement now works out to be 163.23 Mtoe in 1996-97. If the economy grows at 5.6% per annum as targeted in the Plan, the final commercial energy consumption-GDP elasticity is likely to come down from the earlier anticipated figure of 1.2006 to 0.988 for the Eighth Plan period. Table 6.5 below gives the fuelwise requirement of final commercial energy consumption in 1991-92 and 1996-97.

6.10 As may be seen, the revised estimates for final commercial energy consumption are lower in case of coal and petroleum products and higher in the case of natural gas and electricity. As far as coal is concerned, the direct consumption requirements have come down in

Table 6.3

Production, Consumption and Import Requirement of Commercial Energy in 1996-97

		As per Eighth Plan	As per Mid-term Rev	Additional Imports
COAL			*	
- Production	MMT	308	300	
- Consumption	"	311	311	
- Imports	"	3	6	3
LIGNITE				
- Production	"	23	23	
CRUDE OIL				
- Production	"	50 **	38.465	
- Consumption	"	63.32	59	
- Imports	"	13.32	20.535	7.215
PETROLEUM PRODUCTS				
- Production	"	61.57 (incl. 2.05 MMT of LPG from Natural Gas)	55.7+1.75 MMT of LPG from Nat. Gas.	
- Net Imports		19.62	16.88	-2.74
- Consumption		81.19	74.33	
NATURAL GAS				
- Production	MCM	30,189	25,710	
ELECTRICITY				
- Capacity Add.	MW	30,538	20,730	
- Generation				
- Utilities	BU	418.21	404	
- Non-Ut	BU	30	42	
- Imports	BU	2	2	
- Availability	BU	450.21	448	

* The difference of consumption minus production plus imports would be bridged from stocks liquidation.

** The crude oil production target of 47.08 million tonnes in the terminal year of Eighth Plan, indicated in later part, was based on estimates of crude oil production from existing fields, at the start of Plan, and development of discovered fields during the Plan period.

the transport sector and the industrial sector due to a complete phasing out of the steam engines and a lower demand from the brick kilns and other small industries. The reduction in demand for petroleum products is mainly accounted for by the transport and the agriculture sectors. The requirement of natural gas as feedstocks and as an industrial fuel is now estimated to be higher than projected at the time of the Eighth Plan formulation.

Dependence on Imports

6.11 The energy strategy includes maximising satisfaction of demand for energy from the indigenous resources in order to reduce the nation's dependence on imported energy. The Eighth Plan has laid considerable emphasis on this very important aspect of the energy strategy, particularly with regard to oil and oil products imports. As mentioned in the Plan document, any sizeable increase in the quantum of oil imports increases the vulnerability of the economy to the uncertainties of the external markets as well as results in an outgo of scarce foreign exchange. In view of this, the Eighth Plan underlines the importance of managing the oil budget so as to restrict the oil imports, as far as possible, to the level obtaining in 1991-92. However, as mentioned above,

Table 6.4
Requirement of Primary Commercial Energyin 1996-97 (Mtoe)

	1996-97	
	As per 8th Plan	Revised Estimates
Indigenous Production		
Coal & lignite	137.96	134.16
Crude oil	51.18	39.50
Natural Gas	27.75	23.64
Hydro power	8.03	7.27
Nuclear power	2.46	2.27
Total	227.38	206.84
Net Imports	34.59	44.54
Intl. Bunkers	(-)0.21	(-)0.21
N.Gas Flared	(-)1.42	(-)1.21
Primary Comm. Energy Requirement	260.34	249.96

the net import requirements of oil and oil products in 1996-97 are estimated to be 37.415 million tonnes as compared to 30.503 million tonnes in 1991-92. The rising trend in the oil imports is likely to continue in future in wake of the increasing demand for oil products and sluggish trends in addition to oil reserves and production.

6.12 The mid- term appraisal of various sub-sectors of energy sector is given in the following paras.

PETROLEUM AND NATURAL GAS SECTOR

6.13 The following areas of concern and major programmes were identified for the hydrocarbons sector while formulating the Eighth Plan.

(i) Need to restrict oil imports to reasonable level through a) improvement in efficiency of use of petroleum products; b) demand management; and c) inter-fuel substitution. Efforts should be made to achieve demand reduction of atleast 6-7 million tonnes by 1996-97. (

ii) Maximise indigenous production of crude oil including additional production by the rehabilitation of sick and idle wells.

(iii)Initiation of hydrocarbons exploration in the phased manner in deeper continental shelf and greater participation in overseas exploration ventures.

(iv) Augmentation of domestic refining capacity to about 65 million tonnes by 1996-97. Any further addition to refining capacity would need careful evaluation of relative economics of import of crude vis-a-vis petroleum products.

Table 6.5
Revised Estimates of Final Commercial Energy Requirement in 1996-97.

(In Mtoe)

	1991-92	1996-97	
		Projected	Rev. Est.
Coal & Lignite	42.69	52.95	50.02
Pet. Products	55.25	80.02	72.34
Natural Gas	6.90	10.80	12.09
Electricity	19.86	28.88	28.78
TOTAL	124.70	172.65	163.23

(v) Highest priority to be accorded to cost effective debottlenecking schemes and low cost expansion for refining capacity additions.

(vi) Priority to be given to energy use optimisation, energy conservation and schemes of product quality improvement in refining sector.

(vii) Need to eliminate flaring of natural gas at the earliest, in any case not later than 1996-97.

(viii) Maximisation of production of LPG, setting up of facilities for city gas distribution, promoting use of CNG in transport sector.

(ix) Need for attracting more private sector investment in exploration and production and refining and marketing sectors.

6.14 As regards physical programmes of work the following targets were fixed for major activities:-

	1992-93	1996-97	Cumulative
1. Crude Oil Production (Million tonnes)	28.47	47.08	197.32
2. Natural Gas Production (Billion cubic Metres)	19.28	30.18	125.42
3. Natural Gas Despatches (Billion cubic metres)	12.74	22.92	89.48
4. Accretion to Hydrocarbon Reserves (Million tonnes oil and oil equivalent gas)	*	*	1325
5. Demand for Petroleum Products (million tonnes)	60.71	81.19	348.60
6. Build up of domestic refining capacity (million tonnes)	51.82	65.00	-

Demand for Petroleum Products

6.15 The growth in the consumption of petroleum products has been sluggish during the first three years of the Eighth Plan. As against the Plan target of 7.34% per annum growth in the consumption of petroleum products, the growth rate achieved during the first three years of the Plan is estimated to be 4.1% only. According to the latest demand estimates prepared by a Sub-Group set up by the Ministry of Petroleum & Natural Gas in February 1994, the growth in the consumption of petroleum products would be more than 6% per annum during 1994-97 period. In terms of quantity, the demand for petroleum products by the terminal year of Eighth Plan (1996-97) has now been estimated at 74.33 million tonnes against 81.19 million tonnes estimated originally.

Domestic Crude Oil Production

6.16 The Eighth Plan had emphasised the need for maximisation of domestic crude oil production during the Plan. However, against a total planned production of 197.3 million tonnes during 1992-97, the current assessment indicates that oil production may be 167 million tonnes. The terminal year production may be only 38.465 million tonnes as against the target of 50 million tonnes. The medium sized oil fields to be developed under Joint Ventures were expected to produce about 5.4 million tonnes of crude oil during the Plan period. Production from these fields is now expected to materialise only in the Ninth Plan period on account of delays in award of contracts.

Hydrocarbons Reserves Accretion

6.17 The accretion to hydrocarbon reserves has registered a declining trend for the last 4/5 years and during last 2 years the accretion has fallen to very low levels. The Reserves Replacement Ratio, which is a measure of reserves discovered to reserves depleted has declined to less than unity value thereby implying that oil reserves are being depleted faster than being replenished. Against a total production of about 54 million tonnes of oil during 1992-94 period, the accretion to recoverable reserves of oil was about 23 million tonnes.

6.18 The in-place reserves accretion was about 43 million tonnes during 1992-93 whereas during 1993-94 about 76 million tonnes of in place hydrocarbons were discovered. The outcome of exploration during past 3/4 years is characterised by discovery of predominantly smaller size fields. At the current pace, the Eighth Plan accretion target of in place hydrocarbon reserves of 1325 million tonnes of oil and oil equivalent gas and recoverable reserves of about 455 million tonnes of oil and oil equivalent of gas would be almost impossible.

6.19 Considering the scale of exploration activities and the growing size of exploration budgets, recasting/reorientation of exploration strategy is immediately warranted to improve accretion to hydrocarbon reserves during balance period of Eighth Plan. Repriortisation of exploratory efforts, greater application of close grid seismic surveys and interpretation of data on priority in areas with relatively higher potential for extensions/new discoveries, re- evaluation/re-exploration of some of the promising areas through application of technologically advanced techniques of exploration may help in improving the rate of reserves accretion.

6.20 In order to intensify exploration, two major programmes have been launched in addition to the exploration programmes being implemented by National Oil Companies (NOCs). Starting September, 1991 blocks in onland and offshore areas are being offered for exploration on continuous basis. So far about 150 blocks have been offered but the response has not been very encouraging. No major exploratory drilling campaign from private sector can be visualised during the Plan period as these operators with whom contracts are signed, would be mostly busy with pre-drilling surveys and evaluation studies. Therefore, no major exploration efforts and hence no large accretion to hydrocarbon are expected to materialise from the bidding rounds during Eighth Plan.

6.21 An Accelerated Exploration Programme, to be implemented by National Oil Companies during the period 1994-97, has been approved with an outlay of Rs.6500 crore. The programme has five major components : i) National Seismic Survey mainly for unexplored areas; ii) Deep water exploration; iii) Exploration in frontier areas; iv) intensive exploration in hydrocarbons producing basins; and v) Overseas activities, covering acquisition of acreages, farm in's, reserves acquisition etc. The benefits from survey programmes would mainly arise during Ninth Plan. Under intensive exploration component the major thrust would be in Assam where exploration has suffered seriously in the past. The success of accelerated exploration programme would depend on how quickly the oil companies can undertake pre drilling technical evaluation studies for priortising their efforts and also gear up operationally to implement the programme including overseas activities. It is also necessary to work out time bound action programmes.

POL Import Bill

6.22.1 Based on the i) demand projections; ii) domestic crude oil production; iii) domestic availability of petroleum products; iv) crude oil and petroleum products prices in international market in the later part of 1991; and v) the exchange rate prevailing then, it was estimated at the time of commencement of Eighth Plan that the total POL import bill would be Rs.74,660 crore.

6.22.2 The POL import bill for the Eighth Plan period, considering actual position for the first two years of the Plan, estimates for 1994-95 and assuming some firming up in crude oil prices (average US $ 18 per barrel) during last two years of the Plan, may be of the order of Rs.89,500 crore.

6.22.3 The POL import bill still accounts for 25-30% of total export earnings. The continuous spell of soft crude oil and petroleum products prices in international market has been responsible for more manageable POL bill. However, the import bill may increase sharply beyond Eighth Plan on account of: i) expected firming up of crude oil and products price in the international markets; ii) additional demand for POL resulting from power generation capacities based on liquid fuels; and iii) possibilities of gas imports.

Gas Sector

6.23.1 Consequent to lower domestic production of crude oil the gas production would also be lower compared to the Plan targets. In addition there would be shortfall in the production of free gas also on account of delays in the development of gas fields. The gas production may fall short by about 22 billion cubic metres or about 20 million tonnes of oil equivalent during the Plan period. Accordingly gas despatches to downstream users of gas are likely to fall short by almost 10 billion cubic metres.

6.23.2 The overall management of the domestic gas sector will improve during the Eighth Plan with better utilisation of produced gas and minimisation of flaring. The gas utilisation, particularly offshore gas, would improve with the commissioning of gas compression, evacuation, shore based treatment facilities as well as the augmentation of the capacity of HBJ pipeline in later part of the Plan. For onland areas also efforts are underway to maximise the gas utilisation and, therefore, gas commitments are being made to small industrial consumers on fall back basis.

Refining Sector

6.24 Based on overall demand supply outlook for petroleum products the Eighth Plan recommended that the domestic refining capacity be augmented to 65 million tonnes by 1996-97 which is likely to be achieved. Highest priority has been accorded to low cost expansion of refining capacities involving Cochin Refineries (3 million tonnes), Koyali refinery (3 million tonnes), Bongaigaon refinery (1 million tonnes), and Visakh refinery (3 million tonnes). The new grass root refining capacities would be commissioned at Mangalore (3 million tonnes), Panangudi (0.5 million tonnes) and Panipat (6 million tonnes).

Plan Outlays

6.25 An outlay of Rs. 24,000 crore was approved for petroleum sector at the time of formulation of the Eighth Plan. However the revised requirement of petroleum sector would be significantly higher than the approved outlay considering the progress of expenditure during first three years of the Plan and nature/size of the projects under implementation. This increase would be arising out of the following:

i) sharp increase in project costs having large FE component following devaluation/convertibility.

ii) inclusion of projects in the Plan to be implemented solely by PSU's against Joint ventures earlier.

iii) inclusion/approval of projects with small/token provisions.

iv) increase in project costs due to time and cost over-runs including delinking of projects from external financing.

v) Additional funds requirements for Accelerated Programme of Exploration approved by the Government.

6.26 The petroleum sector finances the Plan Outlays mainly from internal and extra budgetary resources. PSUs have been permitted to expand their equity base and tap the capital markets for raising funds for their Plan programmes. Therefore, no funds constraints can be visualised by petroleum sector for meeting their enlarged funds requirement.

Privatisation

6.27 The Government of India has adopted two pronged approach for privatisation. Firstly it is divesting its equity holding in oil sector PSUs to bring it down to 51% progressively. The PSUs are being permitted to increase their authorised capital and tap capital markets for raising funds for implementing their projects and programmes.

6.28 Secondly, in line with Eighth Plan thrust for attracting more private sector investment in exploration and production and refining and marketing sector, the Government of India has thrown open major segments in upstream and downstream sectors for private investment. These are as follows :

6.28.1 Upstream Sector

i) Announcement of exploration bidding rounds, on continuous basis, for onland and offshore areas.

ii) Announcement of speculative seismic survey rounds.

iii) Offering discovered oil and gas fields for development by private sector either solely or as joint venture with upstream sector PSUs.

6.28.2 Downstream Sector

i) Setting up of new grass root refineries by private sector either solely or as joint venture with downstream sector PSUs.

ii) Setting up of lube refineries by private sector.

iii) Parallel marketing of petroleum products by private sector.

iv) Joint ventures for blending and marketing of lube oils.

The oil sector PSUs are also being permitted to form JVs among themselves and with Indian private and foreign companies.

6.29 So far two rounds for development of small and medium sized oil and gas fields have been announced. The contracts for the fields offered under first round are being awarded. It has been observed that the award of contracts particularly for medium sized oil and gas fields have got delayed due to protracted negotiations. The problems are arising due to inadequacy of transparency in the terms and conditions for award of such fields as well as efforts of the bidders to secure more attractive terms by subjecting the basic commercial terms and too many variables to prolonged negotiations. About 5 million tonnes of oil production was expected from such projects by the terminal year of Eighth Plan but in view of delays the production may be much lower.

6.30 Funds and foreign exchange constraints were also responsible for offering proven fields to private sector. The situation has drastically undergone a change since the start of Eighth Plan as follows:-

i) the foreign exchange position is very comfortable.

ii) the internal resources position of upstream sector PSUs has improved very significantly on account of increase in price of domestic oil. Expected increase in gas and oil prices would further augment resources generation.

iii) PSUs have been permitted to expand their equity base and tap capital market for funds.

6.31 In view of this, it may be desirable to review the earlier decision for development of fields by private sector. The PSU's besides developing these fields much faster can also achieve better integration with available infrastructure probably at lower investments.

6.32 As regards downstream sector, LOIs for more than 40 million tonnes of grass root refining capacity have been issued to private sector. Two new grass root refineries, for addition of 12 million tonnes capacity are under consideration as JV projects with Oman Oil Company. Similarly LOIs for two lube refineries, with annual capacity of 0.7 million tonnes have been issued to private sector. Five JVs have already started the business of blending and marketing lubricating oils in India. So far the projects where financial commitments are low have been taken up and not much of activity has been seen in major grass root refinery projects. In fact the LOIs to private sector are posing problems for investment decisions on new refineries/capacity expansion projects of PSUs because of uncertanties of the time frame within which private sector projects can mature. New proposals of low cost capacity expansions, over and above the Plan programme, have been identified by PSUs and hence these would need to be accorded preference over the expensive grass root capacity. The advance action on refining capacity addition projects, during Eighth Plan, would thus need to be prioritised.

6.33 The parallel marketing of most of the petroleum products (except MS,HSD) by private sector has been permitted and imports have been decanalised. This has introduced the dual pricing system for petroleum products to a limited extent i.e. PSUs sell products at administered prices whereas private marketing companies sell at market related prices. An appropriate tariff structure need to be considered for eliminated anomalies in this regard. Due to constraints in port and other storage and despatch facilities the parallel marketing has succeeded only to a limited extent, so far. However, some of the private operators are either setting up or contemplating storage and despatch facilities to step up their marketing activities. Some of the PSUs are also planning Joint Ventures with private sector for jointly providing marketing infrastructural facilities for private parties.

Other Important Developments
Gas Imports

6.34 The proposals for import of large quantities of gas from west Asian Countries i.e. Oman and Iran are under serious consideration. Import of natural gas was not envisaged at the time of Plan formulation. An 'Agreement on Principal Terms' has already been concluded with Oman according to which gas supplies to India can commence by mid- 1999 provided the technical feasibility of deep sea offshore gas pipeline route is established by the studies likely to be completed by July 1995. As regards import of gas from Iran, a feasibility study is expected to be commissioned shortly. In case feasibility of gas imports from Oman is established by mid 1995, action would need to be initiated concurrently for creating gas transportation and distribution system. Additional funds requirement will arise for new projects related to gas imports. It would be, therefore necessary to identify agency/agencies for implementation of such projects in order to mobilise the funds accordingly from PSUs as well as the private sector.

Mid-Term Approach for Petroleum Sector

6.35 Some of the important issues emerging from the Mid-Term Appraisal of the petroleum sector are given below.

i) The outcome of exploration has been characterised by two important features : a) the rate of accretion has been low and b) predominantly smaller size discoveries have been made. Against the 8th Five Year Plan accretion target of 1,325 million tonnes of oil and oil equivalent gas, about 120 million tonnes of hydro carbons have been discovered during the first two years of the Plan. At this pace it would be extremely difficult to achieve the 8th Plan target of reserves accretion, unless major discoveries are made in the remaining period of the Plan. To step up reserves accretion an Accelerated Exploration Programme (APEX) has been approved with an outlay of Rs.6,500 crore. However, the success of APEX would depend on how quickly the oil companies can undertake the necessary pre-drilling technical evaluation studies for prioritising their efforts and also gear up operationally to implement the programme during the Plan period.

ii) The domestic crude oil production would significantly fall short of the target. Against a target of 197.3 million tonnes of oil production, only 167 million tonnes of oil may be produced during 1992-97 provided the joint venture projects also come up in time. The depressed reserves accretion, if it persists for another 3/4 four years, would have far reaching implications in the build up of domestic crude oil production beyond the 8th Five Year Plan.

iii) The gas imports from Oman may commence during the 9th Plan. Advance action would need to be taken for formulation of the projects related to infrastructural facilities for cross country gas transportation and its utilisation by various downstream users. The project would need to be submitted quickly for investment approvals.

iv) The build up of domestic refining capacity would reach the levels as envisaged for the 8th Plan. Very large build up of both the refining and marketing infrastructure is necessary to cater to the growing demand of petroleum products in coming years. In view of this various new proposals have been included for implementation during the Plan period.

v) In order to clearly indicate the approach for private sector participation in petroleum sector as well as privatisation of oil sector PSUs, it is necessary to formulate quickly the approach about the pricing regime for petroleum products greater autonomy to PSUs and other related issues.

vi) The POL import bills would be manageable during the 8th Plan period because of lower growth in the consumption of petroleum products as well as continuation of soft prices in the international market. However, shortfalls in reserves accretion during Eighth Plan may lead to much lower growth rate in domestic crude prodution vis-a-vis the growth rate in demand for petroleum products than required in coming years and this, coupled with possible import of gas and setting up of power generation capacities based on liquid fuels might push up the POL import bill quite significantly in coming years. It would be necessary to take into account the capacity to meet and sustain the higher import bills.

COAL & LIGNITE

6.36 The following are the priority areas of Coal & Lignite development in the Eighth Plan:

i) It was envisaged that the supply and movement of coal would be ensured in a coordinated manner so that pithead stocks would be reduced to a reasonable level (one month's coal production) and the requirements of the consumers would be

Table 6.6
Company-wise Coal Production

(in million tonnes)

Major Sector	1991-92	1996-97	
	Actual	Target	Now assessed
Coal India Ltd.	204.15	270.00	263.60
SCCL	20.58	33.00	30.20
TISCO/IISCO/DVC	4.56	5.00	6.20
Total:	229.29	308.00	300.00

met both from the quality and quantity angles.

ii) To take up specific measures for maximizing the use of indigenous coking coal in steel production through quality improvement scheme including betterment of the existing washery plants.

iii) Beneficiation of non coking coal on large scale for use in load-centre power stations.

iv) The project implementation procedures would be further streamlined and the delays would be reduced during the Eighth Plan with special attention to the aspects of land acquisition, rehabilitation of displaced families and delays in clearance of projects from forest and environmental angle.

v) Preparation of an effective environmental management plan including a comprehensive rehabilitation policy and to monitor and implement the same.

vi) To evolve and implement a policy aimed at improving the availability of coal based domestic fuels.

vii) To arrest low production and productivity in underground mines and improve overall productivity of machinery and manpower.

viii)To promote adoption of new technologies such as fluidised bed combustion for efficient use of low grade coals and also utilising coal rejects from coal washeries and beneficiation plants.

ix) Scientific evaluation of coal resources and development of lignite in locations situated far away from coal resources.

x) To make the coal industry financially viable and self supporting.

6.37 Mid-Term Appraisal has been done with reference to the above policy issues identified in the Eighth Plan and also the physical programme of work.

Demand

6.38 The overall coal demand in the Eighth Plan was placed at 311 million tonnes (mt.) (excluding 7.0 mt. of washery middlings) against an actual consumption of 228.94 million tonnes (excluding 2.30 million tonnes of washery middlings) in 1991-92, thereby implying an average growth rate of 6.32% annually. Against this target, the coal consumption in first three years of the Eighth Plan grew at the rate of about 4.3% per annum touching a level of 259.65 million tonnes (excluding 2.57 million tonnes of washery middlings) in 1994-95. The reasons for shortfall in the coal consumption are demand-supply mismatches due to quality problems and evacuation facilities (Railways movement constraints) which have been continuing since the Seventh Plan. As per the present estimates, the coal demand in 1996-97 is likely to be 311 million tonnes as per the Eighth Plan projections. The sector-wise break-up is indicated in Annex. 6.1.

Production

6.39 The Eighth Plan target for coal production in the terminal year of the Plan was fixed at 308 million tonnes against an achievement of 229.29 million tonnes in 1991-92 implying an annual growth rate of 6%. The all-India coal production touched the level of 253.8 million tonnes in 1994-95. The average annual growth rate works out to 3.4% in the first three years of the Plan. The coal production from underground (UG) has not improved as expected. Instead production from opencast (OC) mines exceeded the targets.

6.40 Coal production target for 1996-97 is now estimated to be 300 million tonnes against the originally approved target of 308 million tonnes. Company-wise details of coal production are given in Table 6.6.

6.41 The power sector would need higher supplies than envisaged in the total demand of 311 million tonnes of coal in 1996-97 in order to sustain operations at higher PLF. It would be necessary to review the production target to meet enhanced requirement of power sector.

Lignite

6.42 Lignite production from Neyveli Lignite Corporation in 1996- 97 is now expected to be 18 million tonnes as compared to the target of 19.5 million tonnes. This is because of the delay in taking up of the Barsingsar project in Rajasthan which has been offered for private sector participation and can now come only in Ninth Plan. In the case of Gujarat Mineral Development Corporation (GMDC), the production in 1996-97 is now assessed at 5 million tonnes as compared to the target of 3.5 million tonnes originally envisaged.

Coal Transportation

6.43 Transportation bottlenecks persist in the movement of coal and are partially responsible for the mounting pithead stocks. Large scale beneficiation of non-coking coal can itself boost up the existing railways transportation capacities by at least 10% by reducing the ash contents of coal besides improving the performance of power plants and also reducing ash handling reduction at power plants. Critical transportation bottlenecks have already been identified like construction of new railway line linking Rajmahal coalfield with mainline, construction of new railway line from Himgir railway station to Gopalpur in IB valley coalfields etc., and railways must undertake work on such proposals on priority. The Ninth Plan thermal power plant locations are tentatively known and coal linkages would be required for these. Advance action is necessary for coal transportation linkages for the Ninth Plan.

Project Implementation

6.44 During the Eighth Plan, it was envisaged that out of a total production of 303 million tonnes from the public sector (CIL & SCCL), 32.59 million tonnes would be contributed by new projects to be taken up during the Eighth Plan period itself and the balance was to come from the existing mines and sanctioned ongoing projects. Coal projects have long gestation period and as such production of 32.59 million tonnes was envisaged from the projects totalling to additional production capacity of about 72 million tonnes. Against this, total capacity that has been sanctioned so far, during the Eighth Plan, is only 35.85 million tonnes. This rate of new capacity additions would adversely affect coal availability in the Ninth Plan. While a decision has been taken to allow projects in the private sector, at present this is only confined to captive mines for power stations and industries. Considering all the above aspects there could be shortfall in the production capacity additions to the extent of 40 million tonnes. or even more in the Ninth Plan if Advance Action proposals are not initiated now. As regards pace of projects implementation, in general, there has been overall improvement due to the efforts made by the Task Force for speedy implementation of coal and power projects. The delays, however, continue resulting in both time and cost over-runs. The problems of land acquisition, forest clearance, rehabilitation of land oustees, delays in equipment supplies, finalisation of the contracts etc. are coming in the way of timely project implementation causing slow pace of implementation in certain cases. The need for an appropriate rehabilitation package has been examined in detail in Planning Commission and it has been generally expected that land oustees would be suitably compensated. While the coal companies are favourably disposed to give adequate compensation, a National level rehabilitation package for displaced persons for coal sector is yet to be finalised. This needs to be expedited.

Environmental Measures

6.45 In order to mitigate the impact of mining on the environment, Eighth Plan placed a major thrust on environmental measures and subsidence control in old abandoned areas of Raniganj and underground mine fires in Jharia coalfields. A separate Plan head was created under "Environmental Measures & Subsidence Control" and an amount of Rs. 75 crore was provided for the period 1992-97. An amount of Rs. 5 crore each has been provided in 1992-93, 1993-94 and 1994-95 to initiate the work in these coalfields. Asansol Durgapur Development Authority (ADDA) has been retained by Ministry of Coal to implement the action Plan. However, the institutional arrangements are yet to be firmed up for taking up this work.

Coal Based Domestic Fuels

6.46 While successive plans as well as Eighth Plan laid emphasis on promotion of soft coke as a domestic fuel, the demand for soft coke continues to be depressed/ declining inspite of the heavy subsidy that has been provided in the prices of soft coke for domestic use. This could be mainly due to consumers preference for Liquified Petroleum Gas (LPG) and kerosene in urban and semi- urban areas. The only Low Temperature Carbonisation (LTC) plant set up by CIL at Dankuni is working uneconomically because of lack of demand and problems of pricing of coal gas. It is high time that a decision is taken to promote soft coke production and sale in small industry sector or private sector as was earlier envisaged. This needs to be reviewed.

Productivity

6.47 One of the major thrust areas of Eighth Plan was to arrest the low productivity in underground mines and to improve overall productivity of both man and machinery. The envisaged overall productivity in terms of output per manshift (OMS) in 1996-97 was kept at 1.65 tonnes (underground 0.66 tonne and opencast 4.32 tonnes) for CIL and 1.36 tonnes (underground 0.86 tonne and opencast 6.43 tonnes) for SCCL. To achieve the above objective, CIL has adopted a time bound action plan for improving labour productivity in underground mines. The actions being taken include:

i) Implementation of voluntary retirement scheme and retraining and relocation of underutilised manpower;

ii) decommissioning of uneconomic mines where scope for improvement does not exist;

iii) re-orientation of investment programme with relatively higher thrust on short gestation and higher output projects ; and (

iv) mechanisation of underground mines.

6.48 As a result of the various measures adopted by CIL, the overall OMS achieved by CIL in first two years has been 1.52 tonnes (underground 0.55 tonne and opencast 4.00 tonnes) and this is likely to increase to 1.56 tonnes (underground 0.56 tonne and opencast 4.28 tonnes) in 1994-95. Major part of the improvement can be attributed to increased productions from OC mines, however there is a marginal improvement in case of UG productivity. The improvement in productivity of underground mines merits greater attention.

Technology Upgradation in Production and use of Coal

6.49 Utilisation of Coal Bed Methane is a new concept in the energy scenario. This has developed quite fast in USA as well as in some other countries in recent years. India too has widespread coal deposits which are likely to contain very significant reserves of coal bed methane. This is another area which needs a systematic time bound programme covering resources assessment, pilot testing and commercial exploitation. Some private parties have shown interest to apply this technology in some of the coalfields in India. Two blocks have already been offered to two private parties. One block in Raniganj Coalfield is being operated by M/s Modi Mckenzee and the other in Jharia/NKP Coalfield by M/S AMOCO. In addition other similar proposals are under consideration for development of coal bed methane technology.

Plan Outlays

6.50 The Eighth Plan envisaged to make the coal industry financially viable and capable of supporting itself through improvements in efficiency and productivity levels. Accordingly, coal sector has initiated action areas in rationalisation of manpower and closure of uneconomic mines as stated earlier. As a result of these measures as well as increase in coal prices annually based on escalation factor, there has been substantial improvement in the Internal Resources (IR) which has led to reduce reliance on budgetary support.

6.51 The Eighth Plan envisaged an outlay of Rs.10507 crores at 1991-92 prices (excluding Rs 850 crores as the share of Government of Andhra Pradesh towards its equity participation in Singareni Collieries) for Coal and Lignite sector against which the expenditure in the first three years has been Rs. 6047 crores (at 1991-92 prices) which is 57.6 % of the approved outlay at constant prices. However, the pace of plan expenditure has suffered to certain extent mainly due to the problems of fund constraints arising out of non-realisation of market bonds as expected and increasing quantum of outstanding undisputed dues of SEBs to CIL. Based on the progress of various projects and other programmes the coal sector may need 15% to 20% higher outlays than approved Plan outlay. Increase in outlays is mainly attributed to escalation in the cost of the major ongoing projects due to price rise.

Private Sector Participation

6.52 In line with the liberalisation policy of the Government, private sector participation has been allowed in the following spheres in coal industry :

i) Captive coal mining by consumers engaged in power generation and iron and steel industry.

ii) Construction of washeries on Build-Own-Operate (BOO) basis.

iii) Construction of captive power plants on Build-Own-Operate basis.

6.53 Forty (40) mining blocks have been identified and offered for captive mining purpose. So far 15 proposals have been received for captive mining from power generating companies. Out of these proposals, 11 have been shortlisted for which 15 blocks have been allotted/ identified. For steel and sponge iron sector, 10 proposals have been received and 3 blocks have been identified, which are under consideration. Similarly, tenders have been invited for construction of 7 washeries (coking coal-3 & non-coking coal 4) in the first phase. Implementation of these washeries are expected to be taken up during the 8th Plan period. Likewise, action has been taken to construct 7 captive power plants based on Fluidized Bed Combustion (FBC) technology near washeries under BOO basis. The real benefits of such programmes, however, would accrue during the Ninth Plan. Competitive bidding procedure has been adopted for coal washeries in private sector and the same is not being used for captive mining. It would be desirable to standardise the procedure of bidding rounds for all types of projects in the coal sector including commercial mining and make the terms and conditions of such rounds transparent for private participant.

6.54 These steps, however, may not be enough to attract large flow of private capital in coal sector. The private sector should be permitted commercial mining for ensuring large flow of private sector resources in coal mining. Such commercial mining by private sector would also warrant freedom of these producers to sell coal at prices fixed on the basis of bilateral arrangements with consumers. The administered pricing mechanism would have to be made flexible in this regard.

Mid-Term Approach for Coal Sector

6.55 Some of the important issues emerging from the Mid-Term Appraisal of the Coal & Lignite sector are given below:

i) As against the targeted creation of 72 million tonnes of annual coal production capacity from new projects during the Eighth Plan period, projects for a capacity of 36 million tonnes have been sanctioned so far. Action on new projects will require to be speeded up to meet the increasing coal demand in the coming years.

ii) Transportation bottlenecks persist in the movement of coal and are responsible for demand- supply mismatches and consequently for the mounting pithead stocks. Critical transportation bottlenecks have already been identified and railways must undertake work on such proposals on priority. The Ninth Plan thermal power plant locations are tentatively known and coal linkages would be required for these. Advance action would correspondingly be necessary for coal transportation linkages. Large scale beneficiation of non-coking coal can itself boost up the existing railways transportation capacities by at least 10% by reducing the ash contents of coal besides improving the performance of power plants.

iii) Progress in coal beneficiation projects has been tardy sand modification of existing washeries and setting up of modern beneficiation plants with private sector participation needs to be pursued more actively.

iv) Opening up of coal mining for private sector participation has been confined to captive mining. It is necessary to allow the private sector to participate in commercial coal mining under market oriented price structure if the increasing demand for coal has to be met in the coming years.

Table 6.7
Targets and Achievements in Capacity Additions in the Eighth Plan Period

(MW)

	8th Plan Target	1992-93 Actual	1993-94 Actual	1994-95 Actual	1995-97 Est.	8th Plan Feasible
Centre	12858	2475	2340	1531	2575	8921
State/UTs	14870	1044	2079	2357	4857	10337
Private	2810	18	120	710	624	1472
Total	30538	3537	4539	4598	8056	20730*

* This includes some of the projects which were not earlier included in the 8th Plan target. The present indications are that the actual capacity addition may range between 16500- 18000 MW during the Eighth Plan period.

v) The cumulative expenditure during the first three years of the Eighth Plan and the Plan outlay for the year 1995-96 will be Rs.10,320.21 crore which is 90.87% of the Eighth Plan outlay of Rs. 11,357 crore (including Rs. 850 crores as share of Andhra Pradesh Govt.). Based on the progress of various projects and other programmes, the coal sector may need 15% to 20% higher outlays than the approved Eighth Plan outlay mainly due to cost escalations in major ongoing projects. Coal companies would have to take more vigorous steps for increasing internal resource generation and market borrowing.

vi) A major review of coal production, pricing and transportation policies is called for the large growth in demand for coal in the Ninth Plan.

POWER SECTOR

Targets and thrust areas

6.56 The thrust areas in the 8th Five Year Plan in Power Sector are:

i) High priority has been accorded for renovation & modernisation of existing power plants for minimising technical losses and operational costs.

ii) Increasing the Plant Load Factor of the thermal power plants is to be treated as an over-riding priority for raising revenue as well as overall success of the Eighth Five Year Plan.

iii) To ensure speedy completion of ongoing projects in time so that the time and cost over-run of the projects can be restricted.

iv) Adequate provision has to be made for ensuring speedy completion of the externally aided projects.

v) The State Governments should endeavour to bring down the T&D losses during the year 1994-95 by providing adequate outlays for T&D schemes especially system improvement schemes aimed at reducing T&D losses.

vi) The State Governments should also raise agricultural tariff to a minimum of 50 paise per unit as per the consensus arrived at during the Conference of Power Ministers.

The Mid-Term review with respect to these objectives is given below.

Generation

6.57 The 8th Plan envisaged a power generation target of 450.21 billion kwh of which 418.21 billion kwh was targeted from utilities. The first and second year of the 8th Plan i.e. 1992-93 and 1993-94 achieved a generation of 301 billion kwh and 323.32 billion kwh respectively. For the year 1994-95 the target for generation has been fixed at 352 billion kwh. Against the targeted growth rate of 8.21% during the 8th Plan, the electricity generation during the first 3 years is likely to grow at a rate of 7.1% annually. If the same trend continues, then the generation from the utilities in

1996-97 may be of the order of 404 billion kwh against the target of 418.2 billion kwh from utilities i.e. a shortfall of 14.2 billion kwh.

6.58 Going by the present trends, the generation from the non-utilities, however, is expected to be 42 billion kwh in 1996-97 as against the target of 30 billion kwhs.

Capacity addition

6.59 Against the target of 30,538 MW capacity addition during the 8th Plan, the actual achievement during the first three years have been 12,674 MW representing 41.50% of the Plan target. The Table 6.7 indicates the targets and achievements in respect of capacity addition during the three years. (Details in Annex. 6.2).

6.60 The major shortfall in the Central Sector is mainly in the case of NTPC (1432 MW), NLC (450 MW), Tehri HEP (1000 MW), Ranganadi (405 MW) and Doyang HEP (75 MW) and in the State Sector, Sardar Sarovar (1200 MW), Sharavati Tail Race (4x60 MW), Thein Dam (4x150 MW), Maneri II (304 MW), Srinagar (165 MW) and Upper Indravati (600 MW). The main reasons for delayed/ critical projects are deficiencies in project management, problems related to externally aided projects, law & order problems and constraint of resources. The reasons for shortfall in the private sector projects like Pench (420 MW), Khaper Kheda (420 MW) and Chandil (500 MW) are due to delay in decision making by the State Government.

Power Supply Position - Increasing Shortages

6.61 At the beginning of the 8th Five Year Plan the energy deficit was 9% i.e. in the year 1991-92. With the capacity addition of 30,538 MW the anticipated power supply assessed by CEA indicate a peaking deficit of 20.7% and energy deficit of 9%. Based on the capacity addition of 20,730 MW, the anticipated energy and peaking shortage at all-India level would be higher than what were anticipated earlier.

Renovation & Modernisation (R&M) Programme

6.62 As a result of the R&M Phase-I programme taken up during the Seventh Plan, there has been considerable improvement in the PLF of thermal power stations and the actual achievement in PLF has been 61% during 1993-94. The Second Phase of R&M programme has also been initiated during the 8th Plan but the funding of the Second Phase, normally done by the PFC through loan assistance which is conditional on the concerned SEB fulfilling the OFAPs requirement. Many States have been facing problems in meeting the OFAPs conditionality. States are finding it difficult even to provide 30% of their own resources for R&M works in order to get 70% loan from PFC. PFC should develop a mechanism in order to provide more financial assistance to SEBs for taking up R&M programme. There is also need for providing soft loans to needy States which have inherent constraint and are unable to comply with OFAPs conditionality of PFC.

6.63 Similar programmes have to be taken up expeditiously for Transmission & Distribution works in order to reduce the T&D losses.

Share of hydel generation

6.64 Since the end of the 5th Plan, the relative share of hydel generation in the total installed capacity of the country has progressively declined. Taking into account the feasible capacity addition during the 8th Plan, the hydro share is likely to drop from 27.8% at the beginning of the 8th Plan to 25.7% at the end of the 8th Plan. The projects suffering due to constraint of resources in the Central Sector are Tehri (1000 MW), Ranganadi (405 MW), Doyang (75 MW), Koel Karo (710 MW), Rangit (60 MW) and in the State Sector Sardar Sarovar project (1450 MW), Maneri II (304 MW), Sharavati Tail Race (4x60 MW), Upper Indravati (600 MW) etc. Consequently, lack of adequate peaking support through hydel generation has adversely affected the utilisation of thermal power stations, especially in the north and eastern regions. It was in recognition of the need for accelerating the development of the hydro electricity that the 8th Plan specifically envisages that the relative share of the hydel generation in the total generation capacity in the country should be progressively increased to 40 per cent by the end of 9th Plan. This will call for advance action on many new hydel projects in the 8th Plan. Many of the projects are located in Arunachal Pradesh, Uttar Pradesh, Sikkim and Jammu & Kashmir. The finances of these States do not permit them to take up these projects on their own. The financial position of Central sector undertakings in the hydro-electric sector, viz. NHPC, NJPC, THDC and NEEPCO is also none too comfortable as to permit any expansion in their activities. If the hydel projects are to be developed

Table 6.8
Eighth Plan Projections of IR,ARM and Commercial Losses

(Rs.crore)

Period	IR	ARM	Com. Loss
1992-93	-2338.12	1232.09	[illegible]204.24
1993-94	-2743.94	1778.67	-5130.99
1994-95	-3082.46	2648.31	-5598.00
1995-96	-3212.35	3128.48	-7053.67
1996-97	-4449.84	3438.26	-8876.58
1992-97	-15826.71	12225.81	-30863.48

in these States, the Central Government will have to provide budgetary support to the Central sector undertakings. It should also be considered whether more than one such State can jointly set up new hydro-electric projects, the benefits from which could be shared among them and among the other States in the region in accordance with the existing formula.

6.65 Keeping the above problems in view, the time has come to give a fresh look into the inter-se priorities in the power sector. The trends in the private sector are to go in for more thermal power stations rather than hydel and transmission projects. In view of this, we have to provide more and more funds for hydro and inter-regional transmission projects in the coming years.

Financial Performance of State Electricity Boards

6.66.1 The Eighth Five Year Plan gives considerable importance to the task of improving the financial health of the State power utilities as a prerequisite for the successful implementation of the proposed power development programme. It was emphasised in this context that these utilities should generate adequate internal resources(IR) to be able to fully recover the fixed and operating costs, including interest and other liabilities, and leave adequate surplus for necessary addition in the installed generating capacity.

6.66.2 Most of the State power utilities however reported that they might not be in a position to revise or restructure the tariffs and generate enough IR. 9 of the 17 State Electricity Boards(SEBs)informed that, they were not having any programme for additional resource mobilisation (ARM) during 1992- 97. On the basis of this, the net internal resources, the commercial losses and the cumulative ARM of those SEBs which anticipated to revise the tariffs for 1992-97 were estimated as given in Table 6.8.

6.66.3 The large negative IR projected by the SEBs on the eve of the Plan does not appear to have been based on realistic assumptions. This has adversely affected the the overall power sector Plan outlays of most of the states. For example, 8 of the 9 SEBs which reported that they have no ARM programme during the 8th Plan period, in fact, revised the tariffs during the first two years of the 8th Plan and have targeted for further review in 1994-95, so that they could improve their IR and reduce the commercial losses substantially. The Table 6.9 gives the position.

Table 6.9
- Annual Plan Position of IR and Commercial Losses

(Rs.crore)

Year	IR	Com. Losses
1992-93	-66.79	-3343.09
1993-94	-1123.55	-4577.03
1994-95	-1322.78	-5755.12

6.66.4 In spite of the improvements in the financial position of the SEBs vis-a-vis the 8th Plan projections, their internal resources remain negative and they have large commercial losses. One of the main reasons for this stems from the compulsions of the SEBs to sell electricity at highly subsidised rates for pumpset irrigation and domestic use. The effective subsidy involved in the sale of electricity to these two categories of consumers is estimated at

Table 6.10
Cross Subsidisation of Electricity Tariff by SEBs

(Rs. Crore)

Year	subsidy to agri.& domestic	Cross subsidy from com.& ind.	Col.3 as % of Col.2
1992-93	8905	3606	40.5
1993-94	10358	4261	41.1
1994-95	12014	4500	37.5

Rs.8,905 crore in 1992-93, Rs.10,358 crore in 1993-94 and Rs.12,014 crore in 1994-95. More than 80% of this is on account of subsidised sales for pumpset irrigation. Even though there is a statutory provision for the SEBs to receive subsidy from the respective State Governments against subsidised sale of electricity, most of the State Governments do not actually pay subsidy but adjust the amount partially against the interest payable on loans. A part of the loss due to subsidised sale of power to agricultural and domestic consumers is recovered by the SEBs through cross-subsidisation of tariff on commercial and industrial sales. This, however, does not cover more than 40% of the total subsidy borne by the SEBs. The Table 6.10 clarifies the position.

6.66.5 In terms of Section 59 of the Electricity (Supply) Act, 1948 the SEBs are required to earn a minimum rate of return of 3% of their net fixed assets in service after providing for all expenses, including depreciation and interest charges. Nevertheless, the rate of return of the SEBs remained about (-) 13% during the last two years of the Plan. If the SEBs are in a position to financially break-even, they would be able to make an ARM of Rs. 4,329 crore in 1992-93, Rs. 4,980 crore in 1993-94 and Rs. 6,095 crore in 1994-95. If they achieve 3% ROR, the ARM that the SEBs would be mobilising works out to Rs. 5,411 crore in 1992-93, Rs. 6,071 crore in 1993-94 and Rs. 7,235 crore in 1994-95. During the current year, if the SEBs have to achieve break-even rate of return, they have to revise the tariff upward by about 26 paise/kwh and for achieving 3% rate of return they have to revise the tariff upward by 31 paise/kwh.

Plan outlays

6.67.1 The 8th Plan approved outlay for power sector is Rs.79589 crores representing 18.3% of total public sector outlay. This is comprised of Rs.31,181 crore for Central Sector and Rs.48,408 crore for States and UTs.

6.67.2 The internal resources of Central PSU,s projected for the Eighth Plan account for about 13 % of the outlay approved for the Central sector . The corresponding proportion in respect of extra budgetary resources is 59 % .

6.67.3 Gross Budgetary Support (GBS) amounting to Rs. 8902 crores accounts for about 29 % of the Central Sector outlay for power in the Eighth Plan . External Aid amounting to Rs.5461 crores accounts for 61 % of GBS .

PLAN EXPENDITURE DURING THE FIRST THREE YEARS OF THE EIGHTH PLAN

Analysis of plan expenditure on the basis of actuals for 1992-93 , Revised Estimates for 1993-94 and Revised Estimates for Central Sector and approved outlays for States /UT's for 1994-95 revealed the following:-

Central Sector

6.68 The expenditure on power in the Central Sector during the first three years of the Eighth Plan accounted for only 47% of the approved Eighth Plan outlay at constant prices in the Central Sector as against the expected level of 60% in prorata terms.

6.69 The generation of Internal Resources in the Central Sector at constant prices during the first three years of the Eighth Plan constituted only 42% of the projection as against 60% in prorata-terms. Mobilisation of resources by way of bonds accounted for 35% of the projections at constant prices as against the expected level of 60% in prorata-terms during the same period. Considering the market borrowings constitutes about 42% of the total outlay approved for power in Central Sector during the Eighth Plan, the wide gap between projection and actual mobilisation of resources through bonds is a matter of concern. Gross Budgetary Support (GBS)

6.70.1 As against the amount of Rs. 5461 crores of external aid through budget projected for the Eighth Plan, the estimatedamount for the first three years of the Plan works out to about 80% of the projections at constant prices as against the expected rate of 60% in prorataterms. Thus the utilisation of external aid, which forms part of Gross Budgetary Support, exceeded the projections in prorataterms during the first three years of the Eighth Plan.

6.70.2 The estimated Net Budgetary Support (GBS - External aid) during the first three years of the Eighth Plan accounted for about 59% (at constant prices) of the approved amount of Rs. 3441 crores.

State Sector

6.71 The approved outlay for the States and UTs for the power sector in the 8th Plan amounts to Rs.48,408 crores which accounts for 26% of the total Eighth Plan outlay inrespect of States and UTs. During the first three years of the Eighth Plan expenditure on power in States and UTs accounted for about 43% of the approved outlay at constant prices. The major shortfall was noticed in the States of Assam, Bihar, Haryana, Madhya Pradesh, Orissa, U.P. and West Bengal. The area most effected by this short fall has been transmission and distribution.

Nuclear Power

6.72.1 At the beginning of the 8th Plan, the installed capacity of nuclear power projects was 1500 MWe. During the 8th Plan a capacity of 1100 MWe, comprising Kakrapar (2x220 MWe), Rajasthan APP Unit-3 (220 MWe) and Kaiga APP (2x220 MWe) from ongoing projects was targeted. One unit of Kakrapar 220 MWe was synchronised in 1993- 94 and the second unit was synchronised in 1994-95 taking the total installed capacity to 1940 MWe which is 2.2% of the total installed capacity in the country i.e. 76718 MW. The balance 880 MWe from Kakrapar (Unit 2), Kaiga (Unit 1&2) and RAPP (Unit 3) is programmed for commissioning during the remaining period of the 8th Plan.

6.72.2 The performance of nuclear power stations in the 8th Plan has been unsatisfactory. The average PLF of existing nuclear power stations has decreased from 55% in 1992-93 to 37% in 1993-94. In 1994-95, the PLF has been only 37.2% as against the targeted PLF of 51.3% for the same period. Cost of generation has also turned out to be high.

6.72.3 The approved outlay for Nuclear Power in the Eighth Plan is Rs.4261 crore. The likely expenditure, at constant prices,in the first 3 years of the 8th Plan is 42 percent of the approved outlay as against the prorata level of 60 percent. In the first 3 years of the 8th Plan NPC has not generated any internal resources. As against the projected level of Rs.761 crore of NBS for the 8th Plan, the latest estimate for the first 3 years amount to NBS of Rs. 637 crore at constant prices i.e. 83.7 percent materialisation.

Private sector proposals

6.73.1 Out of the total capacity addition of 30,538 MW envisaged in the 8th Plan, the contribution of the private sector was expected to be 2810 MW from approved and new projects in the pipeline. Against this, the feasible capacity addition during the 8th Plan is of the order of 1472 MW. Thus, there will be a shortfall of 1340 MW during the 8th Plan. On many of the private power projects like Pench (2x210 MW), Khaperkheda (2x210 MW), Chandil (2x250 MW), NLC Zero Unit (1x210 MW) and Rajasthan Lignite (2x120 MW), no starts have been made so far due to various reasons.

6.73.2 As of now, both domestic and foreign parties have expressed interest in setting up total generation capacity of 39,478 MW at an estimated cost of Rs.145501 crore at 86 locations. All these proposals are at various stages of discussion. In most cases, Power Purchase Agreements (PPAs) are yet to be finalised in consultation with the SEBs. Finalisation of PPAs is a pre-requisite to firming up financing arrangements for these projects.

6.73.3 While there is need to expedite processing of these proposals, many foreign investors are still apprehensive of the SEBs being able to pay regularly for the power purchased by them from private generating stations. While sovereign guarantees provide a short-term solution to this, there is no escape from the fact that the SEBs should improve their own financial health to be able to absorb the costly power that the private generators are going to provide. The following issues may also have to be considered.

i) The necessity of adopting competitive bidding procedure to minimise the costs.

ii) The need to pose only fully investigated projects for private sector participation to enhance credibility of the scheme.

iii) Instead of restricting private sector involvement in coal mining to only captive mine development, a more liberal approach for private participation in mining including the right for direct sales may have to be considered.

Mid-Term Approach for Power Sector

6.74 Some of the important issues emerging from the Mid-Term Appraisal of the Power Sector are given below.

a) In the light of the economic reforms taken up in the country, the power sector should also have to undergo necessary restructuring by suitably amending the Electricity Act. The main objectives in this connection would be to restore the autonomy of the power utilities, to convert a portion of the loan capital into equity and to create an environment to enable the SEBs to function as a commercial organisations. This would enable the existing public utilities to improve their performance and also encourage the increased participation of private sector.

b) As far as the financial performance of the SEBs are concerned, a number of SEBs are showing negative rate of return and on an average there was a commercial loss of Rs.6000 crore per annum mainly due to the low tariff rate prevailing in the agricultural sector. Out of the total sale to the agricultural sector at subsidised rates, only 37% of the cost of supply was being recovered through cross subsidisation. Unless the tariff is revised suitably and non-agricultural load in the rural areas are developed, it would be extremely difficult for the States to make payment for the bulk purchase of power from the private investors, in other words, the larger the quantity of power purchased from private generators the bigger will be the amount of subsidy payable to the SEBs and the counter guarantee given by the Central Government is likely to be involved if the State Govts. are unable to meet the rising subsidies to enable the SEBs to pay for the purchased power. This, in turn, would affect the State Plan and non- Plan expenditure from other sectors including the social sectors. The subsidy being given to the agricultural sector thus has to be gradually reduced and the electricity tariff should be suitably revised so that SEBs could generate internal surplus.

c) The outstanding dues of the order of Rs.8,500 crore as on June, 1994 payable to various Central PSUs have to be liquidated before the power becomes available from the private sector; otherwise it would be difficult for the States to pay for their outstanding dues to PSUs as well as for the power to be purchased from private investors, for which Government of India had agreed to give counter guarantee through Central appropriation.

d) For future power projects in the private sector competitive bidding should be resorted to and no guarantees need be given but finances of SEBs should be improved.

e) Public Sector Undertakings should be given equal opportunity to raise funds from domestic as well as international market depending upon their credit rating.

f) Many nuclear power projects are uneconomical as they have long gestation period of 10-12 years and the unit cost in terms of per MW and cost of generation was comparatively much higher in the case of nuclear power projects than that of coal based power generation. Instead of taking up new nuclear power projects, efforts should be made to complete the critical ongoing hydro projects so as to improve the hydro thermal mix by the turn of the century.

g) Plan funds should be reprioritised and adequate priority has to be given to hydro development.

h) The T&D network need to be given higher priority in order to evacuate the power to be made available from private investors. GOI should also formulate policy guidelines for private investment in T&D so as to reduce the burden on States' own resources.

RURAL ENERGY

6.75 Rural Energy Sector includes the programmes of Rural Electrification and New and Renewable Sources of Energy (including Integrated Rural Energy Programme).

6.75.1 The Rural Electrification Programme consists of village electrification and pumpset energisation. At the end of the Seventh Plan, around 90,000 villages were left out to be electrified and out of the total estimated potential of 145 lakh pumpsets, around 45 lakh pumpsets were to be energised in the country. Based on the likely availability of financial resources, the Eighth Plan targets were fixed to electrify 50,000 villages (including 10,000 remote villages to be electrified through decentralised and non-conventional energy sources) and to energise 25 lakh pumpsets. An amount of Rs. 4,000 crore was allocated for Eighth Plan to carry out the above works.

6.75.2 The mid-term review indicated that around 11,000 villages would be electrified and 11.65 lakh pumpsets would be energised in the first three years of the Plan. Thus , a major part of the Eighth Plan targets are to be met during the remaining two years of the plan.

6.75.3 Rural Electrification Corporation (REC) under the administrative control of Ministry of Power is the financial agency which is funding the major part of the RE programme in the states. REC is making efforts in mobilising the funds from the market and also to improve its internal resource generation of their own. Besides. REC is taking necessary steps to collect their outstanding dues from the State Electricity Boards and also approaching Govt. of India to reschedule their loans taken from Govt. of India. Further, REC is co-ordinating with the other concerned Ministries like Ministry of Non-Conventional Energy Sources and Ministry of Rural Development in implementation of the rural electrification programme. This is with a view to develop and promote de-centralised energy options and also to utilise the available resources in an optimal manner.

6.75.4 In this context, it would be advantageous to adopt a new approach for mitigating the shortage of power and, by encouraging private entrepreneurs to set up their own power stations even with low capacities in the range of minimum of 1 MW and above. For this purpose, SEBs should come forward with public announcements to purchase the power from whatever sources of primary and non-conventional sources at the avoided cost of their own power generation. This would help the prospective private sector entrepreneurs to clearly evaluate their investment options.

New and Renewable Sources of Energy

6.76 The thrust areas for development of New and Renewable Sources of Energy (NRSE) during the Eighth Plan period were as under :

i) Operational programmes of biogas, improved chulhas, low grade solar thermal devices would be enlarged and intensified so as to meet a significant proportion of cooking and heating needs in the country especially in the rural areas.

ii) Atleast 750 to 1000 MW of power capacity would be installed on the basis of NRSE technologies of wind energy, micro hydel, urban / agricultural wastes, solar photovoltaics and also cogeneration programmes wherever feasible.

6.76.1 An amount of Rs. 857 crore was approved as outlay under the central sector programme to install 7.5 lakh Nos. biogas plants, 100 lakh Nos. improved chulhas, setting up power generation projects of 100 MW through wind farms, 300 MW through utilisation of urban/agricultural waste, 200 MW through micro hydel, 1720 KW through SPV systems and other programmes including SPV lighting systems, SPV pumps, wind pumps, solar cookers, and other non- conventional energy programmes.

6.76.2 MNES had, howevever, formulated a strategy and action plan to implement a larger programme with revised goals different from that of the originally fixed Eighth Plan targets. Achievement of these targets mainly depends upon the effective steps to be taken by MNES on market oriented approach as well as the success of the role to be played by private sector in the coming two years of the Eighth Plan.

6.76.3 The physical achievements during the first three years for the socially oriented programmes have been as follows :

	Target for 1992-97	Achievement 1992-95
Biogas Plants	7.5 lakhs	6.03 lakhs
Improved chulhas	100 lakhs	70 lakhs
Solar cookers	3 lakhs	1.28 lakhs

Wind Power

6.77 In the wind power programme against the target of 100 MW including private sector the achievement during the first two years was 73.77 MW. The implementation of demonstration projects by states was not encouraging. However, private sector participation is encouraging. During the first two years wind power projects amounting to a capacity of 69 MW were taken up under private sector. Private sector projects have gained momentum in Andhra Pradesh, Gujarat and Tamil Nadu. Except Madhya Pradesh other states are either yet to announce or modify existing promotional policies as per MNES guidelines.

Biomass, Solar Cookers and others

6.78.1 In the biomass based co-generation programme, against the Eighth Plan target of 300 MW the achievement during the first two years was only 6 MW. During 1993-94 MNES has launched a national programme for co-generation in sugar industries. The response from the sugar mills is not yet very encouraging. The major constraints are non-availability of capital with the industries for putting up co-generation plant in the existing sugar mills, lack of proper policies in the states facilitating wheeling of surplus power, banking and buy-back of power generated by the co-generating industries and non- remunerative payment for power exported by the co-generators.

6.78.2 In order to meet the targets proposed in their new strategy and action plan MNES is giving thrust for market orientation and commercialisation while simultaneously promoting private sector participation.

Small Hydro

6.79 The progress of small hydro programme has been somewhat slow. Against the Eighth Plan target of 200 MW including in the private sector, achievement during the first two years was only 17.37 MW. The implementation of subsidy based projects by States was not encouraging. The allotment/clearance of private sector projects was also slow. The problems and constraints were mainly institutional and operational in nature. Inadequate state plan allocation, lack of coordination among the agencies, low priority by SEBs, lack of clear policy for private sector participation are some of the constraints.

Indian Renewable Energy Development Agency

6.80 The Indian Renewable Energy Development Agency (IREDA) came into existence on 11th March, 1987 with the main objective to operate a Revolving Fund for developing, promoting and commercialisation of technologies relating to New and Renewable Sources of Energy (NRSE) through providing soft term finances. IREDA has now assumed global dimensions with assistance received from the Govt. of Netherlands, Line of credit from World Bank and with assistance in the pipeline from DANIDA, ADB etc.

6.81 The review of the Non-Conventional Energy Programmes on completion of the first two years of the Eighth Plan reveals that the progress in respect of the socially oriented programmes like biogas, improved chulhas, solar cookers, solar PV programmes for lighting in villages etc. is satisfactory and the Eighth Plan targets are likely to be achieved. However, the progress in the case of the programmes for power production through non-Conventional Energy Sources has not been very good so far. The achievements in the first two years are limited to only 100 MW as against the Eighth Plan target of 600 MW.

6.82 The economics of decentralised power generation needs to be evaluated with reference to the delivered cost of grid electricity vis-a-vis local generation cost. Cost of grid electricity would include not only the generation cost but also the actual transmission & distribution cost including the T&D losses. Decentralised power generation cost, on the other hand, will include a possible higher capital cost but low or nil fuel cost and also low distribution cost. A proper comparison of these relative costs of electricity at the consumer end is necessary to evaluate different options for non-conventional energy programmes for power generation. Ministry of Non-Conventional Energy Sources (MNES) after realising the constraint of funds to be provided through Govt's budgetary support and also taking into account the vast potential of non-conventional Energy Sources available for large scale power generation, has formulated a strategy and action plan with revised goals to achieve as high as 2000 MW of power generating capacity in the Eighth Plan. This action plan is based on the new strategy for market development and commercialisation. It is expected that a suitable policy environment and support for market mechanisms would lead to increased participation of the private sector in the production and utilisation of non-cnventional energy devices.

Integrated Rural Energy Programme (IREP)

6.83.1 IREP, which was earlier implemented by Planning Commission, had since been transferred to the Ministry of Non-Conventional Energy sources(MNES) with effect from 1.4.94 onwards. The Central sector outlays provided for IREP are utilised in creating capabilities for setting up planning cells in the states in their selected blocks. These funds were utilised in meeting the expenditure on staff component of IREP as well as their training. The states are providing funds for IREP for actually implementing the programme by providing the energy devices like biogas plants, improved chulhas, solar cookers etc.

6.83.2 For proper upkeep and maintenance of the energy devices, technical back up units are set up both at the state level and district level. So far 17 state level and 122 district level technical back up units have been set up. A National Training Centre has been set up in Delhi and Regional Training-cum-R&D Centres are in the process of being set up in Bangalore (Karnataka), Lucknow (U.P.), Kheda (Gujarat) and Shillong (Meghalaya).

6.83.3 An amount of Rs. 85 crore was approved under central sector as the outlay for Eighth Plan taking into account the resource constraint. A target to cover at least 100 blocks during each year of the Eighth Plan with atleast one block in each district, was fixed. The state sector outlay for IREP for Eighth Plan was approved as Rs.82.03 crore.

Mid-Term Approach for Rural Energy

6.84 Some of the important issues that emerge from the Mid-Term Appraisal of the Rural Energy Sector are given below.

i) The left out villages to be electrified during the remaining years of the Eighth Plan are mostly confined to the states of Uttar Pradesh, Bihar, Madhya Pradesh, West Bengal, Orissa, Rajasthan and some of the North-Eastern States. These states by and large are facing financial difficulties and thus are neither able to meet their rural electrification targets on their own nor able to absorb funds from the Rural Electrification Corporation (REC) in the form of loans. State Govts. should help their SEBs in clearing their arrears with REC and pave way for smooth flow of funds from REC to the SEBs.

ii) In order to strengthen the financial position of the SEBs measures like increasing the tariff of power supply to agriculture is to be implemented. As per the decision of Power Ministers Conference a minimum agriculture tariff of 50 Ps./kwh has to be adopted by all SEBs. Alternatively the state Govts. should fully subsidise the financial losses arising out of Rural Electrification to the SEBs.

iii) As the leftout villages to be electrified are located mostly in far-flung and remote areas with very little scope for load development, it is necessary to electrify some of these villages through decentralised and non-conventional energy sources. The decentralised energy sources would include mini/micro hydels, wind energy, solar photovoltaics, biomass based power generation sources etc. In order to achieve these objectives an effective and close coordination among the various concerned ministries/agencies like Ministry of Power, Ministry of Non-Conventional Energy Sources (MNES), Rural Electrification Corporation (REC), Energy Development Agencies of the States etc. is necessary. It is also necessary to properly evaluate the relative costs of grid supply of power and decentralised power generation to evolve an optimum programme.

iv) The major expansion of the non-conventional energy programme for the future is being envisaged through a new strategy and action plan in which the new approach would direct a shift from state supported development followed so far to market orientation and commercialisation. This approach would meet its objectives only if suitable financial and fiscal incentives are given by Govt.

v) A rational energy pricing policy for non-conventional energy programmes that also takes into account the environmental costs and benefit of non- conventional energy options is to be adopted. Attractive buy back arrangements with provisions for wheeling and banking the power produced through non- conventional energy sources by the state power utilities would enable the entrepreneurs to risk their limited resources to be invested in this sector.

vi) The Indian Renewable Energy Development Agency (IREDA) which had been set up as a financial agency mainly for promotion and development of new energy technologies, is proposed to be used as an executive agency for NRSE programmes. The coordination arrangements of IREDA vis-a-vis state energy development agencies implementing NRSE programmes need to be strengthened. Besides, in order to ensure that the non-conventional energy programmes are broad based and their impact appropriately multiplied, the linkages of NRSE programmes with the operational programmes of other user sectors in the rural as well as urban areas need to be worked out in detail and appropriately formalised.

ENERGY CONSERVATION PROGRAMME

6.85.1 Energy conservation was taken up as a major thrust area in the Eighth Plan and in this context a National Energy Efficiency Programme (NEEP) was taken up. The main features of the NEEP in the Eighth Plan are:

i) Saving of 5,000 MW of installed capacity for power generation in electricity sector and an annual saving of 6 million tonnes of petroleum products in the oil sector by the terminal year of the Plan, i.e. 1996-97.

ii) This saving is to be achieved in the four major sectors of the economy namely, industrial, agriculture, transport and domestic from both the demand and supply sides in the two main energy supply sectors i.e. power and petroleum.

6.85.2 NEEP is to include different components like a policy package, necessary financial arrangements including creation of a revolving fund, appropriate legislation, development of institutional capabilities, etc. in order to achieve the targets indicated above. The Ministry of Power and the Ministry of Petroleum & Natural Gas have developed some action plans for achievement of these targets. The energy conservation potentials in the industry, agriculture and transport sectors have been identified to be of the order of 25-30%, 30% and 20% respectively. In the absence of appropriate policy package, legislative framework and institutional set-up these potentials are not likely to be realised.

6.85.3 Unless a comprehensive approach is adopted, the potentialities of energy conservation on the supply side as well as on the demand side will continue to remain untapped. The Ministry of Power has the overall responsibility relating to energy conservation. The Mid-term review has brought out that it is necessary to have an effective framework and to set up an Energy Conservation Authority with necessary statutory powers, if we are to achieve any significant success in realising present energy conservation potentials. It is only such an organisational set-up with legislative backing that can take up the task of formulating the policy packages, the financial incentives as also necessary programmes and projects relevant for different supply and end-use sectors

SECTION - 2

TRANSPORT

6.86 The sluggish growth in the Industrial, including Mining, sector of the economy in the first two years of the Eighth Plan had an adverse impact on the performance/output of the main surface modes of the Transport, namely, Rail and Road. While the overall industrial growth rate in 1992-93 was 2.3 %, the growth rate of the manufacturing sub-sector was of the order of 2.2 % only; and that of the Mining sector 0.6 %. In 1993-94, there was a slight improvement, and the manufacturing sub-sector growth rate went up to 3.6 % while the Mining sub-sector grew at 2.5 %. In 1994-95, there was a revival in the economy.

RAILWAYS

6.87 It has been recognised that Railways are energy efficient and eminently suited for movement of freight traffic over medium and long distances and hence it is desirable that a major part of such traffic should move by rail. The 8th Plan accordingly laid emphasis on improving, inter alia :

(i) The carrying capacity of selected sections of the Railways.

(ii) The operational efficiency and commercial practices of the Railways.

(iii) Linkages with road transport at loading and unloading centres.

6.87.1 The strategy and broad objectives of the 8th Plan include completion of the process of rehabilitation, replacement and the renewal of overaged assets, improved methods of maintenance, augmentation of line, terminal and rolling stock capacities, conservation of energy through technological upgradation and steps to improve overall efficiency and to reduce operation costs.

Review of performance in 1992-93 and 1993-94

6.88.1 The performance of Railways in terms of originating tonnage and freight traffic has fallen short of expectations in the first two years of the 8th Plan as may be seen from Table 6.11

6.88.2 Achievement in respect of passenger traffic has also been significantly less than targets. If the trend in the first two years is any indication, the 8th Plan target of 37,774 Crore passenger Km (CPKm) would remain a distant goal. Table 6.12 brings out this position.

6.88.3 The sluggish growth in freight traffic in the first two years of the Plan should be seen in the context of the overall sluggish growth of the industrial (including mining) sector. The decline in traffic in 1993-94 occurred in respect of almost all major commodities except coal (Details are in Annex. 6.3). The largest shortfall was in respect of fertilizers (-29.0

Table 6.11
Growth of Cargo Traffic

	1991-92	8th Plan	1992-93		1993-94		1994-95
	Actual	Target	B.E.	Actual	B.E.	Actual	B.E.
Revenue-earning Traffic							
a) Originating Tonnage (Lakh Tonnes)	3379.8	4184.0	3540.0	3500.5	3700.0	3587.0	3800.0
b) Traffic carried (Crore tonne k.m.)	25024	31380	26133	25239	27241	25241	27373
c) Average lead (km)	740	750	738	721	736	709	720

Table 6.12
Growth of Passenger Traffic

	1991-92	8th Plan	1992-93		1993-94		1994-95
	Actual	Target	B.E.	Actual	B.E.	Actual	B.E.
Passenger Traffic							
a) Suburban							
i) No. of Passengers (Crore)	243.56	269.40	254.02	229.75	258.36	239.14	243.92
ii) Passenger k.m. (Crore k.m.)	6354	7543	6573	6055	6623	6560	6691
b) Non-Suburban							
i) No. of Passengers (Crore)	163.71	177.80	174.07	146.72	160.31	145.56	148.49
ii) Passenger k.m. (Crore k.m.)	25117	30231	26029	23966	26042	23556	24027
c) Total							
i) No. of Passengers (Crore)	407.27	447.20	428.10	376.48	418.68	384.72	392.41
ii) Passenger k.m. (Crore k.m.)	31472	37774	32602	30020	32665	30500	30718

Lakh Tonnes). This is directly related to a substantial fall in the production of fertilizers. The static level of movement of iron ore for exports at 110.0 lakh tonnes in 1992-93, and 104.6 lakh tonnes in 1993-94 as against the targets of 150 lakh tonnes and 120 lakh tonnes respectively, and the shortfall in the foodgrains movement by rail despite a bumper harvest in 1992-93 are a matter of concern.

6.88.4 Apart from a decline in the production of some commodities, one of the reasons for the Railways not being able to realise the target seems to be the increasing share of Road Transport in the movement of certain commodities like fertilizers, cement and raw materials. In the case of general merchandise, it is predominently carried by road even for medium and long distances because of users' preferences. The Core sector commodities and foodgrains account for 90.9% of the goods carried by Railways at present. There is an imperative need to transport more and more goods in the general category (i.e. other than the core sector commodities like coal, steel, cement etc.) for long distances. Railways have to make special efforts towards this objective. This is necessary to reduce overall transportation costs and also to contain if not reduce consumption of petroleum fuels. Expansion of the bi-modal container freight service system appear to be one of the answers to this problem.

Capacity augmentation and replacement of overaged assets

6.89.1 The Railways have made considerable progress in removing capacity constraints on heavy density routes and augmenting the rolling stock to meet the traffic demand. They have already made investments on 3rd line segments in two heavily concentrated routes: Sonnagar-Mughalsarai on Eastern Railway and Bilaspur- Akaltara on the South-Eastern Railway. The large scale gauge conversion programme currently under implementation would further improve line capacity of Indian Railways. Railways are also going in for high capacity freight locos to be deployed on trunk routes.

6.89.2 Replacement of overaged assets is as important for such a large network as adding to capacity. At the beginning of 8th Plan, the arrears of track renewal stood at 9,600 Km. including 4,600 Km on BG. Taking into account renewals becoming due during 8th Plan, total length of track due to renewal would be 18,000 Km. Primary, or complete renewal of MG track would not be necessary because of

Table 6.13
Percentage increase in Working Expenditure and Traffic Revenue

	1992-93	1993-94	1994-95	
			BE	RE
Working expenses	13.80	12.17	13.20	10.97
Passenger fare revenue	17.10	12.74	5.61	10.52
Freight revenue	15.20	17.10	11.37	9.10

the large scale conversion programme and hence the Railways estimated the requirements in the 8th Plan at 12,500 Km. including 1,250 Km of secondary renewal of MG track. In the first two years, 5,358 Km. of track have been renewed and the target for 1994-95' is 2,400 Km. Track renewal is thus proceeding as per schedule. Rehabilitation of bridges, however, needs to be reviewed. At the beginning of Eighth Plan, rehabilitation of 600 bridges (including 130 distressed bridges) was in progress; during the Plan period arisings of distressed bridges is estimated to be 500. There is need to accord priority to rehabilitation of all distressed bridges during the Plan period itself.

6.89.3 Under 'Rolling Stock', the percentage of overaged locos is negligible. However, the percentage of overaged BG coaches and wagons was 10 percent and 7 percent respectively in the beginning of 1993-94. This has to be susbstantially reduced and Railways have to provide sufficient funds for this purpose. The spillover works as replacements under 'Signalling and Telecommunication' is of the order of Rs.355 crore. About 50 percent of the signalling and safety gears, of which nearly 20 percent are on the core heavy-density routes, are overaged, i.e. more than 25-30 years old. The allocations of funds under this head needs to be stepped up substantially in order to clear the backlkog of outdated equipment. Similarly, replacement of overaged equipment in Workshops has to be completed since otherwise it will adversely affect the performance of rolling stock.

6.89.4 On the whole, the provision made by the Railways for replacement of overaged assets are as per requirements, though there is a need for stepping up of allocation of funds and speedy implementation in certain areas like S&T, workshops and distresed bridges.

Operational Efficiency

6.90.1 In the last decade, the efficiency index in respect of freight traffic, Net-Tonne Kilometers (NTKm.) per wagon per day, had improved substantially. This is, to a great extent, due to the improvement in wagon design. However, the mobility of average wagon has not improved significantly. On an average, a wagon still moves about 5-6 hours a day only, covering a distance of about 110 Km.a day. In other words, the average wagon tends to idle at both loading and unlaoding terminals for 4-5 days and also enroute. This is a major reason why the eficiency index of wagon utilisation has not improved between 1988-89 and 1992-93. Unless the Railways take necessary steps, to improve wagon mobility and utilisation on a priority basis, 8th Plan target of 1,750 NTKm.per wagon per day cannot be achieved.

6.90.2 In the context of improving overall operational efficiency, it is also important that the maintenance and back-up facilities including workshops, plant and machinery etc. are modernised so that on-line failures of rolling stock etc. could be minimised. Any additional investments that may be required for this purpose would be well worth undertaking.

6.90.3 In the first three years of the Plan, the increase in working expenses has been sought to be met by increase in tariff (freight and passenger). The percentage increase in working expenses and traffic revenue are indicated in Table 6.13.

Table 6.14
Physical Targets & Achievements

Asset	Target	Achievement
1. Track Renewal (in kms)	5370	5752
2. Rolling Stock		
(a) Locos (Diesel & Electric)	596	615
(b) Coaches (including EMUs)	5036	5148
(c) Wagons	45500	45778

6.90.4 It may be noted that substantial increase in passenger revenue in 1992-93 occurred despite a fall of 4.6% in total passenger kms. (PKM) in that year, indicating a fairly steep increase in passenger fares, mainly of the upper class. In 1993- 94, the increase was not as high as in the previous year, though total PKM improved by 1.6%. In 1994-95 total PKM is expected to increase by about 1% and yet, the passenger earnings are expected to rise only by 5.6%. This shows that since last year, Railways are intending to keep passenger fare hike at a moderate level. The implication of this is that the burden of increasing working expenditure will more and more fall on the freight traffic and freight charges will have to be increased more than proportionately. This may not augur well for Railway's freight traffic which is increasingly facing competition from Road Transport. It is, therefore, necessary that suburban railway traffic as well as second ordinary and mail/express traffic, which operate on heavy losses to the Railways, bear a fair proportion of increasing costs (working expenses.)

6.90.5 An increase in input cost of 7 to 10 % in 1995-96 and 1996-97 would appear to be in order and the moot question that the Railways have to face is the extent to which their prices can be increased further. As to passenger traffic, the Railways' documents indicate a loss of around Rs.1,884 crore on "Coaching Services" in 1993-94 of which at least. Rs.1,400 crore could be attributed to passenger services alone. While it is generally accepted that the long distance Express services, and even Bombay Suburban traffic are not run at a loss, it is the short distance passenger traffic which drains railway's resources. The railways have not been able to push through any price increase in this losing segment of passenger traffic.

6.90.6 In the area of freight, about 85 % of traffic carried by the Railways consists of basic raw materials and essential foodgrains and also inputs for Agriculture and Industry. An increase in the freight charges of essential inputs would have an immediate impact on industrial product prices. With increasing competition from the trucking industry there is a real danger of the Railways losing such traffic if further price increases were to be introduced. Again, the Railways are hamstrung in not being able to raise the freight charges on certain essential commodities like foodgrains, or for the matter salt and lately even fertilizers - these commodities are being carried at subsidised rates.

6.91 The Railways' Plan investments need to be viewed at, broadly, from the need to add capacity which again has a long gestation period, the need to technologically upgrade and introduce energy efficient traction and at the same time go in for the replacement/renewal of physical equipment in the various areas of Railways' working. As to increase in capacity, the Plan lays considerable emphasis on improvement in productivity; and the composite index in this regard is the net tonne kilometers earned per wagon day. To arrive at the target of 1750 NTKMs in the terminal year of the Eighth Plan as compared to 1439 NTKMs in 1991-92 is a daunting task. The actual achievements in the first two years of the plan were 1457 and 1475 NTKMs respectively. All-round system improvement coupled with investment for creating matching facilities in various areas is necessary; or in other words, the strategy is to be oriented towards a more intensive utilisation of and improvement in the reliability of all equipment which goes into railways working rather than adding to the numbers of these assets. Much remains to be

Table 6.14
Physical Targets & Achievements

Asset	Target	Achievement
1. Track Renewal (in kms)	5370	5752
2. Rolling Stock		
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(b) Coaches (including EMUs)	5036	5148
(c) Wagons	45500	45778

done; the NTKMs achieved is behind anticipated trend. The achievements in respect of assets in the first two years of the 8th Plan is along the anticipated lines as shown in Table 6.14. Investment expenditure in regard to externally aided projects is almost in line with the outlay.

6.92 However, in the matter of initiating technological upgradation, the progress remains slow. After the lapse of almost two-and-a-half years of the Plan, the Railways have indicated their acceptance of higher 'standards' for heavy axle-loads, upgrading of bridges, locomotives etc.; but the translation of these into an action-oriented systems-upgrading programme remains somewhat elusive. The fear is that the new assets which will be acquired in the remaining years of the Eighth Plan will continue to be technologically out-dated.

6.93 The Plan investments of the Konkan Railway Corporation (KRC) were taken into account commencing Annual Plan 1993-94. In that year, the KRC raised bonds to the extent of Rs.454.74 crore. In 1994-95, KRC raised Rs.698 crore. The Konkan Railway Project is expected to commence operation by December 1995. Similarly, Container Corporation of India (CONCOR)'s Plan investments were taken into account from 1994-95.

6.94 As on 1.4.1995, the spillover requirements for projects in five major areas, viz: New lines, Gauge Conversion, Electrification, Doubling and Workshops have been estimated to be about Rs.8,500 crore. With new projects already sanctioned/being sanctioned during 1995, the spillover requirements are expected to be still higher in the next year. In view of the resource crunch, it is necessary to prioritise these projects, taking into account among others gestation period, economic viability etc.

6.95 The Railways have made efforts to encourage private sector investments to supplement their own resources. The leasing of rolling stock and equipment by the PSUs, the IRFC and CONCOR, is a pointer to the potentialities of the private sector participating in a similar manner. Scope for private sector investment exists in the supply and marketing of such services to the Railways as Overhead Electrification, Communication, Terminal facilities including cargo handling equipment, etc. Railways have already identified projects under various heads of development for private participation. Tenders for a number of projects have already been issued. However, Railways are yet to formulate a comprehensive policy statement laying down the opportunities, obligations and the legal frame work in which the private sector could be expected to play a role.

Externally Aided Projects

6.96 Presently, there are 3 multilateral and 3 bilateral ongoing externally-aided projects in the Railways, as shown in Table 6.15. All these projects are expected to be completed in the Eighth Plan period and external aid is likely to be utilised fully.

Problem of Time and Cost Over-runs

6.97 Railways have a large shelf of ongoing projects of new lines, electrification, gauge conversion, doubling etc. The spillover requirements of funds have been estimated to add up to around Rs.11,000 crore. Some of these projects have been pending completion for a number of years. The main reason for this is taking up of many projects without proper prioritising and spreading the limited resources over a number of projects. It is, therefore, necessary to be highly selective in taking

Table 6.15
Progress of Externally Aided Projects

Name of the Project	Estimated Cost	Total drawal of aid upto 1993-94	Provision in 1994-95 (Rs.crore)	
			Total	External Aid
Multilateral				
1. Rly. Modernisation Project (World Bank)	EA $ 260 M. DC Rs.500 Cr. (Approx.)	$212 M	81.8	45.0
2. First Rly. Project (Electric Locos etc) (ADB)	EA $ 190 M DC Rs.60 Cr.	$ 23.75 M	36.12	26.0
3. Second Rly. Project (Electrification) (ADB)	EA $ 117.7 M DC Rs.120 Cr.	$ 7.13 M	199.4	195.0
Bilateral				
4. UK Grant '90 (Equipment)	EA: Pound 40 M	Pound 17.2M	12.1	6.5
5. OECF/Japan (Workshop Modernisation)	EA: JY 1256 M	-	12.9	6.9
6. Swiss Credit (Turbo Chargers)	EA: SF 7.4 M	-	8.9	4.8

M stands for million.
Cr. stands for crore.

Table 6.16
Outlay and Expenditure

	Outlay (Rs.crore)	Expenditure (Rs.crore)
Eighth Plan (1992-93 to 1996-97)	27202 @	
1992-93	5710 *	6162 *
1993-94	6900 **	6600 (RE)
1994-95	7149	6889

@ This figure does not include outlays of the PSUs - CONCOR and KRC

* including Konkan Railway Corporation (Rs.400 cr.)

** including Konkan Railway Corporation (Rs.450 cr.) and Container Corporation of India (Rs.184 cr.)

Table 6.17
Financing Pattern of Railways Plans

(Rs.in crore)

Plan outlays	Eighth Plan (1992-97)	1992-93	1993-94	1994-95
Budgetary Support	5375	1935	960	1150
Bonds	3000	1200	900	1050
Internal Resources	18827	2575	4640	4315
Total	27202	5710	6500	6515
Konkan Railway	-	-	400	450
CONCOR	-	-	-	184
Grand Total:	27202	5710	6900	7149

Note: The bonds requirements of Konkan Railway Corporation (KRC) were identified from 1993-94 onwards. The requirements of both Konkan Railway and CONCOR were not included in the Rs.27202 crore outlay at the time of framing the Eighth Plan.

up new projects and the completion of the existing ongoing projects should be based on relative priority from Railways' operational point of view.

Financial Performance

6.98 Plan outlay and expenditure of the Railway Sector (including PSUs) during the Eighth Plan may be seen in Table 6.16.

Resource Mobilisation

6.99 The Plan outlays and sources of financing have been indicated in Table 6.17 .

6.100 During 1992-93 IRFC could not mobilise funds from bonds market. It took a short term loan from UTI (Rs.417 crore) and drew Rs.545.17 crore from its funds earmarked for repayment of laons, making a total of Rs.962.17 crore. Actual expenditure during the year was Rs.6,162 crore, which is Rs.452 crore more than the approved outlay.

6.101 During 1993-94, while the IRFC and KRC were able to mobilise funds from the Bonds market, the Railways could not realise their Internal Resources target due to a substantial fall of Rs.436 crore in traffic receipts. Consequently, the Railways had to cut their Plan size by Rs.300 crore, from Rs.6,500 crore (excluding KRC) to Rs.6,200 crore.

6.102 The targets of resource mobilisation (bonds as well as internal generation) in 1994-95 are likely to be achieved. However, this would depend on positive growth in traffic receipts as well as control on operational expenditure. Railways had calculated that every 1 per cent increase in the rate of inflation would result in an increase of Rs.54 crore in working expenses. The budget estimate for 1994-95 envisages an increase of Rs.1,558 crore by way of expenditure while anticipated increase in traffic earnings is Rs.1,764 crore. In order to ensure that this narrow gap between earnings and expenses does not turn negative, effective control on operational costs is necessary.

Task ahead

6.103 In order to achieve the Plan target of freight and passenger traffic, increase the share of Railways in total freight traffic in the country and to keep the system in tact to meet the growing requirements of the economy, the following measures, inter alia, need to be taken :-

i) Steps to increase the operational efficiency of the system including the wagon utilisation rate in freight traffic and improvement in wagon design.

ii) Expansion of container traffic for carriage of goods of less than train load traffic. This can be achieved with active participation of Private Sector, the Railways and CONCOR. This would also require increased availability of multi-axle vehicles on road for movement of containers to and from the loading and unloading terminals.

Table 6.18
Outlay and Expenditure - Roads Sector

(Rs.crore)

	Central Sector	State Sector	Total
Eighth Plan(1992-97)	2600.00	10233.00	12833.00
1. 1992-93			
Outlay	463.37	1807.34	2270.71
Expenditure	458.93	1838.48	2297.41
2. 1993-94			
Outlay	593.00	2155.59	2748.59
Anti. Expenditure	627.00	1870.11	2497.11
3. 1994-95			
Outlay	665.00	2510.68	3175.68

iii) Encouragement to Private sector to bring their own fleet of wagons and also to market the transport services for which Railways, who will run the trains, could charge appropriate prices.

iv) Private sector could also be given the opportunity to lease, own and operate freight terminals for both container and wagon traffic.

v) Technological upgradation and modernisation of workshops, maintenance sheds etc. for better maintenance facilities, in order to minimise on-line failures.

vi) Replacement of overaged assets like S&T equipment and bridges.

vii) Selective expansion of line capacity on heavily congested sections.

Table 6.19
Utilisation of External Aid - Roads Sector

(Rs.crore)

	1992-93		1993-94	
	B.E.	Actuals	B.E.	Actuals
Approved outlay/ Expenditure	463.37	458.93	593.00	583.00
Of which:				
Budgetary Support	463.37	458.93	583.00	583.00
National Highway	441.87	442.14	569.69	559.69
External Aid	57.42	80.30	220.00	220.00
EBR*	-	-	10.00	-

* EBR represents private investment in Road Sector.

viii)Early completion of electrification of all trunk routes carrying bulk of freight traffic.

ix) Proper prioritisation of all ongoing Projects to derive maximum benefits. Projects which do not contribute significantly to operational efficiency or are not financially/economically viable should be reconsidered.

x) Measures to reduce time and cost over-runs, including proper prioritisation and review of projects as mentioned above.

xi) Measures to reduce operational costs by a change in operational practice and system which would result in improving over-all mobility of rolling-stock, less detentions at terminals better output in workshops etc.

ROADS

6.104 Roads are the life line of the country. In the Eighth Plan stress has been laid on the removal of existing deficiencies in the National Highway (N.H.) System, completion of ongoing projects, replacement of weak and narrow bridges and timely and adequate maintenance of the roads. The plan also envisages raising of Rs.600 crore through private sector participation in N.H. road construction activities. The outlay and expenditure in respect of Central and State Sector Roads are given in Table 6.18.

6.105 The details of Eighth Plan outlay and the progress of expenditure on roads in the Annual Plans of Central Sector and State Sector are given in Annex. 6.4 and 6.5.

Private Participation

6.106 Steps have been initiated to facilitate entry of private sector in road construction activity. Provisions of the National Highway Act (1956) have been amended to enable levy of fee on selected sections of National Highways, bridges etc. Action is now to be taken to modify the provisions of the Act to allow private builders to levy user charges. Road Sector has been declared as an "industry" to facilitate borrowings on easy terms. Provisions of the MRTP Act have been relaxed to enable large firms to enter Highway Sector. Import duties on construction equipment have been revised down considerably and the procedures have been simplified. However, the response of private entrepreneures in this activity has been lukewarm. So far 27 projects relating to bypasses, bridges and expressways have been identified for being taken up by the private sector on Build- operate-transfer (BOT) basis. The modalities are still being finalised and starting of the work is likely to take time. Accordingly, the target of Rs.600 crore to raise resources through private participation appears difficult. This may necessitate increasing budgetary support to the road sector.

Deficiencies in National Highway Network

6.107 The estimated cost for removal of deficiencies in the existing NH network and widening/strengthening of roads in high density corridors is about Rs.52,000 crore (1994 prices). The National Highways constitute only 2% of the total road network in the country but are reported to carry 35% of the total road traffic which is increasing year after year. At the present level of plan allocation of Rs.700 - 750 crore per annum, the removal of deficiencies is likely to take several decades. It is therefore, essential to have a fresh look on the plan allocation for the National Highway Sector to cope up with the ever- increasing traffic.

6.108 Of the 20 lakh kms of various classes of roads, the Central Sector investment relates to about 35,000 kms of the National Highways network. A very accurate estimate of the share of traffic carried by National Highways or for that matter, roads in general, is somewhat difficult in the absence of a regular compilation of primary data of traffic carried by road vehicles. However, some estimates, including those relied on by the World Bank, place the share of the road sector as between 58 and 60 per cent and that of Rail at between 38 to 40%. The National Highways are estimated to cater to about 35% of total road share. The Plan performance in Central Road Sector in the first two years of the Eighth Plan would have to be seen in the context of the funds made available for investment for the Central Sector roads. The Eighth Plan provides for an outlay of Rs.2,600 crore including Rs.2,000 crore as budgetary support; and of this, the share of the National Highways was Rs.1,860 crore. In the first two years, as would be seen from the table below, the expenditure has matched outlay though there has been shorfall in utilisation of external aid. The external aid in the Eighth Plan programme will cover around 1,200 km. in various stretches of NH network agreegating around 35,000 km. The earmarking of the funds for externally aided projects results in skewing off the allocation in favour of a small no. of such works.

6.109 The requirement of funds for development of National Highways are very large. Ministry of Surface Transport has estimated the fund requirement at Rs.52,000 crore for removal of deficiencies in the NH network. The annual budgetary allocation, as mentioned above, is around Rs.700 crore which is far less than the requirements. This has created con-

Table 6.20
Performance of State Road Transport Undertakings

Performance Indicator	1992-93 Actual	1993-94 Rev. Est.	1994-95 Est.	1996-97 Target
Vehicle productivity (Kms. per bus held per day)	259	267	275	280
Bus Staff Ratio (on fleet operated)	8.04	8.02	7.94	7.50
Staff productivity(Kms. per worker/ day)	36.2	37.5	38.5	40.0
Fuel efficiency (Kms. per litre)	4.48	4.50	4.52	4.60

Table 6.21
Contribution to the Plan by State Road Transport Undertakings

(Rs.crore)

	Contribution to the Plan	For which A.R.M.
I. Eighth Plan(Est.)	572.26	6197.64
1. 1992-93(Actuals)	- 68.74	184.41
2. 1993-94(Actuals)	- 27.67	727.29
3. 1994-95(Rev. Est.)	-118.14	1193.99
II. Total in nominal terms (1 + 2 + 3)	-214.55	2105.69
III.Gap in nominal terms to be covered in 1995-96 & 1996-97 (I-II)	786.81	4091.95

gestion on roads hampering smooth flow of traffic.

Externally Aided Projects

6.110 Externally aided projects constitute about 3% of the NH length. The Eighth Plan outlay including local component for these projects is about Rs.1,100 crore, leaving only about Rs.1,360 crore for un-aided NH works on 97% of the network. There is, therefore, an urgent need to review the position if the unaided National Highway system is to be preserved. In the States Sector, a number of externally aided road projects, the total cost of which is estimated at Rs.2,650 crore(approx.), are under implementation. An amount of around Rs.1,045 crore is estimated to have been spent on these projects by 1993-94. Most of these projects are expected to be completed by the end of Eighth Plan period.

Maintenance of Roads

6.111 A major area of concern is under-provision of funds for maintaining both national and state highways. Inadequate maintenance results in premature wastage of durable assets. At present, level of satisfaction in the maintenance of NH network is only 50%. In the case of State roads, this percentage varies widely from less than 30% to 70% or above. Availability of maintenance funds is very poor in the case of West Bengal, U.P., Bihar and Jammu and Kashmir. Prolonged neglect of maintenance will result in costly rehabilitation needs. Therefore, there is no point in building new roads if existing roads cannot be adequately maintained. This aspect needs to be highlighted in order to ensure adequate availability of funds for maintenance.

6.112 An allied issue is the large number of small works in the central sector roads costing less than Rs.50 lakh, which are being executed. These works appear to be in the nature of delayed maintenance activity. It is necessary for Ministry of Surface Transport (MOST) to review such works so that plan funds could be optimally utilised.

6.113 Considering the vast magnitude of deficiencies in the NH system, the increasing traffic volumes, pre-emption of large funds for externally aided projects leaving small outlay for unaided NH roads, there is an urgent need to increase the plan outlay. There is still another reason for enhancing the plan outlay for NH system. The Eighth Plan had assumed Rs.600 crore of extra-budgetary resources for private sector investment in NH sector. So far the private sector investment has eluded this sector. To make up for this shortfall, the budgetary support/outlay for central sector roads would need to be considerably enhanced.

6.114 The Eighth Plan aims at providing connectivity by all- weather roads to all villages with a population of 1,000 and above. It is estimated that by 1993-94, achievement has been over 80%. However, certain States like Bihar, Uttar Pradesh and West Bengal lag far behind in village connectivity. If the Plan target is to be achieved, these States would need to accelerate village connectivity through construction of roads in the remaining years of the Plan.

ROAD TRANSPORT

6.115 Road transport plays an important role in the movement of both passengers and goods. Passenger transport services are being operated both by public and private sector; freight services, however, are owned and operated predominantly by the private sector. There is 100% nationalisation of passenger services in a few States. At present, the share of State Road Transport Undertakings (SRTUs) in the national bus fleet is around 30%.

6.116 In keeping with the objectives of the Eighth Plan, guidelines have been issued to the State Governments/SRTUs (i) to improve the performance of SRTUs, (ii) that incremental demand for passenger traffic be met by the private sector; there is thus no need for public sector to add to their fleet of buses except for operation in difficult areas where private sector may not come in, and (iii) that budgetary support for expansion of fleet/services would not normally be provided except for services in "difficult areas". Replacement of buses are, in any case, to be funded from depreciation fund.

6.117 Some states have taken steps to denationalise certain routes to allow entry to the private sector. While this is a welcome development, efforts need to be continued in this direction if the objective of reducing pressure on the budgetary resources is to be realised.

6.118 As regards the productivity of SRTUs, significant improvement is noticed in the physical performance indicators. The details of selected physical performance indicators in respect of 46 SRTUs whose resources are assessed in Planning Commission are given in table 6.20.

Table 6.22
Performance of Major Ports

	8th Plan	1992-93		1993-94		1994-95	
	Target	Target	Actuals	Target	R.E.	Target	Anti. Achi.
Cargo Handled (in lakh tonnes)	2280.0	1570.0	1666.0	1700.0	1792.6	1810.0	1970.0
Approved outlay & Expenditure (Rs.cr.)	3216.00	612.76	274.88	621.54	406.86	475.00	491.23
Of which internal & extra budgetary resources utilised (Rs.cr.)	1895.00	513.96	221.45	518.08	311.90	355.00	371.23

Table 6.23
Capacity and Throughput at Major Ports

(In Lakh Tonnes)

Commodity	Capacity			Throughput		
	8th Plan	1992-93	1993-94	1992-93	1993-94	1994-95
POL	1061.5	780.0	780.0	797.0	773.0	773.0
Iron Ore	425.0	415.0	415.0	297.9	341.2	331.5
Coal	420.0	70.0	80.0	238.7	264.3	266.5
Fertiliser	66.0	79.5	79.5	73.8	77.7	79.0
Container	173.3	83.8	85.2	89.8	113.5	(
						(360.0
General Cargo	389.1	202.0	286.2	220.9	225.0	(
Total	2534.9	1710.3	1725.9	1666.1	1794.8	1810.0

6.119 The financial performance of SRTUs continues to be unsatisfactory. 42 out of 46 SRTUs whose resources are discussed in the Planning Commission are incurring losses year after year; these are not able to provide depreciation fund for replacement of overaged buses. The cumulative loss in respect of SRTUs before the beginning of Eighth Plan, i.e., 1.4.1992 was Rs.2808.34 crore. During Annual Plans 1992-93 and 1993-94, the net loss has been Rs.360.34 crore and Rs.378.39 crore, respectively. For the Annual Plan 1994-95 (RE), net loss is estimated at Rs.443.01 crore. Undertaking-wise details of cumulative loss are given at Annex. 6.6.

6.120 It was envisaged at the time of formulation of the Eighth Plan that all SRTUs put together would be contributing Rs.572.26 crore to the State Plans of which ARM (yield from passenger fare revisions) was estimated at Rs.6197.64 crore. These projections seem difficult to materialise as per details given in Table 6.21.

6.120.1 Yearwise and SRTU-wise details of contribution to the Plan and gap to be covered are given in Annex. 6.7.

6.121 Major reasons for the losses are excess staff, uneconomic fares and time lag between cost increase and fare revision. Some States give subsidies to meet part of SRTUs' losses. Some States also continued to give budgetary support to provide for replacement of over-aged buses which should normally be met from depreciation reserve fund. This tendency needs to be curbed as it does not contribute to the improvement of the viability of SRTUs. It is essential for the SRTUs to continue efforts at cost reduction including cutting down of excess manpower. States should allow a fair and timely increase in fares if SRTUs are to be run efficiently as viable units.

5.122 In the Central Ssctor, the major scheme relates to "loans to Delhi Transport Corporation (DTC)". DTC is incurring a working loss of about Rs.7 crore per month, primarily due to over- staffing, low productivity of staff and vehicles, uneconomic passenger fares, concessions in fares to students, residents of re-settlement colonies etc. Annex. 6.8 gives the losses of DTC.

6.123 In keeping with the plan objectives, the Planning Commission have been stressing the need to improve the performance of DTC, and have not favoured adhoc measures like giving "ways and means advances" to DTC to overcome its financial problems. There is an urgent need for restructuring of the capital of DTC which comprises inter-alia, outstanding loans of over Rs.600 crore on which heavy interest liability accrues year after year, adding to the net loss of DTC. As a part of the restructuring of its capital, it is essential to wipe out the accumulated losses of Rs.1,375 crore which is "lost capital" of DTC.

6.124 Road Transport Corporations Act (1950) provides for capital contribution in the form of perpetual loans by the centre and the states to SRTCs. The centre's contribution is on a matching basis to the contribution by the states in the ratio of 1:2. Since 1988, centre's contribution has been made conditional to the SRTCs making a profit or breaking even. The criteria is under review in the Ministry of Surface Transport. During the remaining period of Eighth Plan, provision is required to be made only for paying "arrears of contribution" aggregating Rs.15.26 crore to specific SRTUs, pending Government decision on the continuance of capital contribution.

6.125 In terms of Eighth Plan objective, budgetary support to Public Sector Undertakings is to be phased out. Planning Commission has also decided not to allow state governments to contribute Plan funds to their respective SRTCs for expansion of fleet. Consequently, requirement of funds for "capital contribution to SRTCs" will be much less compared to the plan outlay. Having regard to these factors and the likely expenditure of Rs.78 crore in the first three years of the Central Sector Plan, the revised Eighth Plan outlay will be substantially lower than the approved outlay of Rs.264 crore. The details of outlay and progress of expenditure during Eighth Plan period in the Central Sector and States Sector are given in Annex. 6.9

PORTS

6.126 The major objectives of the Eighth Plan under the port sector are modernisation of ports and cargo handling facilities, intensive

Table 6.24
Port-wise Outlay and Expenditure

(Rs.crore)

	8th Plan	1992-93		1993-94		1994-95
	Outlay	Outlay	Expr.	Outlay	R.E.	Outlay
Major Ports	2984.00	541.66	254.30	584.34	386.13	419.50
Others	232.00	71.10	20.58	37.20	20.73	55.50
Total	3216.00	612.76	274.88	621.54	406.86	475.00

Table 6.25
Share of Internal Resources in Plan Outlay/Expenditure - Mjaor Ports

(Rs.crore)

Port	1992-93				1993-94			
	Outlay	Of which IR	Exp.	Of which IR	Outlay	Of which IR	Exp.	Of which IR
Bombay	70 (12)	58	26 (4)	22	86 (20)	66	72 (15)	57
Kandla	40	40	11	11	38	38	28	28
Madras	35 (8)	27	18 (-)	18	23 (12)	11	20 (10)	10
Visakhapatnam	66	66	47	47	71	71	59	59

(Figures in brackets represent external aid.)

utilisation of the existing infrastructure and attracting private sector capital in port activities. Action has been initiated during the Annual Plans to achieve these objectives.

6.127 The Central Sector has eleven major ports; the State Governments being responsible for the intermediate and minor ports. The physical performance of the major ports in the first three years of the Eighth Plan has been as under:-

6.128 In the overall, the physical achievements have been to expected levels though there has been some change in the mix of commodities handled and in the performance level of individual ports. Both capacity and cargo throughput have been increasing at our major ports, as may be seen from table 6.23. The increase in traffic has been higher compared to that in capacity which has been made possible through higher berth occupancy, higher ship berth-day output and higher share of bulk cargo namely coal which was handled at general cargo berths.

Review of Performance

6.129.1 The traffic handled at the major ports increased from 1,670 lakh tonnes in 1992-93 to 1,790 lakh tonnes in 1993-94. The traffic target for 1994-95 is fixed higher at 1,810 lakh tonnes. This level of target is expected to be

Table 6.26
States Investment in Minor Ports

(Rs.Crore)

	Eighth Plan	1992-93	1993-94	1994-95
Outlay	340.58	59.79	54.93	78.58
Expenditure/ Anticipated expenditure		42.82	68.92	78.01

achieved with greater efficiency and optimal utilisation of the capacity already built up.

6.129.2 Productivity in terms of ship turn round time and ship berth-day output has improved. Ship berth-day output increased from 3,372 tonnes in 1991-92 to 3,647 tonnes in 1992-93. During the same period, the average turn round time of ships reduced from 8.1 days to 7.4 days. However, labour and equipment productivity at our ports is far less than that in many neighbouring ports. The most modern Jawahar Lal Nehru Port Trust (JNPT) handles 8.5 boxes per ship-hour compared to 69 in Singapore and 30-40 in Colombo. In terms of per crane hour, 9.5 containers are handled at JNPT against 25 boxes at Singapore and 20 boxes at Colombo. There is thus immense scope for improvement of the productivity level of men and machines at our ports. Maintenance of equipment at the ports is poor and is an area of concern.

Financial Performance

6.130 The expenditure on the port development programme has been consistantly falling short of the outlay, as may be seen from Table 6.24.

6.130.1 Slippages are on account of delay in sanction of new projects, contractual disputes etc. Better planning and improved monitoring of the port projects are called for.

6.131 The financial Plan expenditure performance of the Ports Sector in the first two years of the Plan has, however, not been satisfactory. Considerable slippages have occured in sanctioning, implementing/ monitoring of the Plan projects. Accordingly, the capacity build up/ modernisation of works at the ports are behind schedule. The private investment in port activities has been insignificant. A policy statement outlining the scope of activities, terms, obligations etc. that would be available to private investors in specific port activities or in the operation and management of ports in general is required to be worked out. The legal frame-work within which the private sector is to operate under the Major Ports and Indian Ports Act is yet to be formulated.

6.132 The Plan expenditure of the Ports Sector has been adversely affected by the delays in the sanctioning of projects, externally assisted projects as well as user oriented projects. As a result, external aid component has declined. The use of internal resources has also declined due to reduction in outlay for specific major ports of Bombay, Kandla, Madras and Vishakhapatnam which are funding the projects from their internal resources, as brought out in Table 6.25.

6.132.1 The Plan objective of encouraging inter-corporate loans (ICL) to asist the deficit ports and to reduce budgetary support has met with partial success mainly on account of the reluctance on the part of surplus ports to part with their funds.

6.132.2 It is necessary to tighten the monitoring of/control on the formulation and implementation of projects to avoid time and cost over runs.

6.132.3 Statement at Annex. 6.10 gives the outlay and expenditure in the port sector.

Internal Resource Generation

6.133 In the matter of internal resource generation , the performance of different ports is mixed. Ports like Bombay, Madras, Kandla and Vishakapatnam generate sufficient sur-

Table 6.27
Plan Investments in Shipping Corporation of India

(Rs.crore)

Outlay	8th Plan	1992-93		1993-94		1994-95	
	B.E.	B.E.	Actuals	B.E.	Actuals	B.E.	Anti.
Outlay	3300	665	340	997	788	1196	1096
(of which B.S.)	(50)	(50)	(55)	(50)	(73)	(27)	(27)

plus over and above their plan requirements. However, ports like Calcutta and Cochin do not generate sufficient resources; they depend on budgetary support from the Government. Since the Seventh Plan, inter-port loans have been encouraged. These inter-port loans will be continued in the future to contain the requirement of budgetary support. The ultimate objective is that the port sector is able to generate funds for its development programme; budgetary support would be restricted to external aid to be routed through the budget.

Productivity of labour and equipment

6.134 Excess manpower at ports is a major problem. Sharp reduction in labour force at the ports may not be possible. However, the labour productivity could be increased with better management. As regards equipment, bulk of the port equipment is either obsolete or overaged. Replacement by modern and more versatile equipment needs to be encouraged. Cargo handling equipment at the ports needs to be compatible with modern vessels calling at our ports. In the area of container handling too, the productivity is low.

Development of Minor Ports

6.135 Minor ports play a significant role in coastal shipping. Development of minor ports is the responsibility of the State concerned. The investment profile for Eighth Plan is summarised in Table 6.26.

Private sector participation

6.136 A beginning has been made with regard to private sector participation in the ports. This participation, however, at present is limited to some types of cargo handling equipment. No private party has so far been inducted for operation and maintenance of port terminals. Consequently, their participation has not made any dent on resource availability and efficiency in port operations. A definite action plan identifying the areas of possible privatisation and a package for encouraging private sector participation within a time frame needs to be formulated.

6.137 Considering the likely expenditure of Rs.1,157 crore on ports sector during the first 3 years of the Eighth Plan, the plan outlay of Rs.3,216 crore is not likely to be fully utilised.

SHIPPING

6.138 In the shipping sector, the thrust areas are scrapping of obsolete vessels and their replacement by modern fuel efficient vessels, acquisition of container vessels and streamlining the procedure for acquisition and sale of ships.

6.139 The Indian Shipping Industry comprises a major public sector player, the Shipping Corporation of India which owns about 50% of the national tonnage, one State (Tamil Nadu) PSU and over 60 private companies. The accent in the Eighth Plan is on the modernisation of the Indian shipping fleet by scrapping the obsolete vessels and inducting specialised vessels, particularly containers. In the process, though the tonnage would not be added significantly, the average age and cost competitiveness would improve. Only the investment requirement of the SCI figures in the Central Plan outlays.

6.140 On the operational side, the overall aim is to enable Indian shipping to carry 40 % of import/export liner cargo in accordance with the provision of the UNCTAD agreement. Presently indian shipping account for only 16% of such cargo.

6.141 The net tonnage held by Indian Shipping was 62.8 lakh GRT at the end of March, 1994. Of this tonnage, about 30 lakh GRT was held by Shipping Corporation of India (SCI), the public sector undertaking. The pace of tonnage acquisition by SCI has been slow on account of procedural delays and foreign exchange crunch. SCI has a monopoly in the transport of petroleum crude and products to India. It has acquired three 1450 TEU cellular container vessels last year.

Shipping Corporation of India

6.142 SCI generates internal resources and commercial borrowings to fund its ship acquisition programme. Its resource position remains precarious due to heavy loan repayment obligations. As per present policy, 20% of the cost of the ships is to be provided to SCI as back up loans to enhance borrowing capability of SCI in foreign markets. In the context of constraints on budgetary resources, there is a need for SCI to enlarge its equity base through public issue.

6.143 In the first two years of the Eighth Plan, the SCI's performance with regard to its Plan investment is as under :

6.143.1 In line with the policy of reducing/ eliminating budgetary support to PSUs, SCI has been asked to rely on internal and extra budgetary resources to meet their investment.

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Out of authorised capital of Rs.350 crore, the paid up capital is Rs.282 crore. 18.2 % of the paid up share capital has already been disinvested.

6.144 Coastal Shipping has vast potential which remained untapped. MOST may prepare an Action Plan for its development.

Director General (Shipping)

6.145 The Eigth Plan programme includes acquisition of training simulators, setting up of Shore Based Academy and Welfare of Seamen and their training. Simulators are likely to be installed by the end of March, 1995. However, the Shore Based Academy project has suffered heavy time and cost-over runs. MOST may consider privatising this project.

Sailing Vessels Industry

6.146 Another scheme, under shipping sector relates to 'assistance to sailing vessels industry'. Under this scheme, loans are granted by State Financial Corporations/Nationalised Banks for construction of mechanised boats or mechanisation of existing sailing vessles; the progress of the scheme has been tardy. There is need to review the scheme which may need restructuring to make it attractive.

Financial Programme

6.147 Approved outlay and expenditure of Shipping Sector during Eighth Plan are given in Table 6.28.

Areas of concern

6.148 SCI acquisition has been on a low key during the last few years. The present procedure for ship acquisition by SCI needs to be further simplified. SCI's capital structure also needs a review to reduce its dependance on budgetary support.

6.149 Another area of concern, is the low share (around 35%) of national shipping lines in India's overseas trade. Our tonnage has stagnated at around 60 lakh GRT since the Sixth Plan. The growth of the private sector in shipping would have to be encouraged. Ministry of Surface Transport is alive to this situation and various legal and financial constraints now inhibiting acquisition of ships are being cleared. They have already done away with the clause relating to redemption of mortgage of ships abroad, which has been a handicap in the past in raising external borrowings.

6.150 In the context of liberalisation, the policy of FOB imports and CIF exports needs a reivew.

6.151 The Eighth Plan outlay for shipping sector is Rs.3,400 crore. The expenditure on shipping programme in the first 3 years 1992-95 is about Rs.3,000 crore. Considering the need to augment Indian tonnage, requirement of funds for shipping (bulk of it in the form of ECB) would need to be stepped up substantially during the plan period.

Coastal Shipping

6.152 The potential of coastal shipping remains largely untapped on account of various problems faced by this mode of transport. Cumbersome and lengthy custom procedure, lack of infrastructural facilities at most of the minor ports, tardy port clearance for these vessels, high manning scales etc. arc hindering the growth of coastal shipping. Steps are required to be taken to remove these impedi-

Table 6.28
Outlay and Expenditure - Shipping

(Rs.in crore)

	8th Plan 1992-97	1992-93		1993-94		1994-95
	Outlay	Outlay	Expr.	Outlay	Expr.	Outlay
Centre	3400.00	1216.19	341.61	1097.00	1110.83	1281.37
States	268.91	79.76	41.92	68.47	68.92	89.79

ments for developement of costal shipping to relieve pressure on surface modes of transport.

INLAND WATER TRANSPORT

6.153 IWT programme has three main components : (i) Central Inland Water Transport Corporation (CIWTC); (ii) Inland Waterways Authority of India (IWAI); and (iii) Centrally sponsored schemes.

Central Inland Water Transpot Corporation (CIWTC)

6.154.1 CIWTC is a public sector undertaking. Its main area of activity is riverine transport from Calcutta to Assam through Bangladesh. It has 114 boats and barges with a capacity of 5 lakh tonnes. The capacity would increase with the delivery of barges under construction at various shipyards. The traffic carried by CIWTC is, however, stagnating at about 2-3 lakh tonnes. It is essential to prepare an action plan to improve the utilisation of carrying capacity of CIWTC.

6.154.2 CIWTC has been incurring losses which have been increasing over the years. The estimated cash loss during 1993-94 is Rs.9.62 crore.

6.154.3 CIWTC also has a ship-building yard, the Rajabagan Dockyard. The modernisation of this dockyard is a part of Eighth Plan scheme. However, the progress so far is insignificant. It may be desirable to consider off-loading this project to the private sector or joint sector.

6.154.4 Inspite of the inherent advantages of water transport, the CIWTC has not been able to rise up to the potentials it has. Some difficulties exist due to transit through another country; but the main problem is its inability to adjust to changing market demand through management strategies.

Inland Waterways Authority of India (IWAI)

6.155.1 Inland Waterways Authority of India (IWAI), set up on 27.10.86, is responsible for the development, maintenance and management of the National Waterways in the country. It undertakes research & development works, technical studies, hydrographic surveys etc. It also assists the States in formulation, implementation and monitoring of the centrally sponsored schemes relating to improvement of Waterways in various States.

6.155.2 The main scheme relates to conservency work on National Waterways, setting up of infrastructural facilities like construction of terminals. Government have declared three waterways as National Waterways. These are : (i) Ganga between Allahabad and Haldia; (ii) Brahmaputra between Sadiya and Dhubri; and (iii) West Coast Canal between Kollam and Kottapuram alongwith Udyogmandal and Champakara canals.

6.155.3 There have been slippages in the implementation of plan schemes and utilisation of plan outlay has been rather poor. Projects are not taken up in time due to delay in the formulation of suitable schemes. The role of IWAI be confined to performing statutory duties; it should hive off operations to private entrepreneurs.

Table 6.29
Outlay and Expenditure -Inland Water Transport

(Rs.in crore)

	8th Plan 1992-97	1992-93	1993-94		1994-95
	Outlay	Expr.	Outlay	Expr.	Outlay
CIWTC	96.10	8.00	19.30	15.30	13.50
IWAI/Central Schemes	135.75	4.73	9.60	5.60	6.30
R & D	1.00	0.03	0.10	0.10	0.00
Centrally Sponsored Schemes	7.15	0.66	1.00	0.60	0.20
Total	240.00	13.42	30.00	21.60	20.00

6.155.4 It is necessary to prepare an action plan for development of IWT. It is essential to

Table 6.30
Physical and Financial Performance - Civil Aviation

	8th Plan Target	1992-93 Target	1992-93 Actuals	1993-94 Target	1993-94 Actuals	1994-95 Target	1994-95 Anti.
Indian Airlines							
Available Tonne Kms. (in lakh)	19160	13310	9680	12140	10710	12000	11360
Revenue Tonne Kms.(in lakh)	13610	9140	6850	8590	7250	8360	7420
Net surplus (Rs.crore)		(-)66	(-)195	(-)166	(-)267	(-)132	(-)230
Air India							
Available Tonne Kms.(in lakh)	30610	26820	19050	25190	21210	26890	23330
Revenue Tonne Kms.(in lakh)	19830	17330	10950	14680	12390	15840	13780
Net surplus (Rs.crore)		151	333	146	123	164	26
IAAI*							
Net surplus (Rs.crore)		41	46	47	50	50	64
NAA*							
Net surplus (Rs.crore)		5	17	6	16	*	26
Pawan Hans							
Net surplus (Rs.crore)		24	23	22	32	31	29

* Negligible
* IAAI and NAA have been merged to form AAI w.e.f. 1.4.95

remove the existing infrastructural constraints through improving the existing jetties, provision of low-cost jetties, thrust on passenger services, improvement in navigation, incentives for optimal fleet utilisation of CIWTC and involvement of private operators in IWT operations on a larger scale. It is also essential to work out a cargo support scheme for IWT in liaison with the concerned Ministries/Depatments. Allocation of funds have been increasing over the plans but the actual investments have been low.

6.156.1 Against the Eighth Plan outlay of Rs. 240 crore, the expenditure in the first three years added upto Rs.55 crore, as may be seen from Table 6.29.

6.156.2 Unless the new schemes could be formulated quickly and implemented as per schedule, there is going to be substantial shortfall in the expenditure during the plan period.

CIVIL AVIATION

6.157 The major thrust areas in the Eighth Plan are to make Civil Aviation industry financially self sustaining, encourage private sector participation in domestic air services and upgrade/ modernise infrastyructure and communication facilities at airports.

6.158 The Civil Aviation Section, comprising the public sector undertakings India Airlines, Air India and the Airports Authority of India(AAI), lend themselves to an analysis in respect of both fraffic handled and revenues etc. earned. (AAI was created on 1.4.95 by merging International Airport Authority of India and National Airports Authority) The per-

Table 6.31
Physical and Financial Performance of Air India & Indian Airlines

	Air India			Indian Airlines		
	1991-92	1992-93	1993-94 (Ant.)	1991-92	1992-93	1993-94 (Ant.)
1. No. of Aircraft	22	25*	26**	52	54@	54@@
2. Aircraft utilisation (Hours per aircraft per day)	9.16	8.66	9.33	6.17	5.4	5.9
3. Revenue Tonne Kms. (lakh)	11408.0	10948.0	12393.0	7610	6850	7250
4. Revenue Passenger Kms. (lakh)	81582.0	84872.0	92600.0	79900	72010	75270
5. Net Profit (Rs. crore)	145.89	333.14	122.71	(198.85)	(195.16)	(267.20)

* three B747-400 were added
** one B747-400 was added
@ two A320 added
@@ five A320 added and 5 B 737 disposed (provisional)
Note: Figures in bracket indicate loss.

formance in the first two years of the Eighth Plan is indicated in table 6.30.

Performance

6.159 The physical and financial performance of Air India and Indian Airlines may be seen in Table 6.31.

6.160 The outlay and expenditure on Civil Aviation sub-sector may be seen in Table below and the organisation-wise break-up may be seen at Annex. 6.11.

6.161.1 The Airports Authority of India, successor of International Airports Authority of India, while carrying out the works on upgradation/modernisation of infrastructure facilities available at the international airports, has generated a profit of Rs.45.73 crore in 1992-93 which is expected to increase to Rs.50.46 crore in 1993-94.

6.161.2 The internal resource position of AAI, successor of National Airports Authority (NAA) is tight especially as compared to its size of the Plans. The deficit in 1992-93 was Rs.7.65 crore which is expected to rise to Rs.146.40 crore in 1993-94. AAI's main project, Modernisation of ATC facilities at Delhi and Bombay airports was taken up in March'93 and the project is scheduled to be completed by October'95.

6.162 Pawan Hans, with a total fleet of 19 helicopters, is another profit making company whose profits during 1992-93 were Rs.23.30 crore and are expected to go up to Rs.31.54 crore in 1993-94.

6.163 In the Plans, budgetary support has been provided entirely to Directorate General of Civil Aviation (D.G.C.A.) and Bureau of Civil Aviation Security (B.C.A.S.) and partly to NAA for their plan schemes. In 1994-95, budgetary support is also provided to Indira Gandhi Rashtriya Uran Academy (IGRUA) over and above contributions by Air India and Indian Airlines, to enable it to implement its plan schemes like recarpetting of runways, purchase of aircraft, landing and communication aids etc.

Table 6.32
Outlay & Expenditure - Civil Aviation

(Rs. crore)

	8th Plan	1992-93 Outlay	1992-93 Exp.	1993-94 Outlay	1993-94 Exp.	1994-95 Outlay
Centre	3998.00	1036.08	871.79	1592.45	1453.06	1686.05
States & UTs	85.26	14.35	10.45	21.97	17.8	33.07

6.164 The plan programme of the airlines is funded entirely from their internal and extra budgetary resources. As at present, external loans are raised by teh airlines with government gurantee. With the liberalisation of the economy, the airlines should explore the possibility of arranging external credit without involving such government guarantees. While Air India has been consistantly making profits, Indian Airlines has been in losses for the last several years. This has however, not effected their fleet acquisition programme which has been funded from external borrowings. This has however affected ground support facilities and has resulted in building up of liabilities. The induction of private airlines has also adversely affected its operations; almost 40% of their passenger km. has gone to the private operators. The loss to Indian Airlines has been rectified to some extent by converting Air Taxi Operators (ATO's) into private airlines. In terms of the government policy, these airlines are required to operate on non-trunk routes also, thereby relieving Indian Airlines of the losses involved in the operation of these routes.

6.165 The air operations in the domestic sector have grown over the years. To meet this growth, AAI have taken up the programme to improve air surveillance and communication systems, upgrade facilities to handle/control larger number at the airports etc. AAI has also taken up development of 12 domestic model airports. Though the coverage of its works has increased, it is facing funds constraint. It would be essential to increase its internal resources through tariff revisions.

6.166 Augumentation of capacity in Bombay and Delhi Airports is of crucial importance to cater to the increasing international air traffic. AAI are re-prioritising their airport schemes. Further scope for expansion of Bombay Airport is limited on account of paucity of land. Measures to ease pressure on Bombay Airport by diverting traffic elsewhere would need to be considered. As at present, AAI generates adequate internal resources.

Privatisation

6.167 The induction of private airlines is the first step in the liberalisation of the civil aviation sector. Private investment in related infrastructure like terminals at the existing airfields and even the entire airports being built/developed by the private sector is being anticipated. With increase in domestic air traffic, it is necessary to augment air communications and air traffic control systems where modernisation needs to be accelerated.

Training Facilities for Pilots

6.168 Indira Gandhi Rashtirya Uran Academy (IGRUA) was set up by the government to provide training facilities for the pilots. As at present, these facilities are underutilised as adequate number of candidates are not coming forward because of high cost of training. Possibility of handing over of IGRUA to Air India for training of pilots both for their captive use as well as for other airlines needs to be explored. Department of Civil Aviation may also explore the possibility of arranging bank loans for the students to meet the cost of training to attract candidates in order to cope up with the expanding demand of pilots in the country.

6.169 The Air Corporation Act 1953 has been repealed and both Air India and Indian Airlines have now become limited companies since March 1, 1994.

6.170 Private Air Taxi Operators have entered the field of domestic aviation and during the past two years they have increasingly carried more and more passengers thereby offering a competition to Indian Airlines.

6.171 Vayudoot has been merged with Indian Airlines. The merger of NAA with IAAI has also been effected. These reforms are directed to make the aviation industry self sustaining in the long run.

SOME ISSUES -- An Overview

6.172 The Policy of Economic Liberalisation introduced in 1991 sought among others, (a) to remove barriers to entry and to encourage competition; (b) as a consequence the focus is on improving efficiency and productivity. As a corollary of this overall objective it follows that (i) there would be reduction in subsidies in all services and products will be based on market determined cost; and (ii) there will be more scope for private participation in areas so far reserved or kept apart for public sector.

6.173 Apart from these fundamental changes some of the key issues which need attention are :

i) Heavy pressure likely to be brought on the transport sector in the wake of expected resurgence of economic activities and hope up faster economic growth. The objective of achieving 7-8% growth rate by the turn of the century would put tremendous pressure on the transport needs to sustain the economic activities. As transport infrastructure takes time to materialise and investment required to put in place the required infrastructure is not readily available, the possibilities of backlog on transport sector is always a reality. This may put a constraint on the growth process in other sectors.

ii) In India's reforms programme growth in exports play a crucial role. In 1990 India's exports were only 8% of GDP. The growth rate in GDP as noted above is expected to be around 6% on the aggregate in the coming years. If the growth rate of exports is to be maintained at the projected Eighth Plan target of 13.4%, the pressure on the ports, inland transport system, international air cargo, etc. would be tremendous.

iii) Because of sheer demographic pressure, even the internal demand on a transport system, is likely to be staggering. The Eighth Plan has projected the growth of population to be 100.62 crore by 2001. Such growth will increase the pressure on passenger transport which is already under great strain. Requirement of providing rural roads will be very heavy, making it all the more difficult to get sufficient public investment in other sectors.

iv) Equally important and a cause of concern is the trend in increase in urban population. In 1992, the urban population was 26.04%, i.e. 22.4 crore. Even if in the post 2001 period, the growth of urban population is expected to be gradually declining, the share of urban population is expected to increase continuously. By 2007, 37.6 crore people (34.2%) are expected to be in the urban areas. Similarly, the number of cities with a population of more than 10 lakh is likely to increase from 12 in 1981 to 40 in 2001. The shift in distribution and concentration of population and economic activity will have profound impact on the transport policy. For example, (a) demand for urban passenger and goods movement will grow rapidly, (b) this will put pressure on physical infrastructure and sub-urban transport system, (c) congestion in urbanized area will mean bottleneck to free flow of inter- city traffic, (d) there will be heavy pressure for urban bye-passes and metro transport systems, which are very expensive, (e) there will be pressure on land relocation and environment as well, (f) and of course by its nature Urban Transport System being very expensive, unless sufficient private investment is forthcoming, the pressure on the limited public fund will be increasing.

6.174 Some of these issues naturally also indicate the possible directions of policy action. First, of course, is the question of level of investment. As public investment is limited, urgency of the situation makes it imperative to locate more private investment. Second, there will be greater need for technological innovations and research to find solutions to local problems. Technological innovations are primarily crucial for railways, road sector, ports and the air transport systems. Third, many of the technological solutions will suffer on account of constraints of resources as well as socio-economic considerations which will resist possible relocation. Fourth, there will be heavy demand for specialized means to address the urban problems as well as problems in the rural areas and financial constraints will be a major impediment. As it is the total share of transport and tourism sector in the over all

Plan has decreased from 24.5% to 13.1% from 1950-51 to 1992-93. And in a situation of competing priorities, locating additional funds would be a major exercise. At the same time, e.g. many of the donor agencies have suggested that there is an absorptive capacity and implementation constraint in the road sector that is more serious than the financial constraints.

6.175 The Eighth Five Year Plan identified the following areas of action in the transport sector : i) strengthening of road network; ii) improvement of the condition of existing roads; iii) entry of private sector in road transport; iv) removal of all potential bottlenecks to smooth flow of railway traffic on trunk routes; v) stepping up of the pace of electrification of railways; vi) creation of adequate air cargo and shipping capacity; and vii) strengthening of the container network and development of Inland Waterways.

6.176 Similarly, the road sector, the Economic Survey 1994-95 has outlined the following areas for action : i) the National Highway network must be greatly improved; ii) a large section has inadequate road thickness; iii) other deficiencies are : a) inadequate capacity, b) poor riding quality, c) weak bridges/culverts, d) congested city sections, e) too many railway crossings, and f) lack of wayside amenities; iv) About 20% of National Highways need widening from single to double lanes and 70% of 2-lane roads need strengthening.

6.177 In the ports and airways sector also major investment to modernise technology, to improve productivity and to provide better safety measures are essential to make the facilities internationally competitive and acceptable.

6.178 Among the important steps taken by the Government to facilitate achievement of the objectives set for the next few years, following can be mentioned :

i) Pathkar abolished by all State Governments and octroi by many of them to reduce overall transit time and to help free flow of traffic.

ii) The Motor Vehicles Act, 1988 amended with a view to simplify procedures in the matter of granting driving licences, removing ceiling on number of Stage carriage permits.

iii) Road sector declared an Industry to facilitate borrowing on easy terms and to permit floating of Bonds.

iv) The National Highways Act, 1956 Amendment being taken up permit levy of fees on National Highway bridges, etc.

v) Customs duties on construction equipment reduced and procedures streamlined.

6.179 There is no doubt, a long way to go. There are numerous issues to be sorted out. Some of the issues which are likely to influence the pace of action are :

i) the huge financial implications and large backlog of justified schemes, urgency of the reforms and the absorptive capacity of the System.

ii) There is a growing feeling that substantial reforms in transport sector and liberalisation of procedures as well as introduction of technology will depend on acceptance of such measures by the organised labour and Government employees who form bulk of the employees in the sector.

iii) This observation is further accentuated by the fact, for example, that the Railways have a huge labour force who may be facing economic instability in case of any changes in the structure of subsidies or in case of more reliance on market forces for pricing of services. One possible way of improving the situation is to increase productivity in the sector so that the existing work force can sustain much larger activities and make the services more cost effective. In fact, improved technology and productivity is also imperative requirement of the Port sector.

iv) As pointed out by the Steering Committee, the Railways also face serious problem with obsolete equipments which need replacement.

6.180 The present scenario, the enormity of the future task and the compulsions of physical and financial constraints make it imperative that :

i) a long term inter-sectoral linkages plan has to be evolved. Or the present one is to be modified to suit the requirements of changed scenario of economic activities subsequent to the economic reforms of 1991;

ii) because of urgency of infrastructure development quick, transparent policy on private participation has to be put in place.

iii) As the gestation period is long, the short term goal should be to improve efficiency and productivity by management innovation, technological input, research and motivation.

SECTION 3

COMMUNICATION

POSTS

6.181 The Eighth Plan is a very important milestone in the consolidation of postal services. In a nutshell, the Plan aims to modernise the services with introduction of latest technology. This is sought to be done by : -

i) replacing existing arrangements with modern technological systems, automation and computerisation;

ii) introduction of new services based on modern technology;

iii) upgrading of material management; and expansion of the postal network to include uncovered areas, especially rural, is the other important objective.

6.182 The approved outlay for postal services is Rs. 325 crore. The likely expenditure in the first three years is Rs. 184 crore (at 1991-92 prices) i.e. utilisation of about 57%. Thus the pace of expenditure has been somewhat slower than ideal. This is due to initial problems faced in introduction of new technology. The scheme-wise details of the outlay and expenditure may be seen at Annex. 6.12.

6.183 A target of opening of 3,000 Extra Departmental Branch Offices(EDBOs) and 500 Departmental Sub Offices(DSOs) was fixed for the Plan. On persistent demand from uncovered areas and request of the Department in 1994, these targets were revised upwards to 3,600 EDBOs and 650 DSOs. In the first three years 1,306 EDBOs and 262 DSOs were sanctioned i.e. achieving 44% and 52% of the Eighth Plan targets. This is not satisfactory. The pace of expansion is grossly inadequate in relation to the quantum of the problem. There were about 1.22 lakh Gram Panchayat villages without a post office, as on 31.3.1994, although mail is delivered in all these villages by the nearest post office. Five States of Uttar Pradesh, Maharashtra, Madhya Pradesh, Punjab and Andhra Pradesh account for about 84% of these villages; U.P. leading the list with 58837 villages. State-wise distribution may be seen in Annex. 6.14. Out of these 1.22 lakh villages, only about 18000 Gram Panchayat headquarters qualify to have a branch post office as per the existing norms fixed by the Department of Posts. But even covering these villages would take several decades at the present rate of expansion. The scheme of opening of rural post offices suffers from the following weaknesses : -

i) The pace of expansion is limited by the availability of funds;

ii) Operational subsidy to the extent of 67% in normal areas and 85% in hilly and tribal areas add continuously to the revenue deficit of the Department; and

iii) The extra-Departmental agents operating EDBOs gradually stake claim to becoming permanent Government employees;

6.184 The scheme is neither capable of providing expansion of services at the required pace due to limited public sector funds, nor is it financially sustainable over a long period due to large amount of subsidy involved. As per the existing income norm, an EDBO can be opened in normal areas if the anticipated revenue is 33% of the cost. In hilly/tribal / desert or inaccessible areas, it need to cover just 15% of the cost. The annual expenditure on an EDBO at present is Rs.20,400. On normative basis, opening of any new branch offices implies a subsidy of about Rs.13,700 in normal areas and about Rs.17,300 in hilly/desert or tribal areas. There are 1,24,245 EDBOs in the country as on 31.3.95. The information on the exact amount of subsidy being paid, basically under non-plan head,is not readily available. On the normative basis of a subsidy of Rs. 13,700 per post office, the present level of subsidy is estimated to be about Rs.170 crore per annum.

6.185 This calls for the adoption of a new approach which would ensure achieving the twin objective of keeping the Government expenditure to the minimum but accelerating the pace of expansion. A change of strategy is envisaged from 1995-96 with the launching of a new scheme called Panchayat Sanchar Sewa Yojana. The basic objective of the scheme is to provide basic postal facilities at low cost to Gram Panchayat villages which are still without a post office. The scheme aims at utilising the existing Panchayti Raj infrastructure for the organisation and operation of these services on commission basis. The Gram Panchayats would be responsible for provision of suitable accomodation, appointment of suitable persons to discharge the functions of the Panchayat Dak Kendras and ensuring financial discipline and propriety. Unlike the EDBOs under Government control, Panchayats would have the freedom to determine the working hours of the Kendras. As per the initial estimates, one Dak Sewa Kendra is likely to cost Rs.600 per month or Rs.7,200 per annum against the annual cost of Rs.20,400 of an EDBO. Thus, with the same amount of funds, the new scheme is expected to provide services to thrice the number of villages under the existing scheme.

6.186 Mechanisation of operations and modernisation of technology is central to the attainment of the basic objective of transforming the postal network into a modern and efficient organization. Keeping this in view, first priority has been accorded to technology upgradation by allocating it 43% of the approved Plan outlay. The main areas involved are :

i) Counter computerisation;

ii) Electronic mail transfer system;

iii) Mechanisation of mail handling;

iv) Speed post track and trace system;

v) Introduction of mechanical aids;

vi) Computerisation of counting and inventory functions-MIS.

The major targets fixed for the Eighth Plan include installation of 5,000 multi-purpose counter machines; introduction of mechanised mail sorting system in three metro cities in addition to commissioning of the system at Bombay; setting up of satellite based money transfer system in 75 centres in the country and modernisation of postal stores and forms depots. During the first three years,the programme of technology upgradation failed to take off at the desired pace due to procedural delays and constraints on the supply side. These constraints basically related to choice of technology, standardisation of equipment and delay in supply of equipment. The problems have been sorted out by 1994-95. As a result, the pace is expected to accelerate in the last two years of the Plan. Given adequate provision of outlay in these two years, the targets fixed for various schemes under technology upgradation for the Eighth Plan, are expected to be achieved. Details of physical targets and achievements are at Annex 6.13.

6.187 The pace of expenditure under the building construction programme has been excessive and out of control during the first three years of the Plan. Against the Plan target of commencing work on 242 new office buildings, work actually started on 288 new buildings in this period i.e. 119% of the Plan target. Same has been true for residential buildings where work on 794 buildings commenced against the target of 1,000 staff quarters in the entire Eighth Plan period. The expenditure in the first three years on building construction is likely to be about Rs.98 crore i.e. 81% of the Plan outlay approved for this activity. As a result, a massive increase in the Eighth Plan outlay will be needed note only to complete the ongoing projects and but also some new projects which were to be started in the remaining period. Given the constraint of resources, such a large increase will not be possible. There is an urgent need to impose effective check on expenditure under this activity. This should csonsist of : -

i) not starting any new projects hereafter Eighth in the remaining Plan period.

ii) review of building plans of all ongoing projects where 50% or more has been completed with the objective of limiting the expenditure to the esstential items, and minimum.

iii) appropriately containing the pace of implementation of all projects, where less than 25% of the civil work has beens completed, so as to spill over the major part of the liability to the next Plan.

6.188 To ensure efficiency and improved quality of services, selective opening up to private entrepreneurs of some of the services rendered by the Department of Posts may be desirable. Besides ensuring flow of required funds into the sector this would enable the Department to pay greater attention to its main activity which is carrying of mail. In some of the areas private participation could be allowed. This would also ensure flow of required funds into the sector. A comprehensive policy needs to be adopted in this regard. Some of these areas are:

i) Opening of new post offices in urban areas through licenced postal agents as private commercial enterprises;

ii) Printing of postal stationery;

card. With the post card increasingly being used for commercial purposes, higher price needs to be charged for busdiness use under a dual price policy; charging an affordable price for the common use.

6.190 With a view to reduce the cost of operations and improve efficiency, a comprehensive cost reduction strategy needs to be worked out by the Department of Posts. An important element of the strategy is to keep the establishment cost at the minimum and providing additional services out of redeployment.

TABLE 6.33

(Rs. crore)

Items	1992-93 (Actual)	1993-94 (Antcd.)	1994-95 (Antcd.)
Post Card	75.16	75.40	94.13
Printed Card	8.32	12.86	11.156
Letter Card	60.67	69.87	87.22
Parcel	15.32	18.26	24.77
Registration	82.46	106.45	136.71
Printed Books	8.42	6.79	11.01
Other Periodicals	4.54	5.75	5.75
Regd.News-paper-Single	26.14	31.17	31.99
-do- Bundled	5.89	10.28	7.21
Acknowledgements	1.97	2.57	3.80
Book Packets	0.89	1.75	2.52
Total:	289.78	341.15	416.67

Source : Department of Posts.

iii) Sale of stationery through licenced agents on franchise or commission basis;

6.189 Large amount of subsidy provided on postal stationery and services is one of the main reasons for deficit. Letters, speed post and savings banks are the only three operations yielding surplus per unit of activity/service. Registration, post card and letter card are the three main items of subsidy accounting for about 75% of the total subsidy being provided on postal stationery.The table 6.33 gives detail of item-wise subsidy during the last three years.

There seems to be little justification for subsidising services like registration, registered news-papers and parcels which are not essential items of use by the common man like post

6.191 Human resource development has not been accorded the priority it deserves in the entire strategy of technology upgradation and modernisation of operations. A comprehensive programme with proper emphasis on developing necessary skills in computers and handling other modern equipment needs to be drawn. Otherwise, the entire exercise of modernisation may not serve the purpose.

TELECOMMUNICATION

6.192 The telecom network had about one lakh lines in 1951. By the end of march 1995 it had increased to 94.5 lakh. Yet there are more than 20 lakh applicants (in March 1995) in the wait list of telephones. Among all the infrastructure sectors perhaps, telecommunication has witnessed the maximum metamorphosis since the

Eighth Plan started. Though this is largely occasioned by the anxiety to raise the telecom facilities in the country to international standards, the burgeoning waiting list had added to the concern. To start with in 1991, manufacture of telecommunication equipment was allowed to the private sector. In July 1992 followed the opening up of value added services. The last vestige of State monopoly in the sector ended in May 1994 on the pronouncement of the National Telecom Policy.

6.193 Rapid expansion of network, modernising it with the state of art technology and improving efficiency are basic thrust areas of the Eighth Plan. To achieve this, the following targets were fixed for the Plan :-

i) Provision of 75 lakh new telephones;

ii) Provision of Panchayat phones in 3.6 lakh villages;

iii) Provision of STD facilities to all exchanges by April 1997;

iv) Provision of one Public Call Office (PCO) for every one hundred households in urban areas;

v) Connecting all District headquarters by digital network, and

vi) Introduction of Value Added Services.

6.194 The outlay provided for telecommunication in the Eighth Plan is Rs. 25,137 crore. This includes an outlay of Rs.23,946 crore for Department of Telecom (DOT) including Mahanagar Telephone Nigam Ltd. (MTNL); Rs. 26 crore for Wireless Monitoring Organization (WMO) and Rs. 1,165 crore for the three Public Sector Undertakings (PSUs) of Indian Telephone Industries (ITI), Videsh Sanchar Nigam Ltd. (VSNL) and Hindustan Teleprinters Ltd. (HTL). The outlay is to be financed basically by internal and extra-budgetary resources - internal resources of Rs.17,721 crore and market borrowing of Rs. 7,026 crore. Budget support (Rs.390 crore) constitutes a negligible portion (1.55%) of the approved outlay.

6.195 It was quite clear when the Eighth Plan was formulated that resources of the public sector plan would not be adequate even to achieve the target of adding net 75 lakh direct exchange lines (DELs), which is quite modest in terms of raising the telephone density in the country to levels reached by many developing nations. Therefore, the Plan visualised radical structural changes in the sector, augmentation of public sector resources through innovative financing methods, initiative to allow private sector in areas hitherto the preserve of the public sector and even foreign direct investment in selected areas. The National Telecom Policy announced in May 1994 has concretised these ideas. The stated objectives of the Policy are to ensure telephones on demand, to achieve universal service coverage and to ensure international standard service to consumers. Strategy wise perhaps the most important changes ushered in by the Policy are allowing entry of private sector in basic services, separation of the roles of the Department of Telecommunication as both regulator and provider of telecom services and establishment of an independent Telecom Regulating Authority. Assuming substantial flow of investment, domestic as well as foreign, the Policy has revised upwards the major targets of Eighth Plan as below:

i) Telephones to be available on demand by 1997;

ii) All villages to be covered by telephones 1997;

iii) Provision of a PCO for every 500 persons in urban areas by 1997, and

iv) Ensuring availability of international standard value added services in the Eighth Plan, preferably by 1996;

6.196 As a result, the new target of DELs set by the Policy is 100 lakhs i.e. an addition of 25 lakh over and above the original Eighth Plan target. Besides aiming for a substantial increase in local network, the Policy has set an ambitious target for rural connectivity. Instead of covering 3.6 lakh villages by the Plan end, the new target is to provide telephone connections to all the 5.7 lakh villages of the country by March 1997. The resource gap to achieve these targets as estimated in The National Telecom Policy is Rs. 23,250 crore (at 1993-94 prices). At 1991-92 prices, it works out to Rs. 19,587 crore. Additional resource requirement is to make up the shortfall in public sector resources to achieve the target of 75 lakh DELs, to provide for the additional 25 lakh DELs and to cover all villages by 1997. Raising additional resources of this order by internal generation or otherwise is beyond the capacity of the public sector. Private investment and full involvement of private sector would, therefore, be needed in a big way to reach the targets aimed in the Policy.

6.197 Against the original target of 75 lakh DELs, achievement in the first three years is expected to be 36.4 lakh DELs i.e. 49%. This leaves a balance of 38.6 lakh DELs to be provided in the remaining two years. In 1995-96 the Department of Telecom (including MTNL) has a target of 16 lakh DELs. Judged by the achievement of 12.3 lakh and 14.0 lakh DELs in 1993-94 and 1994- 95 respectively, targets of 16.0 lakh for 1995-96 and of 18.0 lakh for 1996-97 are quite feasible. Thus 72.6 lakh DELs are likely to be reached from funds raised by public sector in the conventional manner viz.. internal resources and market borrowing. In line with the thinking in the Eighth Plan document the Department of Telecom has been exploring leasing to finance commissioning of additional lines. By this method the shortfall in public sector resources are being finance from the private sector who supply the equipment on payment of lease rentals. In 1994-95 an additional 50,000 DELs could be commissioned through leasing. Achieving another 6 to 7 lakh DELs in the last two years of the Plan through leasing is a distinct possibility. Thus the original target of 75 lakh DELs for the Eighth Plan is likely to be reached.

6.198 One of the main constraints for rapid growth of long- distance transmission has been the lack of expansion of trunk capacity at the desired rate. To remove this constraint, the Eighth Plan target of TAX capacity has been revised upward from 2.72 lakh lines to 7 lakh lines. The increasing capacity would be achieved without much increase in outlay due to significant reduction in the cost of equipment required. Similarly to take advantage of fast reduction in the cost of optical fibre due liberalisation policy, the target of optical fibre system has been revised from 20,000 route Km. to 40,000 route Km. Correspondingly, target of UHF is proposed to be reduced from 1.5 lakh route Km. to 90,000 route Km. as performance of the system is stated to be unsatisfactory. Details of physical targets and achievements in the first three years are at Annex 6.16.

6.199 Rural connectivity is one of the main objectives of the Eighth Plan. According to the original Plan target, 3.6 lakh villages were to be covered by 1997. The present annual rate of expansion is about 50,000 villages (1994-95) and about 1.14 lakh villages are expected to be covered by March 1995 Thus in the last two years i.e. 1995-96 and 1996-97, about 1.1 lakh telephone connections have to be provided annually. This seems to be a difficult task not only by past performance but by any standard. Even if operationally it were possible, financial resources would not available with the Department. As per the National Telecom Policy 1994, all the 5.7 lakh villages have to be

TABLE 6.34
Outlay and Expenditure- DOT(Including MTNL)

(Rs Crore)

Items	Eighth Plan Approved Outlay	Anticipated Expenditure (1992-95)	Utilisation (%)	Balance (1995-97)
1. Internal Resources	16,556	10,193	63	6,363
2. Bonds	7,026	3,948	56	3,078
3. Budget Support	364	25	7	339
4. Others	-	471	-	-
Total	23,946	14,367	61	9,780

Note : all figures are at 1991-92 prices.

covered by 1997. To implement this 2.3 lakh villages will have to be covered in each of the remaining two Annual Plans, which appears impossible. In order to accelerate the pace of rural connecvity the guide-lines and the tenders issued for private sector participation, 10% of the total capacity installed in each circle has to be created in the rural areas. This will no doubt help in speeding up telephone coverage of villages.

6.200 Limited availability of funds with public sector has been the single most important factor inhibiting the growth of telecom facilities so far. This has been true even for the first three years of the Eighth Plan. The outlay available for the Telecom sector has been determined by the capacity of public sector to generate internal resources and to raise money from the market (bonds). For the Eighth Plan, an outlay of Rs. 23,946 crore was approved for the Department of Telecom (DOT) including MTNL. This was envisaged to be financed by internal resources of Rs. 16,565 crore and bonds of Rs. 7,026 crore. Budget support (Rs.364 crore) constitutes a negligible portion i.e. 1.55% of the total approved outlay. During the first three years, about 61% of the approved outlay is likely to be utilized. The details of the outlay and expenditure for DOT, including MTNL, are summarised in Table 6.34.

6.201 In the first three years, against the target of mobilising internal resources of Rs. 10,720 crore (at 1991-92 prices), the actual achievement is likely to be Rs. 10,193 crore, resulting in short-fall of Rs. 527 crore. This is despite the fact that tariffs were revised upward by 15 to 20% in 1993 and the projection of internal resources for the Eighth plan did not assume any increase in tariff. The growth in revenue per DEL has been much lower than the assumed rate of 6%. Though a detailed study is yet to be undertaken to identify reasons for this, ad- hoc approach to tariff fixation, poor quality of service and traffic congestion seem to be the main reasons responsible for this. According to a study of 1992, the major distortions in the tariff structure are :-

i) underpriced telephone rentals;

ii) Over priced call charges leading to under utilization of network; and

iii) charge of same rental from business and domestic users instead of higher from the former, yielding much lower revenue than the optimum.

6.201.1 The upward revision of tariff in 1993, which failed to raise revenues to the extent expected reinforces the need to rationalise different components of the tariff keeping in mind the consumer's capacity to pay. One more factor which can emerge as an important consideration in the future is the need to fix charges having some parity with international rates. This is because with technological advance, reversing the charges, if they are much higher here, and making payment in countries which have lower rates, is a distinct possibility.

6.202 The Eighth Plan envisaged raising Rs. 7,026 crore through bonds, the market borrowing in the first three years is likely to be Rs. 3,948 crore (at 1991-92 prices) representing utilization of 56% of the allocation. The slight shortfall is due to unfavourable conditions in 1993-94 though unlike some other sectors telecom sectors market borrowing received much better response from financial institutions. This leaves a balance of Rs.3,078 crore (at 1991-92 prices) for the last two Annual Plans. In view of the better credit perception of the sector and the need for additional resources to achieve higher physical targets, the allocation of bonds needs to be raised in the last two years. However, the other important factor of Department's ability to service debt has also to be kept in view. When adverse market conditions prevailed the effective cost of borrowing to the Department was as much as 21% while the rate of return is estimated to be about 22% on historical cost basis of its assets.

6.203 To supplement resources of Department of Telecom, Eighth Plan had envisaged methods of financing like leasing, joint venture and raising equity from the market. Not much progress has been made in this regard in the first three years. The Department had aimed to commission 7.5 lakh DELs in the Plan period through leasing. However, progress in the first three years has been rather slow due to initial problems. While leasing of switching equipment is comparatively easy, it is not so transmission equipment like cables. The relative economics of leasing vis-a- vis other modes of financing is yet to be firmed up and tested. Equity capital is a very economical way to finance plan investment. However, this mode of financing has received the least attention.

6.204 Provision of value added service on franchise basis by private sector is among the main objectives of the Eighth Plan. The primary services envisaged include Electronic Mail, Voice Mail, Data Services, Audio Text

Services, Video Text Services, Video Conferencing, Radio Paging and Cellular Mobile Telephones. The pace of implementation of this programme has not been encouraging so far. E-Mail, Voice Mail and Radio Paging have been introduced on a limited scale. The main constraint in this regard has been the lack of a well thought out and transparent policy for allowing and regulating the entry of private sector. Unless the process is streamlined, the objective of the National Telecom Policy to revise the original Eighth Plan targets and to accelerate the introduction by 1996 of value added services at international standards is unlikely to be achieved.

6.205 The entire question of required structural and institutional reforms in the telecom sector in line with the new economic policy of liberalisation and global integration has been discussed and debated at length at the different policy formulation levels in the Government including Telecom Commission. The main issues are :

i) Involving private sector in the basic telecom services;

ii) Separation of three major functions of policy formulation, regulation and service provision;

iii) Setting up of an independent regulatory mechanism; and

iv) Evolving appropriate organisational structure for the operational network of the Department of Telecom.

6.205.1 The Athreya Committee Report (1991), the Nanda Committee Report (1992), the report of Industrial Credit and Investment Corporation of India (ICICI) on Regulatory Mechanism (1993) and the Gupta Committee Report (1995) provided some frame-work for considering different alternativess. On the basis of consensus reached, institutional reforms in respect of involvement of private sector in basic services and setting up of an independent regulatory mechanism have already been effectedd. Consensus is yet to emerge with regard to the other two areas i.e. evolving appropriate organisational structure for DOT's network and the institutional mechanism for policy making. The last issue involves basically the role of Telecom Commission in the changed scenario. On the most appropriate organisational structure of DOT's network, the various alternatives available and discussed are :

i) Continuing it as a Departmental undertaking as recommended by the Gupta Committee Report;

ii) Converting it into single national corporation merging the existing corporation i.e. M.T.N.L. into it;

iii) Creating one national corporation for the entire country keeping MTNL in its present form;

iv) Creating four independent zonal corporations and one long distance connector corporation (as recommended by Athreya Committee).

6.205.2 Though the Telecom Commission in December 1993 had favoured the setting up of four zonal corporations, the issue still remains unresolved.

6.206 The Eighth Plan had emphasised the need for fundamental structural and institutional reforms in the sector to ensure development of telecom facilities at the required rate and bring them at par with the international standards. One major policy change suggested was allowing private sector funding and enterprise in the basic telecom services. After the announcement of the National Telecom Policy, telecom services have been thrown open to the private sector effecting a major structural change. The National Telecom Policy estimates that private investment of the order of Rs. 19,587 crore (at 1991-92 prices) will flow to this sector. On the premise in the Policy that DOT will be able to achieve the original Plan target of 75 lakh DELs including 6 to 7 lakh DELs through leasing, the resources needed to be generated by the private sector has to provide for the balance 25 lakh DELs of the 100 lakh DELs aimed at in the Policy and cost of the equipment leased by DOT. On a per line cost of Rs 40,000 (at current prices) i.e. Rs. 30,000 (at 1991-92 prices), the resource needed by the private sector for basic telecom services will be Rs. 10,600 crore. The flow of funds from the private sector could be much higher and the rate of expansion of services could be accelerated if the entry and operative conditions are conducive and the return on investment is adequate. The achievement of revised targets and success of the Policy would depend to a great extent upon :-

i) how quickly and constructively the guidelines of private sector participation in basic services can be operationalized;

ii) how fair and effective the regulatory mechanism is; and

iii) how remunerative the local network turns out to be for private sector with mandatory operation in rural areas, the present ad hoc tariff structure of DOT continues to serve as the reference rate, long distance carries on to be a monopoly of Department of Telecom and the present non-corporate structure of DOT's telecom services continues with consequential tax advantage albeit perhaps, lower efficiency.

6.207 For any reforms programme to be effective, the changes have to be implemented as a package as there is organic relationship between different components and a proper sequencing has to be followed. Viewed in this perspective, long distance operations, which is a very important component of telecom services and the real revenue earner, should not be allowed to be a monopoly of one operator at the cost of the Indian consumer. If competition has been permitted in the basic telecom services, it should be so also in long distance operation even if it be among two or more public sector agencies.

6.208 In a well developed and efficient communication system, the three basic roles -- (i) policy making; (ii) service provision; and (iii) regulation -- are clearly demarcated and should be performed by three separate and independent entities. All the three functions were so long being performed by the Department of Telecommunications. To ensure a level playing field to the private operators and fair competition among public and private sector these functions need to be separated and performed by independent agencies. It has already been decided to set up a regulatory body called Telecom Regulatory Authority of India (TRAI). To make it truly autonomous, the regulatory body needs to be made statutory and self financing.

6.209 In the changed scenario of private sector participation in the basic telecom services, it is neither feasible nor desirable to expect a departmental undertaking like the Department of Telecommunication in its present form to compete with private companies run purely on commercial lines. Not only do departmentally run services tend to less efficient , such a structure creates problem in raising resources from the market. Accountability also, perhaps, becomes more effective under a corporate set up. The problem posed by the present set up of DOT is best illustrated by the fact that for its network expansion the Department has to rely on the MTNL. This use of a non financial corporate body as a vehicle to access the financial market is a method which is best done away with. Therefore in the changed circumstances, corporatisation of the Department's operational network becomes an immediate necessity. Setting up of one or more independent corporations should be the immediate target as in the final scenario only four or five private companies may emerge as the main operators in the country. To achieve the basic objective of providing efficient services at the cheapest cost, ensuring the best value for money to the consumer and earning optimum profit, these corporations should be allowed to operate as normal commercial organisations. The guiding principles for the corporation should be :-

i) Full autonomy of functioning which should be entirely left to the Boards and the Department's position should be reflected only through its Directors on the Board and its interest should be confined mainly to the protection of the value of its investment and profits.

ii) Full freedom in respect of financial and investment policies including to approach the capital market - both domestic as well as international - for raising capital both in the form of equity and debt instruments, freedom to enter into joint ventures with Indian and foreign companies with regard to equity participation and disinvestment of equity as and when decided by the Board.

iii) Clear understanding that the Government will not provide any budget support to subsidise operations and no tax or other concessions will be allowed

iv) If necessary, at the beginning one time assistance in the form of higher capital base or some grant should be considered to ensure profitability but thereafter, each corporation should run in a manner which is conducive to profit making.

v) Within the limits of pricing laid down by the regulatory body in the interest of the consumers and profitability of operators, freedom to decide the prices actually to be charged.

vi) Full freedom in respect of choice of technology within the limits of compatibility.

vii) Full freedom to rationalize deployment of labour with the objective of increasing efficiency.

6.210 With the regulatory and service provision functions being carved out to separate entities, the Department of Telecommunication will be left only with policy making functions. At present, the policy making role is vested in the Telecom Commission. When the Commission was created in 1989, it was done so with a view to promote rapid development in all aspects of telecommunications including technology, production and service under one authority. The very purpose for which the Telecom Commission was created will cease following the successful implementation of institutional reforms whereby the three functions would be handled by three independent entities i.e. policy making by the Department of Telecom, regulatory functions by TRAI and service provision by independent corporations and other private sector operators. Ultimately, there may not be any need to continue the Commission as policy formulation would be the main role for the Department of Telecom.

6.211 The basic objective of the Eighth Plan of the various Public Sector Undertakings (PSUs) under the Telecom sector is to make these units self-financing and competitive in the changing scenario of economic liberalisation and opening up of the economy. The four PSUs under the Department of Telecom are, Indian Telephone Industries (ITI), Hindustan Teleprinters Ltd. (HTL), Mahanagar Telephone Nigam Ltd. (MTNL), and Videsh Sanchar Nigam Ltd. (VSNL). MTNL and VSNL have enjoyed monopoly positions so far, not facing any competition from national or international companies. During the first three years of the Eighth Plan, these two companies have fared quite well, especially VSNL. On the other hand, the two manufacturing units i.e. ITI and HTL are struggling for growth and stability as following deregulation of telecom equipment manufacturing. With the adoption of open tender policy by the Department of Telecom, they have to compete with both national as well as international companies for sale of their equipment. Due to a substantial decline in the international prices of equipment, especially switching, during the last few years, the two companies are facing problems regarding sale and profitability. ITI is facing major problems with regard to capacity utilisation and the problem may worsen in the last two years of the Eighth Plan unless Department of Telecom agrees to buy higher proportion of its output. Surplus labour force with both the companies is another constraint. It is a major hinderance in reducing cost of production as the companies cannot retrench surplus labour. The problem is quite severe in case of ITI where about 20% of labour force is surplus. Another consequence of opening up of the economy is the flow of latest technology into equipment manufacturing rendering the production capabilities outdated. They have to modernise and diversify into new areas. Under the present policy of buying the equipment through competitive bidding, these two PSUs are not able to effectively compete with the private sector. In order to help the PSUs tide over this problem, the Department is buying 30% of its total requirement from these two units at the lowest quoted priced. With a view to ensure fair competition; some price preference (10 to 15%) for a limited number of years would be a better proposition in place of purchase preference at the lowest price. The details of outlay and expenditure of PSUs may be seen in Annex 6.15.

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Annex. 6.1

Sectorwise Coal Demand

(In Million Tonnes)

	1991-92	1996-97	
Major Sector	Actual	Target	Now Reassessed
(1)	(2)	(3)	(4)
1. Steel & Coke Ovens	31.66	42.00	41.00**
2. Sponge Iron	0.40	2.00	3.20
3. Power (Utilities)	134.60 (2.30)	185.30 (4.70)	194.00 (5.00)
4. Power (Captive)	13.00 (-)	15.00 (2.10)	15.00 (2.70)
5. Railways	4.42	3.00	0.40
6. Cement	9.97	17.50	17.50
7. Fertiliser	4.23	4.00	4.70
8. Export	0.11	1.00	0.50
9. LTC/Soft Coke	0.99	4.00	4.00
10. Bricks & Others	25.50	33.20 (0.20)	26.70
11. Colliery Consumption	4.06	4.00	4.00
Grand Total	228.94 (2.30)	311.00 (7.00)	311.00 (7.70)

Note:- Figures in brackets indicate washery\middlings.
** Including import of 6 mt. of superior grade coal.

Annex. 6.2

Details of Eighth Plan Capacity Additions

	TARGET			REVISED		
	CENTRE	STATE	ALL-INDIA	CENTRE	STATE	ALL-INDIA
A. HYDRO						
ONGOING/APPROVED	3160.0	5971.2	9131.2	1305.0	2376.7	3681.7
NEW STARTS-CEA CLEARED	100.0	51.0	151.0	100.0	15.0	115.0
NEW STARTS-YET TO BE APPROVED	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (A)	3260.0	6022.2	9282.2	1405.0	2391.7	3796.7
B. GAS						
ONGOING/APPROVED	1363.0	1591.5	2954.5	2032.0	1247.0	3279.0
NEW STARTS-CEA CLEARED	1245.0	676.0	1921.0	84.0	290.0	374.0
NEW STARTS-YET TO BE APPROVED	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (B)	2608.0	2267.5	4875.5	2116.0	1537.0	3653.0
C. THERMAL						
ONGOING/APPROVED	4970.0	7470.0	12440.0	4520.0	6460.0	10980.0
NEW STARTS-CEA CLEARED	920.0	1920.0	2840.0	0.0	1420.0	1420.0
NEW STARTS-YET TO BE APPROVED	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (C)	5890.0	9390.0	15280.0	4520.0	7880.0	12400.0
D. NUCLEAR						
ONGOING/APPROVED	1100.0	0.0	1100.0	880.0	0.0	880.0
E. (HYDRO+THERMAL+GAS+NUCLEAR)						
ONGOING/APPROVED	10593.0	15032.7	25625.7	8737.0	10883.7	18220.7
NEW STARTS-CEA CLEARED	2265.0	2647.0	4912.0	184.0	1725.0	1909.0
NEW STARTS-YET TO BE APPROVED	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (E)	12858.0	17679.7	30537.7	8921.0	11808.7	20729.7

Annex. 6.3

Freight Traffic of Indian Railways

	1992-93				1993-94			
	B.E.(Target)		Actual		B.E.(Target)		R.E.	
	L.T.	NTKMs	L.T.	NTKMs	L.T.	NTKMs	L.T.	NTKMs
1. Coal	1570.0	98.62	1577.3	100.48	1660.0	104.91	1669.8	104.59
2. Raw materials to Steel Plants	310.0	9.67	329.7	10.91	335.0	10.65	329.4	12.00
3. Pig iron & finished steel	115.0	13.49	120.3	13.76	130.0	15.47	120.8	13.01
4. Iron ore for exports	150.0	8.46	104.7	6.12	120.0	6.60	104.6	6.03
5. Cement	315.0	23.56	303.8	19.21	330.0	24.09	318.7	19.73
6. Foodgrains	270.0	38.83	273.0	36.29	290.0	39.73	266.6	35.08
7. Fertilisers	205.0	18.96	189.4	17.27	220.0	20.46	191.0	17.83
8. P.O.L.	265.0	15.29	264.1	15.92	275.0	16.50	259.5	15.91
9. Other goods	340.0	34.44	338.2	32.45	340.0	34.00	325.7	31.00
Total :	3700.0	272.41	3500.5	252.39	3700.0	272.41	3586.1	254.28

LT - Lakh Tonnes
NTKMs - Net Tonne Kilometers

Annex 6.4

Central Roads Sector - Outlay and Expenditure

(Rs.crores)

Name of Scheme/ Project	8th Plan Outlay (92-97)	1992-93		1993-94		1994-95	Total 3 years (92-95)
		Outlay	Expr.	Outlay	Anti.Exp	Outlay	
A. Central Sector							
1. National Highways (of which external aid)	2460.00 (808.00)	441.87 (57.42)	442.14 (80.30)	569.69 (220.00)	603.69 (220.00)	647.94 (270.00)	1693.77 (570.30)
2. E&I Roads	60.00	2.00	2.00	2.50	2.50	3.00	7.50
3. Stragetic Roads	30.00	9.00	9.00	9.00	9.00	7.00	25.00
4. Sensitive Border Area Roads	12.00	2.00	1.50	3.50	3.50	2.50	7.50
5. Instt. of Training for Highway Engineers	10.00	-	0.26	2.00	2.00	*	2.26
6. Training (For ext. aided projects)	4.00	8.00	0.75	1.00	1.00	*	1.75
7. Training (Others)	-	-	0.02	0.05	0.05	0.05	0.12
8. National Highway Authority	-	-	-	0.01	0.01	3.00	3.01
9. Highway R&D	10.00	-	0.90	2.00	2.00	1.50	4.40
10. Machinery	14.00	0.50	1.86	2.50	2.50	-	4.36
11. Loans to States (for CSS Scheme)	-	-	0.50	0.75	0.75	0.01	1.26
Total : A	2600.00	463.37	458.93	593.00	627.00	** 665.00	1750.93
B. State Sector	10233.00	1807.34	1838.48	2155.59	1870.11	2510.68	6219.27
Total (A+B)	12833.00	2270.71	2297.41	2748.59	2497.11	3175.68	7970.20

* Outlay for NITHE (Rs.2 crores) and training for externally aided projects (Rs.0.50 crores) included in the outlay for Externally Aided Projects.

** Comprises i) Budgetary support - Rs.655 crores and
ii) Extra Budgetary Resources - Rs.10 crores

Annex. 6.5

Outlay & Expenditure - Roads & Bridges

(Rs.crores)

State/U.T.	1992-97	1992-93		1993-94		1994-95
	Outlay	Outlay	Expr.	Outlay	Anti.Expr	Outlay
1	2	3	4	5	6	7
States						
1. Andhra Pradesh	415.17	96.68	133.55	104.24	112.06	85.46
2. Arunachal Pradesh	313.22	66.50	62.89	77.57	69.87	82.54
3. Assam	219.36	52.00	40.24	52.00	57.96	62.00
4. Bihar	1407.72	237.74	133.56	244.81	76.82	244.81
5. Goa	65.00	12.91	12.91	14.60	14.60	15.00
6. Gujarat	350.00	70.00	137.38	70.00	76.57	84.17
7. Haryana	146.70	19.90	20.70	21.12	19.12	22.58
8. Himachal Pradesh	275.00	50.00	51.34	54.00	63.19	64.85
9. Jammu & Kashmir	236.90	48.37	44.10	57.40	53.53	65.18
10.Karnataka	329.90	70.60	94.35	97.50	129.35	150.50
11.Kerala	359.00	54.60	57.89	57.20	44.33	70.00
12.Madhya Pradesh	341.50	65.00	51.31	73.00	56.07	73.00
13.Maharastra	629.08	116.44	118.84	152.92	136.74	227.95
14.Manipur	150.00	26.55	22.54	28.55	19.87	27.12
15.Meghalaya	198.11	46.40	42.91	52.60	54.31	53.00
16.Mizoram	92.00	19.75	20.31	21.75	20.66	21.75
17.Nagaland	142.50	20.00	12.20	22.60	15.60	24.10
18.Orissa	480.00	93.85	87.68	143.80	116.65	189.45
19.Punjab	200.00	50.75	18.10	25.00	21.75	26.83
20.Rajasthan	697.50	60.00	68.70	81.00	96.00	137.00
21.Sikkim	75.00	14.00	14.55	16.00	14.40	14.40
22.Tamil Nadu	450.00	105.37	103.82	110.00	111.10	123.27
23.Tripura	90.00	19.25	18.85	19.50	17.34	20.34
24.Uttar Pradesh	1572.53	225.41	292.17	371.41	280.08	399.00
25.West Bengal	280.00	48.14	51.86	38.42	52.82	59.28
Total (States)	9516.19	1690.21	1712.75	2006.99	1730.79	2343.58
Union Territories						
26.A&N Islands	51.00	11.46	13.13	14.10	14.10	14.82
27.Chandigarh	2.00	0.33	0.33	0.40	0.40	0.45
28.D&N Haveli	6.60	1.36	2.30	2.00	2.00	2.95
29.Daman & Diu	9.70	2.20	2.21	1.89	1.89	2.13
30.Delhi	626.00	97.00	101.25	124.45	115.17	139.50
31.Lakshadweep	3.16	0.61	0.65	0.70	0.70	0.75
32.Pondicherry	18.53	4.17	5.86	5.06	5.06	6.50
Total (UTs)	716.99	117.13	125.73	148.60	139.32	167.10
Total(States & UTs)	10233.18	1807.34	1838.48	2155.59	1870.11	2510.68

Annex. 6.6

Cumulative Net Profit/Loss in State Road Transport Undertakings

(Rs.crore)

STATE ROAD TRANSPORT UNDERTAKING	1990-91 ACTUALS	1991-92 ACTUALS	1992-93 ACTUALS	1993-94 ACTUALS	CUMULATIVE LOSS AS ON 31.3.1994	1994-95 REV. EST.	CUMULATIVE LOSS AS ON 31.3.1995 ESTIMATE
1	2	3	4	5	6	7	8
Andhra Pradesh	-11.92	-31.13	-26.53	6.25	-112.48	6.50	-105.98
Arunachal Pradesh	-2.41	-1.80	-1.99	-3.78	-14.19	-3.84	-18.03
Assam	-15.36	-17.81	-23.15	-27.65	-189.64	-21.74	-211.38
Bihar	-22.74	-19.81	-14.56	-29.76	-224.14	-42.59	-266.73
Goa (Kadamba)	0.34	-0.31	-0.81	-2.25	-5.92	-2.71	-8.63
Gujarat	4.29	1.74	3.93	-28.75	-311.62	-102.33	-413.95
Haryana	-18.97	-10.22	9.68	5.66	-13.85	-11.50	-25.35
Himachal Pradesh	-15.41	-27.11	-25.30	-28.84	-138.96	-32.44	-171.40
Jammu & Kashmir	-15.90	-16.83	-24.68	-20.69	-133.21	-20.96	-154.17
Karnataka	1.30	-19.09	-61.29	-92.73	-367.54	-90.49	-458.03
Kerala	-30.99	-29.53	-28.27	-27.70	-283.47	-18.29	-301.76
Madhya Pradesh	0.24	0.26	0.22	-22.53	-183.76	-31.67	-215.43
Maharastra	5.58	-26.72	4.48	6.30	-15.89	10.84	-5.05
Manipur	-1.46	-1.70	-2.02	-2.20	-19.77	-2.18	-21.95
Meghalaya	-1.69	-1.71	-2.35	-0.28	-6.03	-1.51	-7.54
Mizoram	-3.47	-3.92	-4.61	-4.80	-16.80	-5.27	-22.07
Nagaland	-4.10	-4.13	-3.46	-4.88	-37.38	-8.64	-46.02
Orissa	-12.09	-11.77	-8.33	-7.10	-127.31	-3.84	-131.15
Punjab Roadways	-30.26	-25.05	-22.61	-9.94	-279.16	-10.31	-289.47
PEPSU RTC	-20.88	-18.15	-17.09	-0.82	-202.97	-2.96	-205.93
Rajasthan	-8.59	12.72	5.88	22.67	-6.78	23.95	17.17
Sikkim	-0.87	-0.73	-3.52	-3.28	-8.30	-3.10	-11.40
Tamil Nadu	-42.28	-21.32	-50.67	-53.68	-290.24	-33.77	-324.01
Tripura	-3.12	-2.75	-3.59	-4.07	-34.73	-4.51	-39.24
Uttar Pradesh	-40.42	-33.43	-22.51	-8.75	-303.97	2.33	-301.64
Calcutta STC	-23.79	-21.65	-22.05	-20.00	-246.51	-20.75	-267.26
North Bengal	-5.75	-5.69	-10.46	-7.99	-22.40	-5.80	-28.20
South Bengal STC	-3.98	-3.30	-4.68	-6.80	-11.48	-5.43	-16.91
Total	-324.70	-340.94	-360.34	-378.39	-3608.50	-443.01	-4051.51

Source: Annual Plan 1995-96 discussions.

Annex. 6.7

Contribution to Plan by State Road Transport Undertakings

(Rs.crore)

State Road Transport Undertaking	Eighth Plan Estimates		1992-93 Actual		1993-94 Actual		1994-95 Rev.Est.		1992-95		Gap to be covered in 1995-96 & 1996-97	
	Total	Of Which ARM *	Total	Of Which ARM *	Total	Of Which ARM *	Total	Of Which ARM *	Total (4+6+8)	Of Which ARM (5+7+9)	Total (2-10)	Of Which ARM (3-11)
1	2	3	4	5	6	7	8	9	10	11	12	13
Andhra Pradesh	656.00	1333.15	61.37	26.00	77.30	0.00	106.27	0.00	244.94	26.00	411.06	1307.15
Arunachal Pradesh	-7.31	3.24	-1.15	0.20	-2.80	0.00	-2.76	0.00	-6.71	0.20	-0.60	3.04
Assam	-88.15	24.13	-20.15	0.00	-23.03	0.00	-17.04	0.95	-60.22	0.95	-27.93	23.18
Bihar	-109.27	46.39	0.31	0.00	-15.00	0.00	-27.41	2.34	-42.10	2.34	-67.17	44.05
Goa	6.82	17.25	-0.12	0.82	1.25	0.33	-1.58	0.00	-0.45	1.15	7.27	16.10
Gujarat	-210.18	393.84	44.87	0.00	3.98	65.92	-67.10	0.00	-18.25	65.92	-191.93	327.92
Haryana	213.27	268.90	24.65	22.09	23.71	10.15	8.70	0.00	57.06	32.24	156.21	236.66
Himachal Pradesh	-200.89	88.58	-29.50	0.00	-23.43	0.00	-31.11	5.50	-84.04	5.50	-116.85	83.08
Jammu & Kashmir	-74.66	29.55	-21.42	1.03	-18.59	0.00	-18.76	1.16	-58.77	2.19	-15.89	27.36
Karnataka	164.36	771.44	-37.82	11.00	3.08	0.00	-61.18	0.00	-95.92	11.00	260.28	760.44
Kerala	-131.40	284.70	-26.07	16.70	-26.03	0.00	-18.36	25.00	-70.46	41.70	-60.94	243.00
Madhya Pradesh	8.62	108.40	7.32	0.00	-13.43	0.00	-27.45	0.00	-33.56	0.00	42.18	108.40
Maharashtra	553.46	790.00	24.23	38.36	56.84	0.00	75.03	0.00	156.10	38.36	397.36	751.64
Manipur	-7.75	2.69	-1.65	0.00	-2.03	0.33	-1.98	0.00	-5.66	0.33	-2.09	2.36
Meghalaya	-1.13	0.54	-1.48	0.00	0.57	0.31	-0.71	0.09	-1.62	0.40	0.49	0.14
Mizoram	-17.63	1.34	-2.42	0.02	-3.82	0.00	-4.25	0.00	-10.49	0.02	-7.14	1.32
Nagaland	-25.45	2.76	-2.22	0.00	-3.63	0.51	-7.41	0.00	-13.26	0.51	-12.19	2.25
Orissa	-25.41	43.00	-5.52	2.57	-2.74	0.00	-3.41	2.89	-11.67	5.46	-13.74	37.54
Punjab	-61.09	123.55	-11.64	5.00	2.36	0.00	2.71	0.00	-6.57	5.00	-54.52	118.55
PEPSU RTC	-61.84	60.68	-9.97	5.43	0.61	0.00	1.38	0.00	-7.98	5.43	-53.86	55.25
Rajasthan	25.23	163.30	1.16	1.96	27.39	0.00	36.32	18.50	64.87	20.46	-39.64	142.84
Sikkim	-1.46	8.75	-1.67	0.48	-2.15	0.00	-1.96	0.00	-5.78	0.48	4.32	8.27
Tamil Nadu	-211.27	867.00	-36.66	0.00	-73.05	21.78	-50.96	0.00	-160.67	21.78	-50.60	845.22
Tripura	-21.71	2.55	-3.11	0.00	-3.81	0.00	-4.20	0.53	-11.12	0.53	-10.59	2.02
Uttar Pradesh	273.46	620.75	-4.92	44.78	2.20	0.00	8.49	35.00	5.77	79.78	267.69	540.97
Calcutta STC	-26.67	62.13	-8.82	3.74	-5.89	0.42	-7.35	0.00	-22.06	4.16	-4.61	57.97
North Bengal STC	-41.33	56.79	-4.32	3.00	-2.80	0.00	-1.65	0.00	-8.77	3.00	-32.56	53.79
South Bengal STC	-4.36	22.24	-2.02	1.23	-4.73	0.01	-0.41	0.00	-7.16	1.24	2.80	21.00
Total	572.26	6197.64	-68.74	184.41	-27.67	99.76	-118.14	91.96	-214.55	376.13	786.81	5821.51

* Represents yield from the respective year measure(s) only.

Annex. 6.8

Losses of Delhi Transport Corporation

(Rs.crore)

Year	Net loss	Working loss	Depreciation	Interest
1992-93	213.50	54.91	15.10	143.49
1993-94	281.72	83.60	14.49	183.63
1994-95	344.78	90.22*	17.70	236.86

* Fares were revised in June, 1994. Despite this, losses have increased.

Annex. 6.9

Outlay and Expenditure - Road Transport

(Rs. crore)

Scheme	8th Plan	1992-93		1993-94		1994-95
	Outlay	Outlay	Expdr.	Outlay	Anti Exp.	Outlay
A. Central Sector						
1. Delhi Transport Corpn.	140.00	20.00	19.30	10.00	0.12	10.00
2. Central Govt. matching capital contribution	70.00	4.00	11.50	4.39	4.39	3.25
3. Central Institute of Road Transport	4.50	0.50	0.27	-	-	0.50
4. Road Safety Programme	40.30	4.40	3.80	9.10	9.02	12.90
(Road safety equipment)			(3.39)	(3.00)	(3.00)	(6.00)
5. Training Programme for staff and installation of computer system	3.20	0.67	0.10	0.21	0.20	0.20
6. Research & Development	4.00	-	-	1.00	0.95	0.30
7. Misc. including Studies on Transport Industry	2.00	0.43	0.12	0.30	0.28	0.85
Total A:	264.00	30.00	35.08	25.00	14.96	28.00
B. State Sector	3855.00	611.07	515.65	694.58	724.35	805.86
Total (A+B)	4119.10	641.07	550.73	719.58	739.31	833.86

Note: Figures in brackets represent external aid.

Annex. 6.10

Portwise Outlay and Expenditure

(Rs.crore)

Major Ports	8th Plan	1992-93		1993-94		1994-95
	Outlay	Outlay	Actual Exprd.	Outlay	R.E.	Outlay
1 (a) Calcutta	155.00	45.00	10.80	66.00	28.77	10.00
(b) RR Schemes	76.00	40.58	14.48	27.00	-	30.00
(c) Haldia	190.00	45.00	26.04	50.00	34.29	-
Total:Calcutta	421.00	130.58	51.32	143.00	63.06	40.00
2 Bombay	413.00	70.43	26.09	86.00	71.72	50.00
3 JNPT	215.00	57.30	26.92	63.00	17.30	30.00
4 Madras	570.00	34.89	18.31	23.56	18.62	50.00
5 Cochin	117.00	42.17	26.13	47.00	39.01	50.00
6 Vishakapatnam	250.00	65.57	46.52	71.00	59.11	40.00
7 Kandla	226.00	40.00	11.24	37.78	23.67	30.00
8 Mormugao	123.00	11.76	9.13	13.00	27.98	30.00
9 Paradip	486.00	67.00	28.36	75.00	48.46	40.00
10 New Mangalore	98.00	4.91	2.79	6.00	3.30	40.00
11 Tuticorin	65.00	17.05	7.49	19.00	13.90	19.50
Total:Major Ports	2984.00	541.66	254.30	584.34	386.13	419.50
II Others						
1 DCI	155.00	55.79	9.51	20.00	7.38	35.00
2 ALHW	70.00	13.11	10.76	15.00	13.30	17.72
3 R&D	1.00	0.20	0.00	0.20	0.05	0.10
4 MPSO	6.00	2.00	0.31	2.00	-	2.68
Total:Others	232.00	71.10	20.58	37.20	20.73	55.50
Grand Total	3216.00	612.76	274.88	621.54	406.86	475.00

Annex. 6.11

Outlay and Expenditure - Civil Aviation

(Rs.crores)

Sl.No.	Name of Orgn.	1992-93 EXPENDITURE			1993-94 OUTLAY			1993-94 ANTI. EXPENDITURE			1994-95 OUTLAY		
		B.S.	I.E.B.R.	TOTAL	B.S.	I.E.B.R.	TOTAL	B.S.	I.E.B.R.	TOTAL	B.S.	I.E.B.R.	TOTAL
1.	AIR INDIA	-	571.76	571.76	-	748.31	748.31	-	731.88	731.88	-	764.51	764.51
2.	IND.AIRLINES	-	155.24	155.24	-	421.80	421.80	-	350.00	350.00	-	434.68	434.68
3.	I.A.A.I.	-	58.23	58.23	-	135.80	135.80	-	94.69	94.69	-	119.60	119.60
4.	N.A.A.	1.50	73.88	75.38	3.71	246.29	250.00	4.82	239.45	244.27	13.11	329.25	342.36
5.	D.G.C.A.	5.88	-	5.88	7.25	-	7.25	7.22	-	7.22	4.00	-	4.00
6.	B.C.A.S.	0.40	-	0.40	1.00	-	1.00	0.60	-	0.60	1.00	-	1.00
7.	VAYUDOOT	-	p	p	-	q	q	-	2.50	2.50	-	r	r
8.	PAWAN HANS	-	4.90	4.90	-	28.28	28.28	-	21.89	21.89	-	14.90	14.90
9.	I.G.R.U.A.	-	s	s	-	t	t	-	u	u	4.99	v	4.99
10.	A.C.I.	-	-	-	0.01	-	0.01	0.01	-	0.01	0.01	-	0.01
11.	H.C.I.	-	-	-	-	w	w	-	x	x	-	y	y
		7.78	864.01	871.79	11.97	1580.48	1592.45	12.65	1440.41	1453.06	23.11	1662.94	1686.05

p Actual expenditure of Vayudoot in 1992-93 has been Rs.0.50 crore shared equally by IA & AI.

q The outlay of Rs.5.66 Cr. which is to be equally shared by Air India and Indian Airlines, is included in their respective plan outlays.

r Outlay of Rs.4.00 crores for Vayudoot is to be provided by IA and is included in its outlay.

s The contribution to IGRUA by Air India and Indian Airlines has been Rs.1.25 crore each which is included in their respecitve plan outlays. However, the actual expenditure, as shown by IGRUA in 1992-93 is Rs.0.5 Cr. only.

t The outlay of Rs.4.58 Cr. for IGRUA in 1993-94 is included in Air India's plan outlay.

u IGRUA anticipates to spend Rs.4.82 Cr. in the year 1993-94 which would be provided by Air India. This amount is included in Air India's anticipated expenditure.

v The total outlay of IGRUA for 1994-95 has been agreed at Rs.9.99 crores of which Rs.4.99 crores would be B.S. from the Govt. and Rs.5.00 crores is to be contributed equally by AI & IA and is included in their respecitve outlays.

w The outlay of Rs.15.8 Cr. for HCI in 1993-94 is included in Air India's plan outlay.

x HCI has anticipated an expenditure of Rs.2.36 Cr. in 1993-94 which is included in Air India's anticipated expenditure.

y Outlay for HCI for 1994-95 is Rs.15.0 crores to be provided by AI. It is, however, included in Air India's outlay.

ANNEX 6.12

Schemewise Outlay/Expenditure - Department of Posts.

(Rs crore)

No.		8th Plan Outlay at 1991-92 Prices	At 1991-92 Prices. 92-93 Actual Expnd.	93-94 Revised Estmates	94-95 Antcd. Expnd.	92-95 Total Expnd.	% Utili sation 8th Plan	95-97 Balance	95-96 Approved Outlay
1.	Expansion of postal network	23.65	1.52	3.79	4.89	10.20	43.13	13.45	5.78
2.	Construction of post buildings	121.35	35.60	32.01	30.99	98.61	81.26	22.74	17.34
3.	Manpower Development (Training Programme)	5.00	1.17	0.88	0.62	2.67	53.44	2.33	0.94
4.	Machanisation & Modernisation	138.30	13.94	13.48	28.12	55.53	40.15	82.77	33.82
5.	Mail Moter Services (transport services)	14.80	2.72	2.95	1.35	7.02	47.45	7.78	0.18
6.	R M S Vehicles	2.50	0.00	0.42	0.09	0.51	20.56	1.99	0.09
7.	Speed Post Service	5.50	0.21	0.21	0.95	1.37	24.93	4.13	0.58
8.	Material Management	4.90	0.00	1.18	1.07	2.25	45.84	2.65	0.34
9.	National Savings (POSB)	2.50	0.12	0.42	0.39	0.93	37.06	1.57	-
10.	Marketing	6.50	0.48	1.24	0.77	2.50	38.39	4.00	1.16
11.	P L I	-	0.07	0.00	1.86	1.94	NA		1.18
	Total	325.00	55.83	56.59	71.11	183.52	56.47	141.48	61.40

* Under construction scheme Rs.2.00 crore should be allocated for heritage buildings during 1994-95.

ANNEX 6.13

Physical Targets/Achievements

Nos.

Name of Schemes	8th plan target	92-93 Actuals	93-94 Actuals	94-95 Target	94-95 Antcd. Achvt.	92-95 Antcd. Achvt.	% of 8th plan	95-97 Balance.	95-96 Target.
1	2	3	4	5	6	7	8	9	10
1. Expansion of Postal Services									
a. Opening of post offices									
EDBOs	3000	635	667	80	4	1306	43.5	1618	80
DSOs	500	116	115	150	31	262	52.4	119	150
b. Panchayat Dak Sewa Yojana (New Scheme)	2500	0	0	500	500	500	20.00	2000	1000
c. Planting of Letter Boxes	87000	0	0	56000	56000	56000	64.36	31000	26000
- Rural	72000	0	0	51000	51000	51000	70.83	21000	21000
- Urban	15000	0	0	5000	5000	5000	33.33	10000	5000
d. Provision of operational equipment (New Scheme)	650	0	0	100	100	100	15.38	550	200
2. Upgradation of Technology									
i) Counter computerisation									
a. Supply of M P C Ms	5000	0	250	1000	1500	1750	35.00	3250	1000
b. Other programme for Computerisation of postal operations (No. of POs)	1053			53	53	53	5.03	1000	500
ii) Mechanisation of Mail handlings									
a. Mechnised Mail Proccessing (Metros)	4	1	0	1	1	2	50	2	Delhi
'b. Electronic Money Transfer (at stations)	75			5	26	26	34.66	49	49
c. Track & Trace System for Speed Post (at SPCCs)	20			5	2	2	10	18	20
d. Computerisation of accounting & inventory functions- MIS (at circles)	19		6	13		6	31.75	13	13
e. Vehicular Support in Rural Areas i.e. cash Vans (New Schemes)	100								50
f. Introduction of Mechanical Aids									
Hand stamp cacellors	25000	100	6000	20000	20000	26100			5000
High/low speed stamp cancelling			270						0
machine electronic franking mach				40					20

Annex-6.13 (Contd.)

1	2	3	4	5	6	7	8	9	10
3. Training Programmes									
In service training /SB refresher	32500	6307	5569	7100	7100	18976	58.38	13524	7100
Refresher training to EDBPMs	119000	4564	4108	4900	4900	13572			4900
Computer tarining									100
4. Material management									
House printing machines	30	4	3	4	5	12	40.0	18	10
Paper cutting machines	45	1	3	4	8	12	26.6	33	10
5. Transport Service									
a. R M S Vans									
i) New construction (MG Boggies)	10								20
ii) Remodelling	50		15	50	10	25			50
b. M M S Vans	560	123	124	135	35	282	50.35	278	25
6. Speed post service(estbt of)									
Business centre	25			15	48	48			15
POD centres									55
Lease/purchase of mopeds									0
8. Construction of									
Postal Buildings	242	98	105		85	288	119.0		-
Staff Quarters	1000	267	297		230	794	79.4	206	-
Other buildings									
9. Postal Life Insurance									
Computerisation of circles	13	5	1	4	4	10	76.92	3	13+1 Dt.
Upgradation of circles	5	2	2	1	1	5	100.00		0

Note : The POSBs scheme included in computerisation of postal operations.

Annex 6.14

Number of Gram Panchayats Without Post Office

Name of Circle	Nos.
Andhra Pradesh	6395
Assam	73
Bihar	3327
Delhi	80
Gujarat	5235
(Dadar & nagar Haveli and Daman & Diu)	
Haryana	3422
Himanchal Pradesh	488
Jammu & kashmir	249
Karnataka	237
Kearla	-
(Lakshdweep)	
Maharashtra	15826
(Goa)	
Madhya Pradesh	12938
North East	1457
Orissa	206
Punjab	8451
(Chandigarh)	
Rajasthan	747
Tamil Nadu	4066
(Pondicherry)	
Uttar Pradesh	58837
West Bengal	6
(Sikkim & A&N Islands)	
All India Total	122040

Annex 6.15

Outlay, Expenditure and Financing Pattern of Telecom Sector (at 1991 -92 Prices)

(Rs Crore)

Sectors/ Heads of Developments	Eighth Plan Approved outlay	1992-93 Expnd actual	1993-94 RE	1994-95 Approved Outlay	1994-95 Antcd Expnd.	1992-95 Total	% Utilis ation	1995-97 Balance	1995-96 Approved Outlay
I. DOT including C-DOT	23946.00	3640.02	4138.17	4455.87	4610.45	12388.64	51.74	11557.36	4980.50
of which (13225)									
i) Internal Resources	16556.00	2480.37	2790.24	3501.31	3385.38	8655.99	52.28	7900.01	3752.53
ii) Bonds	7026.00	1135.16	1347.94	954.55	1225.07	3708.17	52.78	3317.83	1227.97
iii) Others (ECB)	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
iv) Budgetary Support	364.00	24.48	0.00	0.00	0.00	24.48	6.73	339.52	0.00
II. MTNL	*	642.75	814.66	762.10	790.69	2248.10			681.74
of which (13225)									
i) Internal Resources	*	445.42	477.67	515.30	613.90	1537.00			659.66
ii) Bonds	*	0.00	162.59	77.29	77.29	239.89			0.00
iii) Others		197.33	174.39	169.51	99.50	471.22			22.07
Total DOT including MTNL	23946.00	4282.77	4952.83	5217.96	5401.14	14636.74	61.12	9309.26	5662.24
of which (13225)									
i) Internal Resources	16556.00	2925.79	3267.91	4016.61	3999.28	10192.98	61.57	6363.02	4412.19
ii) Bonds	7026.00	1135.16	1510.53	1031.84	1302.37	3948.06	56.19	3077.94	1227.97
iii) Others	-	197.33	174.39	169.51	99.50	471.22			22.07
iv) Budgetary Support	364.00	24.48	0.00	0.00	0.00	24.48	6.73	339.52	0.00
III. Wireless Monitoring Orgn.	26.00	1.49	2.57	3.86	3.64	7.70	29.61	18.30	3.61
of which (13275)									
i) Budgetary Support	26.00	1.49	2.57	3.86	3.64	7.70	29.61	18.30	3.61
IV. VSNL (13275)	800.00	183.39	208.04	276.97	317.11	708.54	88.57	91.46	281.16
of which									
i) Internal Resources	800.00	144.09	169.49	217.97	80.32	393.91	49.24	406.09	248.61
ii) EBR - Others	-	39.30	38.54	59.00	236.79	314.63			32.55
V. Indian Telephone Inds.	350.00	43.84	32.01	100.48	100.48	176.33	50.38	173.67	95.35
of which (12859)									
i) Internal Resources	350.00	11.87	32.01	0.00	0.00	43.89	12.54	306.11	55.62
ii) EBR - Others	-	31.96	0.00	100.48	100.48	132.44			39.73
VI. Hindustan Teleprinters Ltd	15.00	1.86	1.36	4.75	6.72	9.94	66.29	5.06	8.88
of which (12859)									
i) Internal Resources	15.00	0.00	0.00	1.72	0.00	0.00	0.00	15.00	8.88
ii) EBR - Others		1.86	1.36	3.03	6.72	9.94		-9.94	0.00
Grand Total of which	25137.00	4513.34	5196.81	5604.03	5829.10	15539.25	61.82	9597.75	6051.24
IR	17721.00	3081.75	3469.42	4236.30	4079.60	10630.77	59.99	7090.23	4725.31
Bonds	7026.00	1135.16	1510.53	1031.84	1302.37	3948.06	56.19	3077.94	1227.97
Others	0.00	270.46	214.29	332.01	443.49	928.24		-928.24	94.35
Budgetary Support	390.00	25.97	2.57	3.86	3.64	32.18	8.25	357.82	3.61
Grand Total	25137.00	4513.34	5196.81	5604.03	5829.10	15539.24	61.82	9597.75	6051.24

* The MTNL's figures are included in the DOT's figures.

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ANNEX 6.16

Schemewise Physical Target /Achivements - Telecommunication Services

Nos.

Telecommunication Services:	Unit	8th Plan Target Approved	8th Plan Target Now Proposed	1992-93 Achieve-ments	1993-94 Achieve ments	1994-95 Target.	1994-95 Antcd Achvt.	1992-95 Total	% of 8th Plan	1995-97 Balance	1995-96 Target.
1	2	3	4	5	6	7	8	9	10	11	12
1.Local Telephone System:											
i) Switching Capacity	Lakh Lines	93 (22.70)	93	12 (1.78)	18 (3.41)	19	19 (4)	49	53	44	19 (4)
ii) Direct Exchange Lines	-do-	75 (19.20)	68	10 (1.91)	12 (2.62	14 (3.0)	14 (3)	36	48	39	16 (3.5)
iii) Leasing (DELs)	-do-					-	3 (1)	3			4 (1)
2.Long Distance Switching System:											
i)Trunk Auto Exchange	Nos.	-		15	31	100	100	146			-
ii)Trunk Capacity (TAX)	Lines	272000	700000	42000	40600	125000	125000 (16000)	207600	76	64400	370000 (55000)
3.Long Distance Transmission System:											
i)Coaxial Cable System	Route Kms.	3000	3000	1112	848	600	600	2560	85	440	400
ii)Microwave System	-do-	20000	20000	2578	3383	4500	4500	10461	52	9539	5500
iii)UHF System	-do-	150000	90000	5710	4822	20000	20000	30532	20	119468	10000
iv)Optical Fibre System	-do-	20000	40000	3586	6442	6000	6000	16028	80	3972	10000
v) Earth Stations	Nos.	50	50	4	20	18	17	41	82	9	100
vi) VSAT	Nos.										
4.Openwire & Telegraph:											
i)Panchayat Phones (LDPTs).	Nos.	338000	338000	30072	33001	50000	50000	113073	33	224927	100000 +30000*
iv)Telex Capacity											
a)Local	Lines	31200	25000	3274	2132	2125	2125	7531	24	23669	1390
b)Transit	Lines	-	-	1708	648	1850	1850	4206	-	-	900

Note: Figures in brackets indicate MTNL component.
* Panchayat Phones to be provided out of proposed ADB loan.

CHAPTER 7

INDUSTRIAL DEVELOPMENT POLICY & PUBLIC SECTOR REFORMS

Section - 1

Overview

7.1 The 8th Plan strategy with regard to industrial development lays emphasis on clear prioritisation of sectors for investment in order to facilitate operationalisation and implementation of the policy initiatives taken in the areas of fiscal, trade and industrial sectors and human development. For the industrial sector, the new Industrial Policy of 1991 provides the backdrop for evolving the strategy for its development. The basic tenets pertain to promotion of efficiency, growth and competitiveness. The major highlights of the industrial policy being pursued since 1991 are:

i) Enhancement of domestic competition through virtual abolition of industrial licencing except for a short list of industries related to security and strategic concerns, social reasons, hazarduous chemicals and overriding environmental concerns;

ii) Reforms in the Monopolies and Restrictive Trade Practices (MRTP) Act to remove threshold limit of assets and elimination of requirement of prior approval for establishment of new undertakings, expansion, merger or amalgamations;

iii) Enhancement of external competition through substantial deregulation of import procedure, virtual elimination of quantitative restrictions on capital goods and raw material and reduction in tariff rates;

iv) Liberalisation of foreign investment approvals and foreign technology agreements; and

v) Public sector reform including substantial dereservation of industries earlier reserved exclusively for the public sector.

Liberalisation

7.2 Steps have been initiated on almost all fronts. The Industrial Policy of 1991 reduced the industries exclusively reserved for the public sector from 17 to 8. The list has further been shortened to 5 (Annex - 7.1). Similarly, 18 industries were retained under compulsory licencing which were further reduced to 16 (Annex-7.2). The MRTP Act has been amended to remove the threshold limit of assets in respect of the MRTP Companies. The peak customs duty as well as tariff on capital goods, machine tools and components of capital goods have been gradually reduced, the rates proposed in the budget for 1995-96 being 50 per cent and 25 per cent, respectively. In order to encourage foreign investment in the high priority areas requiring large investments and advanced technology, approval for direct foreign investment upto 51% foreign equity has been made automatic. In the same vein, automatic approval for foreign technology agreements has been agreed upon to inject the desired technological dynamism in the Indian industry. As a result, during the post-policy period i.e. August 1991 to December 1994 5484 foreign collaborations have been approved involving a total foreign investment of Rs.27,340 crore. Public sector restructuring is being undertaken with a view to generating more internal resources through improved efficiency so as to reduce recourse to budgetary support. The measures taken in this regard include partial disinvestment of shares in selected Public Sector Enterprises (PSEs) and bringing sick PSEs within the purview of the Board for Industrial and Financial Reconstruction (BIFR) through an amendment of the Sick Industrial Companies (Special Provision) Act, 1985, to help revival of the sick industries in the public sector and obviate the need for the Government to make investment of scarce resouces in unviable units. The Memorandum of Understanding (MOU) system has been introduced to ensure greater accountability and National Renewal Fund (NRF) established to protect the workers affected by industrial restructuring. Besides, for encouraging industrial production for exports new schemes like the Export Promotion Industrial Parks (EPIPs) Scheme has been introduced and Export Processing Zones (EPZs)/ Export Oriented Units (EOUs) strengthened.

Deregulation

7.3 The new policy aims at generation of high rate of industrial growth to the tune of about 7.5% per annum during the 8th Plan. The Plan specifically emphasised upon industrial deregulation and rational administered price policy. It was observed that domestic economic activities have been subject to a wide array of detailed and discretionary Govt. controls. In the industrial sector, such controls took various forms: barrier to entry and expansion imposed through industrial licencing; reservation of a large number of industries for the public sector as well as small scale sector; highly time-consuming procedures required for the exit of firms from an industry; price and distribution controls on various industrial products; etc. Eventhough, the new industrial policy reduced the extent of industrial licensing quite substantially, continuance of licensing requirement of consumer goods such as sugar, entertainment electronics etc. may also be reviewed. Therefore, only industries related to defence, explosives and hazardous chemicals need to be in the restricted list of industries requiring industrial licensing. The liberal entry policy needs to be matched by easy exit of the incidence of sickness in the industry is to be avoided. While protecting the legitimate interest of the workforce, an effective policy needs to be evolved towards restructuring of sick units. The liberal entry policy is likely to be successful provided there is an equally rational policy towards restructuring of unviable units.

National Renewal Fund

7.4 In the aforesaid context, it may be noted that the National Renewal Fund (NRF) was set up by a Government resolution dated 3.2.1992 to protect the interest of workers affected by industrial restructuring. In terms of the approved guidelines, the NRF has two components viz. National Renewal Grant Fund (NRGF); and Employment Generation Fund (EGF).

7.4.1 The NRGF provides assistance mainly for (i) worker counselling, retraining and redeployment; (ii) worker compensation packages in both the public and private sectors, and (iii) interest subsidies to financial institutions offering loans at concessional rates for labour rationalisation.

7.4.2 The EGF provides assistance mainly to : (i) area regeneration schemes sponsored by the State Governments; and (ii) employment generation schemes in both formal and non-formal sectors.

7.4.3 To administer the NRF, a high-power Empowered Authority has been set up. Funds were made available to Central Public Sector Units (CPSUs) to implement the Voluntary Retirement Scheme (VRS) as a mechanism for reducing their surplus labour force. A total of 73,267 workers had availed of the VRS as on 31.10.1994. The amount spent on this purpose was Rs.528.24 crore in 1992-93 and Rs.476.06 crore in 1993-94 respectively. The average outgo for VRS per worker was approximately Rs.1.5 lakh. Employee Resource Centre (ERCs) have been set up by 20 CPSUs and workers retraining schemes are being implemented by Employee Assistance Centres (EACs) at five places. Besides, Ministry of Labour has made retraining facilities available for rationalised workers in 15 ITIs and 6 ATIs.

7.4.4 It is proposed to set up EACs in all locations where substantial worker outflows have taken place. An area regeneration scheme in respect of 19 closed textile units of Ahmedabad is being initiated.

7.4.5 It is observed that eventhough initially the activities of NRF centred around VRS of CPSUs, recently more emphasis is being given to retraining/redeployment and employment generation schemes.

Turning round sick units

7.5 The problem of industrial sickness has been a matter of concern as at the end of September, 1992, 1599 non-SSI units with an outstanding bank credit of Rs.6,805 crore was in the list of sickness. Similarly, 828 non-SSI units with an outstanding bank credit of Rs.2,436 crore were found to be weak whereas 2,33,441 SSI units out of 23.84 lakh (as on 31.3.94) were sick blocking a bank credit of Rs. 3,346 crore. The Government has been taking various steps from time to time such as monitoring of industrial sickness by the bank and Financial Institutions, provision of tax benefits under Section 72A of the Income Tax Act to promote amalgamation/ merger of the sick units with healthy ones etc. to help recover these units from sickness.

7.6 The most important step taken by the Government in recent time is the enactment of the comprehensive legislation namely Sick industrial Companies (Special Provision) Act (SICA), 1985 with view to secure timely detection of sick and potentially sick companies, speedy determination through a Board of Experts of the preventive, ameliorative remedial and other measures which need to be taken with such sick companies and the expeditious enforcement of measures so determined.

7.7 The SICA Act is being implemented by the Board of Industrial Finance and Restructuring (BIFR). The BIFR is a quasi-judicial body with power to regulate its procedure and conduct of business. It became operative w.e.f. 15.5.1987. BIFR generally takes a conscientious approach in consultation with all concerned parties namely the Financial Institutions, the sick units, the Administrative Ministry and the State Governments. Normally, the operating agency appointed by BIFR sumbits a revival package that is discussed in forums represented by all concerned. While BIFR provides a forum whereby all concerned agencies are brought together for analysing, diagonising and evolving a conscientious decision for revival or otherwise of the sick industrial units, the process sometimes involved is rather time consuming and the Committee on Industrial Sickness and Corporate Restructuring (Goswami Committee) felt that BIFR need to be a fast track facilitator by taking expeditious decisions.

7.8 In the context of liberalisation of economy, competitiveness has become the buzzword for survival. In order to be competitive, the industry needs to upgrade the technology restructure the financial and managerial capability and improve upon the efficiency. The Government and Financial Institutions should assist the potentially viable sick units in turning round with such measures.

Public Sector Reforms

7.9 The 8th Plan visualises an important role for an autonomous and efficient public sector in providing essential infrastructural and strategic support for achieving the targeted rate of economic growth during the plan period. Broad policy measures envisaged are:

i) Restructuring involving modernisation, rationalisation of capacity, product-mix changes, selective exit and privatisation;

ii) Increase in autonomy and performance accountability through the MOU system;

iii) Changes in management in specific enterprises to promote leadership, resourcefulness and innovation; iv) State Governments to promote reforms in their public sector enterprises which are beset with interference, lack of professionalism and ad hoc investment and employment decisions;

v) Technological upgradation through an integrated R&D effort and import of technology;

vi) Reorientation of approach in Ministries and other Govt. agencies corresponding to liberalisation and dismantling of regulation (price, distribution, investment and import control) to develop new institutional capability to facilitate operation of market forces, orchestrisation of integrated R&D effort and evolution of concensus and partnership among various stake-holders.

7.10 The basic features of public sector reforms underway have been spelt out in para 7.2. As on 31.3.1994, there were 246 Central Public Sector Enterprises (CPSEs) with a total investment of Rs.1,64,332 crore and capital employed of Rs.1,59,307 crore. Its break-up alongwith the profitability positon, cognate group-wise is given in Annex-7.4. During 1993-94, 120 enterprises earned an overall profit of Rs.9,722 crore, 117 enterprises suffered a loss of Rs.5,287 crore and 3 enterprises made neither profit nor loss. The total net profit increased by 35.58% from Rs.3,271 crore in 1992-93 to Rs.4,435 crore in 1993-94.

7.10.1 While petroleum and power are most profit-earning cognate groups, consumer goods and textiles were the main loss-making ones. The total number of persons employed in the public sector enterprises during 1993-94 was 21.49 lakh, reduced from 22.16 lakh in 1992-93. However, return on investment improved only marginally from 2.33% in 1992-93 to 2.78% in 1993-94. Such a meagre return on investment has been a matter of concern to the Govt. and needs to be addressed urgently.

7.11 In the I&M Sector, the Public Sector outlay for large and medium industries in the Central Sector for the 8th Plan was envisaged to be Rs.35,150 crore (later revised to Rs.35,195 crore) at 1991-92 prices from Rs.17,268 crore in 7th Plan. The outlays/expenditures in the first three years amounted to Rs.20,068.39 crore at current prices, which after allowing for changes in the price level, comes to about half of the outlay provided for the five year period. The sectoral outlays and expenditures in the first three years of the 8th Plan are given in Annex-7.5.

7.12 The financing pattern of PSEs envisaged raising more resources from the internal and extra budgetary sources so as to release scarce resources for funding of social sectors. The reduction in the budgetary support in financing of the PSEs resource requirements was to be made up by recourse to extra-budgetary resources (e.g. borrowings) and generation of internal resources. Out of the approved outlay of Rs.35,150 crore in the 8th Plan for Industry and Mineral sector, the budget support was to be Rs.7,150 crore(20.35%), with rest of the resources coming from internal and extra-budgetary resources(IEBR). The review of the expenditure pattern in the first half of the 8th Plan, however, shows that the PSEs could not raise the required resources through IEBR and the budgetary support had to be increased to meet the shortfall. As against an estimated 20.35% of budget support, the actual budget support for the first three years (1992-95) formed 39% of the total expenditure of Rs.20,900 crore approximately. The actual budget support in the three years was of the order of Rs.8,090 crore.

7.13 The PSEs have not been able to raise the projected borrowings on account of their past record of not being run on commercial basis. With rationalisation of the tax structure in the recent budgets, such as uniform excise duty of 15% on capital good components, reduction in duty on aluminimum to 15% and lowering of peak customs duty to 50%, it is expected that the PSEs would be able to generate internal resources for their sustenance and growth.

7.14 Fiftytwo chronically sick PSEs have been registered with BIFR. BIFR have decided revival of two PSEs and recommended winding up of three PSEs. They are considering draft schemes for four companies and issued winding up notices in respect of nine companies. The employees of four companies have filed writ petition in Calcutta High Court against BIFR award and obtained stay.

MoU concept

7.15 Following the recommendation of the Arjun Sengupta Committee Report, the Govt. of India introduced the concept of the Memorandum of Understanding (MOU) in early 1988. MOU is an instrument which defines clearly the relationship if the PSU with the Govt. and clarifies thier respective roles. The MOU emphasizes on achieving the negotiated and agreed objectives rather than interfering in the day to day affairs. For the year 1993-94, 101 PSUs signed MOUs with their respective Administrative Ministries/Departments. For the year 1994-95, 106 PSEs are expected to sign MOUs. MOU system, however, has not been very effective and requires review. For instance, targets envisaged in the MOUs are often subjected to a number of obligations to be fulfilled by the Administrative Ministries as well as the PSEs which are not always met. It is, therefore, necessary that some responsibility be fixed both on the concerned Govt. agency and the Public Sector Enterprises for fulfilling their respective obligation. Then only can the MOU have a positive impact on the outcome of the enterprises signing such MOUs. A number of steps are being taken to bring further improvement in the MOU policy:

i) It has been decided to give 80% weight to MOU performance in the Annual Confidential Reports (ACRs) of the MOU signing PSE Chief Executives.

ii) It has been decided to give 60% weight to financial performance in the 1995-96 MOUs in order to lay greater thrust on financial efficiency and fiscal discipline.

iii) It is proposed to hold workshops to decentralise the concept of accountability and instil the concept of collective decision-making and belongingness among all sections of the employees of the MOU signing PSEs.

Need for new outlook

7.16 Under the present liberal regime, it has become more essential that the public sector is allowed to function with complete autonomy to be competitive with the private sector. This can only be possible if the Board of Directors are given greater responsibility with corresponding accountability to make investment and other major decisions. For example, investment decisions of Rs.50 crore and above require appropriate government clearance. This limit can be raised and Board given the final authority in such cases, especially where the PSU is not seeking any budgetary support.

7.17 Under the existing policy of the Govt. of India, a new project proposed to be set up in any of the 29 notified industries or any proposal for expansion or modernisation of any activity (Where the pollution load exceeds the existing level) requires prior environmental clearance from the Govt. of India. Vide notification of January, 1994 as amended in May, 1994, the procedure for such environmental clearance has been considerably streamlined. However, implementation of the instructions require to be monitored closely. Some of the PSUs have indicated that, although expansion and modernisation requires environmental clearance from the Govt. of India only if the pollution load exceeds the existing level, many cases where the pollution load does not exceed the existing level are also required to be referred to the Govt. of India for clearance. Moreover, decision for environmental clearance exceeds the stipulated time period of 120 days thereby delaying the implementation of the project causing considerable cost overrun.

7.18 Similarly, for projects in mining sectors requiring lease or renewal of existing lease and involving conversion of forest land into non-forest land require clearance from Forestry Department. This is rather lengthy and time consuming and requires streamlining.

7.19 As a measure of reform in Public Sector Enterprises, partial disinvestment of Government holdings in the share capital of a selected number of Publilc Sector Enterprises has been undertaken. An aggregate amount of Rs. 4,950 crore has been raised through sale of shares to public sector financial institutions, mutual funds and the general public upto March, 1994. The procedure adopted for such disinvestment has been subjected to some criticism due to lower realisation in price and lack of transparency. It has been argued that major financial restructuring is required in most of the PSUs to improve their viability and make the Earning Per Share (EPS) more attractive, before attempting such disinvestment. In this connection, the recommendations of the Rangarajan Committee for imparting greater transparency by issue of prospectus and public issue of shares needs consideration. Disinvestment of Government holdings in the public sector serves two main purposes. On the one hand, it reduces Government liability while increasing public accountability, and on the other it is an instrument of raising resources in the hands of Government. In view of the fact that disinvestment adds to Government resources, there is a strong case for ploughing back a portion of the amount realised through disinvestment to the PSUs for their diversification and upgradation programmes. The profit making public sector enterprises may also be advised to adopt potentiall viable sick public enterprises and revive them through investment of resources raised through dis-investment. A part of the resources raised by the public enterprises may also be utilised to repay the public debt to reduce the burden on the Government. In the context of the need for restructuring of some of the PSUs, it may be necessary to set up a Public Sector Restructuring Fund to be financed partly through budgetary support and partly through contribution by the PSUs, to serve as a rolling funds for utilisation by the PSUs for their diversification and upgradation programme.

Industrialisation of Backward Areas

7.20 Industrialisation plays an important role in correcting regional imbalances and acclerating industrial growth. The pace of industrial development, however, has not been uniform. There are pockets of backwardness even in an industrially prosperous State. With liberalisation the problem has become more acute as the new industrial units are gravitating towards existing developed States. For instance, 9 States (Maharashtra, Gujarat, U.P., Tamil Nadu, Haryana, Andhra Pradesh, M.P., Rajasthan and Punjab) have accounted for 82.38% of industrial investment proposals (Industrial Entrepreneus Memoranda and Letter of Intents) during the post-liberalisation period, i.e, August'1991 to December'1994.

7.21 For promoting industrialisation of the backward areas in an effective manner, it was decided to develop 70 growth centres in all the States/Union Territories, during the 8th Plan, to serve as magnets for attracting industries in backward areas. These growth centres are to be endowed with adequate infrastructural facilities in respect of power, water, communications and banking, etc. Each growth centre would create infrastructural facilities of a high order. These growth centres would lead to employment generation and prevent concentration of population in large towns and metropolitan cities. Till 1993-94, 39 growth centres have been approved and work for setting up these centres is in progress. The project reports of 22 more growth centres are in the process of appraisal. A sum of Rs.73.24 crore has so far (till March'1994) been released as central assistance towards the approved Centres.

7.22 To promote industrialisation in specific hilly, remote and inaccessible areas such as Jammu & Kashmir, Himachal Pradesh, Sikkim, North-Eastern States, Andaman & Nicobar Islands, Lakshadweep, eight hill districts of Uttar Pradesh and Darjeeling district of West Bengal, the Transport Subsidy Scheme'1971 was in operation upto 31.3.1995. Under the scheme, subsidy at rates ranging from 50% to 90% on the cost of movement of raw-materials and finished goods from/to selected rail heads/ports was provided to all industrial units except plantations, refineries and power generation units. The scheme worked on reimbursement basis, i.e., the subsidy to eligible units was first disbursed by the State/UTs concerned and disbursement claimed from Centre. From the inception of the scheme up 15.10.1994, an amount of Rs.163.32 crore has been disbursed.

7.23 Besides, while deciding the location of Central Public Enterprises, due consideration is given to the backwardness of various regions subject to the over-riding consideration of techno-economic feasibility. Income tax holiday for five years was provided in the budget of 1993-94 for establishing new units in the North-Eastern and other hilly areas. The budget of 1995-96 proposes to establish a new North Eastern Development Bank to finance industrial enterprises in that region.

Reforms in Industrial Sector : Initiatives by State Governments

7.24 Several State Governments have taken significant initiatives in industrial sector reforms to accelerate the pace of the implementation of new industrial policy measures. States have announced their own industrial policies setting out the objectives and priorities in industrial development. The State level initiatives in the industrial reforms include:

i) Appointment of Committees to review laws relating to various aspects of liberalisation with a view to simplifying and streamlining them;

ii) Constitution of State level and districts level committees and single window agencies to expedite industrial clearance within a stipulated time limit;

iii) Privatisation/disinvestment in State public sector units;

iv) Simplification of Inspection System of industrial units;

v) Greater role for private sector in accelerating industrial growth;

vi) Emphasis on development of infrastructure with private sector participation;

vii) Simplification and streamlining of procedures adopted by industrial promotion agencies;

viii) Announcement of package of incentives to attract investment; and

ix) Rationalisation of State tax structure.

It is expected that these measures may help accelerate the pace of industrial development in the country.

Industrial Growth

7.25 The 8th Plan started against the backdrop of impressive industrial growth during the Eighties. The average annual growth rate of the industrial sector including mining, manufacturing and electricity gneration during the 7th Plan period was 8.5% which though marginally lower than the targeted 8.7% was much higher than 5.9% achieved during the 6th Plan. The significant growth in industrial production during the 7th Plan provided a base for a higher targeted growth for industrial sector in the 8th Plan. The 8th Plan envisaged a growth of 8% in mining, 7.3% in manufacturing and 7.8% for electicity. This targeted rate of growth for industrial production could not be achieved during the first two years of the 8th Plan. The industrial production remained sluggish compared to the growth rate achieved in the 7th Plan period. Only 2.3% rate of growth was achieved in the first year of the 8th Plan (1992-93). In the second year (1993-94), the growth rate achieved was only 4.1%. Industrial production, however, showed an upward movement in 1994 and during April-December'1994, the growth rate achieved was 8.3%. Table 7.1 gives the growth rates of industrial production by broad categories and use-based classification for the period 1991-92 to 1994-95.

7.26 The slow growth in industrial production can be attributed to the demand constraints faced by industry on account of the decline in government and public sector spending and the contractionary credit policy of 1991-92 to help contain fiscal deficit and inflation and the poor performance of domestic capital goods sector. The recession in capital goods sector occurred as the private investment did not show any substantial increase partly because of the inveritable time-lag between intentions and actual placement of orders and partly be-

Table 7.1
Annual Growth Rates of Industrial Production

Sectors	Weights	1991-92	Per Cent 1992-93	1993-94	1994-95 April-Dec)
General	100.00	0.6	2.3	4.1	8.3
Broad Categories					
Manufacturing	77.11	-0.8	2.2	3.6	8.5
Mining & quarrying	11.46	0.6	0.6	2.5	7.0
Electricity	11.43	8.5	5.0	7.4	8.5
Use Based Classification					
Basic Goods	39.4	6.5	2.6	5.9	4.3
Capital Goods	16.4	-8.6	-0.1	-5.3	22.2
Intermediate Goods	20.5	-2.2	5.4	11.4	4.5
Consumer Goods	23.6	1.5	1.8	3.1	8.1
Consumer Durables	2.6	-10.7	-0.7	15.2	10.2
Consumer Non-durables	21.0	4.7	2.4	0.5	7.6

Source : Economic Survey 1993-94 and C.S.O.

cause of postponement of investment decisions by the corporate sector in the face of uncertainty, competition and rapidly changing policy environment. The reduction in customs duty led to liberal imports which affected adversely the capacity utilisation in the domestic sector in some industries like copper, lead, zinc initially. Besides, the Government had increased the administered prices of some infrastructural items like coal and petroleum which increased the cost of production and thereby adversely affected the profitability postion as well as the incentive to produce. At the same time, the import compression measures due to paucity of foreign exchange during the initial phase of liberalisation also affected the availability of the imported raw materials, spares and components and capital goods to import-dependent industries such as electrical and electronics, metals and chemical and pharmaceuticals, engineering, paper, rubber, plastic, automobiles and ancillaries. The downward adjustment of the exchange value of rupee in July'1991 made imports costlier and pushed up the production cost of import-dependent industries.

7.27 With the revival measures taken in 1994-95 Budget with rationalisation of tax and duty structures and the reform measures gradually developing stronger roots, the above-stated uncertainties have been resolved to a large extent and the industrial activity has started showing the sign of recovery. The turn-around is most impressive in the capital goods sector which witnessed a growth rate of 22.2% during the period April-December'1994. Besides, during 1994-95, the index of six infrastructure industries (electricity, coal, saleable steel, crude petroleum, petroleum refinery products and cement), carrying a combined weight of 28.77, recorded a rise of 8.0% as against 5.3% during 1993-94. The over-all industrial recovery in the industrial sector has been aided by the smooth progress in this infrastructure sub-sector.

Industrial Production

7.28 The sectoral targets of industrial production and achievement thereof during the 8th Plan period are given in the Annex-7.3. It can be seen from the Annex that overall targets of industrial production are achievable in most of the cases. Production targets are also achievable for most of the minerals and metals. There may be shortfall in the case of fertilisers and some of the basic chemicals. The reasons for the shortfalls in the respective industrial sub-sectors are elaborated in the subsectoral issues.

Sectoral Issues

Iron & Steel

7.29 With the enunciation of Industrial Policy of July 1991, the iron and steel industry has been removed from the list of compulsory licensing. It is expected that this would result in surge in private investment. Sponge iron, pig iron ferro alloys and steel industry are nowincluded in the list high priority industries for private investment.

7.30 The programme of development of the steel industry in the Eighth Plan is aimed at improving the health of the existing integrated steel plants and modernisation and upgradation of technology so as to achieve international competitiveness in respect of both cost and quality. Modernisation of existing integrated steel plants of Steel Authority of India Ltd. (SAIL) at Durgapur and Rourkela in the public sector and Tata Iron & Steel Co. in the private sector is expected to be completed in the Eighth Plan. Upgradation of steel making in the secondary steel sector has been taken up.

7.31 The 8th Plan envisages a production target of 20.09 million tonnes in 1996-97 for hot metal from integrated steel plants, out of installed capacity target of 20.46 million tonnes. In respect of saleable steel production from integrated steel plants the targets have been set at 15.94 million tonnes out of installed capacity target of 16.33 million tonnes.

7.32 The actual production of hot metal from integrated steel plant during 1992-93, 1993-94, and 1994-95 was 15.197, 15.936 and 17.762 million tonnes respectively. A production target of 18.780 million tonnes has been set for 1995-96. In the year 1995-96 the installed capacity of integrated steel plants for production of hot metal is expected to be 19.387 million tonnes. It is expected that there may be some shortfall in realization of the Eighth Plan production target of 20.090 million tonnes of hot metal.

7.33 The actual production of saleable steel from integrated steel plants during 1992-93, 1993-94 and 1994-95 was 11.388, 11.983, and 13.142 million tonnes respectively. A production target of 14.221 million tonnes for salable steel from integrated steel plants has been set for 1995-96. The installed capacity of integrated steel plants in 1995-96 for saleable steel production is 14.698 million tonnes that may go upto 15.866 million tonnes in 1996-97 due to completion of modernisation of steel plants at Durgapur and Rourkela. It is expected that the production of 15.940 million tonnes may be achieved in 1996-97.

7.34 The reason for shortfall in achieving production targets for saleable steel from integrated steel plants is that there have been time overrun in modernization of Rourkela and Durgapur steel plants, and also in stabilization of steel production at Vishakhapatnam Steel Plant of Rashtriya Ispat Nigam Limited (RINL) as also due to indicision for modernisation of IISCO.

7.35 Based on the Feasibility Report submitted by the Japan International Cooperation Agency (JICA) in July 1987, the stage- I clearance was given for the modernisation of IISCO. The Detailed Project Report (DPR) and Basic Engineering Reports (BER) were prepared by Japanese Consulting Companies (JCC). The cost of modernisation of IISCO was estimated at Rs. 6,520 crore. The PIB in its meeting held on 26.12.1991 approved the modernistion of IISCO and authorised the Ministry of Steel to approach CCEA with the condition that it explore the possibilities of private participation. Accordingly the offers from private sector were invited. The Committee of Experts was constituted to evaluate the offers received from the private sector and recommended the offer of one of the participants for undertaking the modernisation of IISCO. However, later SAIL has submitted an alternative proposal for modernisation of IISCO in two phases. The issue of modernisation of IISCO, needs to be resolved quickly.

7.36 The targets of export of finished steel in 1996-97 was set at 2.800 million tonnes. About 2.200 million tonnes of finished steel has been exported in 1993-94. It is expected that the target of export of 2.800 million tonnes may be realised as envisaged in the Eighth Five Year Plan.

7.37 Although pricing and distribution of iron and steel was decontrolled in January, 1992, the integrated steel plants were directed to fix ex-stockyard prices on the basis of actual freight or the freight element as was then existing, whichever was less. Thus, these steel plants were required to subsidise a part of the transport cost for the more distant states. The burden on the public sector steel plants on this account is around Rs. 107 crore per annum. It is time that this freight subsidy is completely withdrawn, so that the steel plants may charge the actual cost and utilise the funds for their development projects.

Minerals

7.38 The priority area identified for the Eighth Five Year Plan period was minerals exploration keeping in view the time lag between discovery of new deposits and eventual production of minerals. Thrust areas included were acquisition of modern exploration technologies such as remote sensing, geophysical & geochemical techniques and re-orientation of exploration strategy, etc., in the context of minerals which have poor resource base such as gold, diamond, nickel, tungsten, rock phosphate, sulphur, etc. The tempo of exploration including modernisation of Geological Survey of India (GSI) has been rather slow due to paucity of resources and reduction in the exploration budget for promotional projects provided to Mineral Exploration Corporation of India Ltd. (MECL) - a public sector enterprise.

7.39 In line with the liberalisation of the economy, the Government have announced a new National Mineral Policy wherein 13 minerals, which were hitherto reserved for the public sector, have been thrown open to private sector for mining. The Mines & Minerals (Regulation & Development) Act, 1957 was amended in line with the new National Mineral Policy and new Industrial Policy. As a result of these policy changes, many private entrepreneurs including foreign nationals have shown interest to invest in the mining sector particularly for base metals, gold and diamond.

Iron Ore

7.40 The demand for iron ore during the terminal year of the Eighth Plan (1996-97) had been projected at 72 million tonnes comprising 40 million tonnes for domestic consumption and 32 MT for exports. As against this, the production of iron ore during the first three years has been varying between 54-57 million tonnes per annum; the exports have been between 26-27 million tonnes. The National Mineral Development Corporation (NMDC) - a Central Government public enterprise - considering the growing domestic demand from sponge iron industry and anticipating better prospects for exports had planned 22 million tonnes of production of iron ore in 1996-97 (terminal year of the Eighth Plan) with completion of the on-going schemes and opening up of two new mines, namely, 10/11-A and 11-B (of 5 million tonnes each) at Bailadila in Madhya Pradesh during the Plan period. There has been delay in implementing these mining projects due to paucity of resources. Due to this, production target set for the Eighth Plan is likely to fall short by about 10 million tonnes. This is likely to lead to a serious situation since the demand for iron ore is steadily increasing. The Rowghat project of Bhilai Steel Plant is also getting delayed due to non-availability of environment clearance. Besides, the demand for calibrated lumpy ore is increasing from the sponge iron industry which necessitates speedy development of the 11-B mine at Bailadila in M.P. It is, therefore, imperative that 10/11-A and 11-B mining projects are taken up for implementation without further delay.

Aluminium

7.41 The demand for aluminium was anticipated to grow at an annual rate of 8.4% during the Eighth Plan period. In the first three years of the Eighth Plan, the average annual growth rate has only been around 1.5% due to a general slow down in the economy and low off-take of the metal by the State Electricity Boards which were facing resource crunch. Therefore, the demand target set for the terminal year of the Eighth Plan (1996-97) is not likely to be realised.

7.42 A major investment plan for the Eighth Plan in the public sector was for modernisation of the Korba Smelter of Bharat Aluminium Company and installation of a new cold rolling mill at an anticipated cost of Rs.123 crore apart from developing a new mine at an estimated cost of Rs.75 crore at Mainput in Madhya Pradesh. However, due to inability of BALCO to mobilise internal and extra-budgetary resources, all these investments have been slowed down.

7.43 National Aluminium Company had planned to instal sixth unit of its captive power plant at an estimated cost of Rs.226.41 crore and expand its smelter. While the sixth unit of its captive power project has been completed, the expansion of its Smelter has not yet been taken up. Hindustan Aluminium Corporation has dropped its project of 1,50,000 tonnes per annum capacity in Andhra Pradesh on commercial considerations. Indian Aluminium Company - a private sector enterprise - which had to close its 65,000 tonnes per annum capacity Belgaum smelter in Karnataka in 1992 due to high power tariff and general power shortage there, has now energised a capacity of 24,000 tonnes per annum. The Madras Aluminium Company's Mettur smelter in Tamil Nadu of 25,000 tonnes per annum capacity which remained closed since 1991 has been energised recently. Based on these developments, the aluminium production in 1996-97 is now anticipated at 5,50,000 tonnes as against the Eighth Plan projection of 6,56,000 tonnes.

Copper

7.44 The liberalisation of the economy affected copper industry rather severely. The problem was compounded with recession in the international copper industry during 1992-93, which continued upto October 1993 resulting in sharp fall in the London Metal Encharge (LME) price of the metal. With reductions in import duty announced in the Budgets of 1992-93, 1994-95 and 1995-96, the indigenously produced copper became highly uncompetitive as compared to imported metal. The consumer became free to buy either from international market or indigenous market consequent to decontrol of non-ferrous metals industry and liberalisation of the economy. This resulted in huge losses to HCL, particularly in 1993-94. However, the situation improved with the spurt in LME prices w.e.f. October 1993. The HCL recorded a modest profit in 1994-95 and is likely to continue with this trend during the remaining period of the Eighth Plan.

7.45 The demand for copper was anticipated to grow at 5.9% during the Eighth Plan period. Due to a slow growth in the economy, the consumption of copper remained practically stagnant during the three years from 1991-92 to 1993-94. However, of late, there has been a good pick up in demand and it appears that the demand in 1996-97 may be only marginally lower than the Eighth Plan target of 200,000 tonnes.

7.46 The only indigenous copper producer, Hindustan Copper Ltd. (HCL) had planned to expand its Khetri Copper Smelter from 31,000 tpa to 45,000 tpa. However, with a view to becoming competitive in the liberalised environment, HCL has changed the scope of its Khetri Smelter expansion programme and is now contemplating to expand the smelter to a capacity of 100,000 tonnes per annum at an estimated cost of Rs.360 crore. As a result, production from the proposed smelter expansion will not materialise during the Eighth Plan period and HCL's total production in 1996-97 may be only 45,000 tonnes as against the Eighth Plan target of 55,000 tonnes.

7.47 With liberalisation of the Indian economy, the private sector is planning to venture into this sector in a big way. Three new private sector smelters based on imported concentrates - Sterlite's 60,000 tonnes per annum capacity smelter, Indo-Gulf Fertilizers & Chemicals' 100,000 tonnes per annum copper smelter and Metdist Limited's 100,000 tonnes per annum copper smelter are expected to come up by the end of this century. Besides, SWIL has planned to set up a 50,000 tonnes per annum secondary copper smelter.

Zinc

7.48 The liberalisation of the economy affected zinc industry also. The problem was compounded with recession in the international zinc industry during 1992-93 which continued till October 1993 resulting in sharp fall in the LME price of the metal. With the reduction of import duty, the indigenously produced zinc became highly uncompetitive as against imported metal. Consequently, the Hindustan Zinc Limited's (HZL)'s - a public sector enterprise - profit fell sharply to Rs.4.55 crore in 1993-94 compared to Rs.62.86 crore in 1992-93. However, after October 1993, when LME prices started rising again, the performance of HZL improved in 1994-95 compared to 1993-94 with the company recording a profit of Rs.15 crore. The position is further expected to improve in 1995-96 with the company having projected a profit of Rs.20 crore. Because of the inability of the company to generate adequate internal resources, it has had to slow down its investment programmes.

7.49 Zinc is expected to maintain its trend growth rate of 4.5% during the Eighth Plan period. The demand target of 180,000 tonnes set for the terminal year of the Eighth Plan (1996-97) is expected to be realised.

7.50 The production target of 154,000 tonnes set for the terminal year of the Eighth Plan - 1996-97 is also expected to be realised. Except for 10,000 tonnes of additional capacity planned by private sector Cominco Zinc Ltd. to be added to its existing capacity of 20,000 during the Eighth Plan period, no major capacity addition for zinc metal was planned. The Cominco Zinc Ltd. has completed its expansion programme as scheduled. An additional capacity of around 30,000 tonnes of zinc has come up in the secondary sector.

Lead

7.51 The demand for lead was anticipated to grow at an average rate of 7% during the Eighth Plan period which is not likely to be realised due to slower then projected growth rate in some of the consuming sectors like commercial vehicles. Besides, exports of lead acid batteries and cables to the earstwhile Soviet Union were affected due to break down of the Soviet Union.

7.52 The production target of lead was fixed at 96,000 tonnes for the terminal year of the Eighth Plan -1996-97. As against this, a production of 85,000 tonnes is now anticipated. The shortfall is due to only a part realisation of the anticipated expansion of lead capacity in the private sector.

Gold

7.53 Among the mining companies, Bharat Gold Mines Ltd. (BGML) continues to be sick and its rehabilitation programme prepared by the Operating Agency appointed by the BIFR, namely, ICICI is under consideration of the Government.

Mineral Exploration Corporation

7.54 The Mineral Exploration Corporation of India Ltd. is not in a position to raise resources from the market for its exploration programme, nor is it in a position to obtain more work on contract for utilising its capacity fully. Besides, the budgetary support to the company for promotional projects has been reduced. Unless immediate remedial measures are taken, the company could become sick.

7.55 There is an urgent need to continue with the exploration of minerals particularly where the country is deficient. Exploration being a risky investment will take time for the private sector companies to come in the market for exploration. It is, therefore, imperative for the Government to continue to invest in exploration as a matter of policy for some more time. A mechanism would, however, need to be worked out to recover the costs from the investors in mining projects based on exploration carried out with Government investment at the time of granting mining leases.

Fertilizer Sector

7.56 There are at present, 57 fertiliser units manufacturing a wide range of nitrogenous and phosphatic/complex fertilisers. Besides, there are about 80 small and medium scale units producing single superphosphate (SSP). At the time of commencement of the Eighth Plan, the installed capacity of nitrogen was 81.48 lakh tonnes and of phosphate 27.52 lakh tonnes. The total installed capacity as on March, 1995 stands at 89.72 lakh tonnes of nitrogen and 28.22 lakh tonnes of phosphate.

7.57 During the Eighth Plan, addition of capacity of 27 lakh tonnes of Nitrogenous fertiliser and 4.5 lakh tonnes of phosphatic fertiliser was envisaged, thus reaching a level of capacity of 109.40 lakh tonnes of nitrogen and 31.00 lakh tonnes in case of phosphate in the terminal year of Eighth Plan. The actual production target of Nitrogenous fertiliser was targetted at 98.00 lakh tonnes and of phosphatic fertiliser 30 lakh tonnes. The addition of capacities were to be achieved through the doubling of the capacities of existing fertiliser plants at Vijaipur, Aonla and Jagdishpur and also commissioning of the other projects (Gadepan, Babrala, Kakinada, Shahajahanpur).

7.58 In the first three years, the achievement in capacity addition had been 9.54 lakh tonnes of nitrogen and 0.72 lakh tonnes of phosphatic fertilisers. The capacity is likely to reach a level of 102.62 lakh tonnes of nitrogen and 28.75 lakh tonnes of phosphate by the end of Eighth Plan period. There is likely to be a shortfall in capacity addition by 7.0 lakh tonnes in case of nitrogen and 2.0 lakh tonnes in case of phosphate in the Eighth Plan target due to slow progress made on projects under implementation. Actual production of nitrogenous fertilisers has fallen short of targets mainly due to lower contribution of 'N' nutrients from the complex fertilisers whose production has gone down due to market constraints and shortage of gas for the gas based plants en-route Hazira-Bijaipur-Jagdishpur (HBJ).

7.59 A gradual phasing out of fertiliser subsidy has been envisaged in the Eighth Plan. Following the recommendations of the Joint Parliamentary Committee (JPC) on fertiliser pricing, all phosphatic and potassic fertilisers were decontrolled on 26.08.1992. As a consequence, the price of these fertilisers had increased considerably. However, at the same time, the price of urea was scaled down by 10%, thus significantly altering the price differential between 'Nitrogenous (N) ' 'Phosphatic (P)' / & potassic (K)' fertilisers. In spite of 20% rise in the price of urea in July, 1994 the difference in the phosphatic and nitrogenous fertilisers still remained sizeable. This price differential in the prices of NPK had caused more imbalance in their consumption ratio.

7.60 After the decontrol of phosphatic fertilisers and a free trade fertiliser policy since September, 1992, the domestic production suffered due to stiff competition from low priced imported fertiliser. To ease this situation, a subsidy of Rs. 1000 per tonne on Di-Ammonium phosphate (DAP) was reintroduced. This, however, had not helped the domestic manufacturers as their relative position with respect to imported stock remains unchanged. Only when exclusive subsidy to domestic product was made applicable from May, 1993 were the domestic manufacturers able to increase their production level.

7.61 The fertiliser sector is facing an uncertain future with increasing production costs, feed stock shortages and uncertain prices. No private initiatives to set up fertiliser plants have been forthcoming due to rigid pricing policies. To make fertiliser sector more attractive for investment, an attractive price policy and an assured supply of feed stock on long term basis has to be devised. Fertiliser sector needs preferential treatment in the allocation of gas. A long term perspective plan is essential at this moment for fertiliser sector as the gestation period of fertiliser plants is long.

Shipbuilding and Ship Repair Industry

7.62 In the Eighth Five Year Plan, keeping in view the problems being faced by the Shipbuilding Industry, it was felt that while efforts would be made to improve productivity and viability of the existing yards, more emphasis would be given to the repair activity, which is far more profitable / foreign exchange saving activity than shipbuilding.

7.63 At present there are about 41 shipyards in India. Out of these, seven are in the public sector, two in the State sector and the remaining in the private sector. The private sector shipyards are allowed to construct vessels of any size. However, at present the private sector shipyards are not capable of building large sized ships. The capacity utilisation of the public sector shipyards under the Ministry of Surface Transport i.e. Hindustan Shipyard Ltd (HSL), Cochin Shipyard Ltd.(CSL), Hoogly Dock And Port Engineers Ltd. (HDPE) has been less than 20% in the first three years of the Eighth Five Year Plan. The major reasons for the poor capacity utilisation are lack of regular flow of adequate number of orders in time, reluctance on the part of Indian ship owners to place order due to higher price of indigenous ships vis-a vis the lower international price and long construction period and more time taken for indigenous procurement of steel.

7.64 The Government has taken a series of measures including delicencing, changes in the import / export policy etc. to improve the viability of the shipbuilding industry. Some of the measures which have already been taken in this regard are:

i) The price of an ocean going vessel to be built at Indian Yard would be fixed on the basis that the public sector yard would participate in open tender and permitted to match the lowest bid and thereafter be entitled to 30 % extra price over the above price, 20 % being payable by the Government and 10 % by the Shipowners.

ii) Loans at concessional rate of 9 % to the extent of 80 % of the cost of a ship would be given to shipping companies placing orders with Indian Shipyards.

iii) Fixation of price in terms of US $ / Japanese Yen and the shipowners to pay each stage in instalment to the shipyard at market determined parity rate of foreign exchnage prevailing on the date of actual payment.

iv) Ship repair industry has been recognised as deemed export industry and a number of concessions given to 100 % export oriented units are available to this industry.

It is expected that the performance of this sector will improve with these measures.

Engineering Industry

7.65 Engineering Industry, which grew at an annual compound growth rate of 11.7% in the Seventh Five Year Plan, started having setback from 1991-92, when it had a negative growth rate of 5%. The Industrial Policy statement of July, 1991 and subsequent developments in the Indian Economy made it possible to reverse this trend. While the growth rate was -1.5% in 1992-93 and 0.4% in 1993-94, has gone up to 11.8 % in 1994-95 (April-December).

7.66 The shortfall in growth in the engineering industry during 1992-93 and 1993-94 was due to negative growth in metal products, non electrical and electrical machinery and very poor growth in transport equipment. The new policy regime has had some positive impact on majority of these products and they have started contributing towards growth. The areas which still lack growth are non-electrical machinery and basic metals.

7.67 In the public sector, the major contribution for production comes from the 49 operating units under Department of Heavy Industry. However, these units would not be able to achieve the Eighth Five Year Plan production target of around Rs. 60,000 crore and profit target of Rs. 1,151 crore. It is now anticipated that the production from all the units during Eighth Five Year Plan would be about Rs. 44,000 crore with an overall loss of Rs. 1,174 crore. The major reasons for losses are repayment of interest and penal interest on Government loans, shortage of working capital, excess manpower, obsolete plants and machineries, besides the increase in cost of inputs, etc. Due to these reasons the growth rate in production in the PSUs under Department of Heavy Industry was only 4% in 1992-93 and (-)4% in 1993-94. During 1994-95, the production is expected to be 6% higher as compared to the production in 1993-94.

7.68 Out of 49 PSUs, in operation under the Department of Heavy Industry, 34 are making losses and 15 are making profits. 23 PSUs of Department of Heavy Industry are sick industrial companies and have been referred to BIFR for rehabilitation and revival. Voluntary Retirement Scheme (VRS) has also been introduced in a number of PSUs of Department of Heavy Industry to shed surplus manpower without causing undue hardship to the workers. Around 24,000 employees have already retired during Eighth Five Year Plan upto January, 1995 under this Scheme.

7.69 In the wake of liberalisation and consequent changes in the industrial scenario in the country, the need for restructuring some of the PSUs has been recognised. Several studies have been undertaken for identifying optimal product mix, investment and organisational structure for achieving further growth and long term viability in the operation of these enterprises. Decisions on restructuring now need to be taken expeditiously to avoid further deterioration of the conditions of these units.

Table 7.2

Production in Electronics Sector

Sl. No.	Particulars	Terminal Year of Eighth Plan (1996-97) Target		Anticipated	
		Production (Rs.cr)	Growth Rate(%)	Prod. (Rs.cr)	Growth Rate(%)
1.	Consumer Electronics	8500	22.35	6250	15.05
2.	Industrial Electronics	4500	24.57	3300	17.08
3.	Communication & Broadcasting	6000	23.01	6650	25.57
4.	Computer systems	3300	30.56	2300	21.46
5.	Components	7600	31.95	4200	17.19
6.	Export oriented Hardware prodn	2000	48.70	4000	70.82
7.	Software	2600	46.50	2400	44.19
8.	Strategic Electronics	1500	28.39	550	5.05
	Total	36000	27.73	29700	22.91

Electronics

7.70 The electronics sector continues to be one of the fastest growing segments of Indian industry both in terms of production and exports. With the recent changes in policy regime, this sector is attracting considerable attention not only as a supply source but also as a potential production base by international companies.

Production in Electronics Sector

7.71 In the Eighth Five Year Plan, the Electronics Sector was targetted to grow at an Annual Compound Growth Rate of 27.73% to achieve a production level of Rs. 36,000 crore in 1996-97. But due to slow growth of 16.62 per cent in the year 1992-93 and 16.59 per cent in the year 1993-94, it is now anticipated that a production level of Rs. 29,700 crore may be reached, thus achieving an Annual Compounded Growth rate of 22.91 per cent only. It may be seen from table 7.2 above that while Communication & Broadcasting and Export oriented hardware sectors have exceeded the target, all other sectors had a shortfall. The major area of concern is the components sector, where annual compound growth rate is 17.19% as compared to a target of 31.95%. The component sector is very vital for the health of future electronic industry.

7.72 The Electronics Industry started recovering from 1993-94 and a progressive and forward looking Government policy has contributed significantly to the performance of the industry. With a view to boosting exports in the Electronics sector, schemes regarding setting up of Electronics Hardware Technology Parks and Software Technology Parks have been initiated. Liberal excise and custom duty reliefs have been announced in the Budgets for 1994-95 and 1995-96, for further augmenting the growth in this industry.

7.73 The exports of the electronics sector increased steadily from Rs. 910 crore in 1990-91 to Rs. 2200 crore in the calender year 1994, the major area of exports being computer software which accounts for 50% of the total exports.

7.74 The focus of attention in the Eighth Five Year Plan in Electronics Industry has been oriented towards production at internationally competitive scales, encouraging export oriented growth, technology and manpower development, and application of electronics in key socio-economic sectors. Efforts are continuing to attain technological self-reliance, through induction of foreign technology, where needed Department of Electronics have initiated Technology Missions Programme in the frontier areas of Parallel Super Computing, Strategic Components, Electronic Materials, Future Air Navigation Systems, Micro-electronics, Retrofit Automation and Photonics to further update this sector.

Cement

7.75 The private sector has a significant presence in the cement industry and accounts for about 85% of the capacity, the balance being contributed by the public sector. At the commencement of the 8th Plan, the total cement capacity and production were 66.5 Million Tonne and 54.01 Million Tonne respectively. It is envisaged that capacity and production of cement would go upto 90 Million Tonne and 76 Million Tonne respectively by the terminal year of 8th Five Year Plan. A target of 5 Million Tonne of cement export has been set during the year 1996-97.

7.76 The production of cement in the year 1992-93 remained almost the same as that of the previous year. Production during the year 1993-94 was 57.96 Million Tonne which recorded an increase of 7% over the cement production of 1992-93; production in the year 1994-95 has registered a further growth of 7% over the previous year. It is expected that the production target of 76 Million Tonne by the end of the 8th Plan would be realised. The likely capacity creation in the cement industry is expected to go up to 90 Million Tonne by the year 1996-97. The export target is also likely to be achieved.

7.77 The performance of the public sector enterprises, Cement Corporation of India (CCI) has been unsatisfactory during the first three years of the 8th Plan. The production suffered badly due to power shortages, shortage of working capital and slippage in project implementation. The company is contemplating a turn around strategy which, inter alia, involves privatisation of some of its units, financial restructuring, etc.

7.78 The cement industry has achieved tremendous technological advancement in recent times. A majority of cement units based on old and un-economic wet process have been converted into modern dry process. Large scale modernisation has yielded lower energy consumption, improvement in quality and automation. A large number of plants of 1 Million Tonne and above capacity have been set-up with the latest dry process precalcinator technology.

7.79 In the post liberalisation era, the cement industry is facing new challenge for lowering production cost, productive use of labour and adoption of new technology.

7.80 The cement industry needs aggressive marketing drive to widen the consumption base. The industry should also reach out to potential consumers in rural and semi-urban areas.

7.81 On the export front, targetting a minimum of 10 percent of the output does not seem unattainable. The country has a very strong potential for increasing export of cement if adequate port and other infrastructural facilities are provided for bulk as well as bagged transporation.

Sugar

7.82 The 8th Five Year Plan document envisages the delicensing of sugar industry as well as decontrol of molasses. At the end of the 8th Plan, it is envisaged that the production of sugar would go up to 15.5 Million Tonnes while the target for export of sugar has been fixed at 4 Million Tonnes.

7.83 The sugar production during the year 1992-93(Oct-Sept) was around 10.5 Million Tonne, 21.2 percent less than that of the previous year. The production reached a very low figure of 9.8 Million Tonne in the year 1993-94 necessitating import of about 2 Million Tonne of sugar. The production of sugar is estimated at 13.3 Million Tonne in 1994-95. The trend in sugar production in the first three years indicates that the 8th Plan targets of sugar production and export would be difficult to achieve.

7.84 The shortfall in sugar production has been largely due to fall in area under sugarcane because of drought in some parts of the country, lower yield, diversion of sugarcane to other sweetening agents, etc.

7.85 The diversion of sugarcane to Khandsari/Gur production has caused reduction in sugarcane supplies to sugar mills.As a part of re-structuring the sugar industry, price and distribution control on molasses was abolished w.e.f. June 1993. This would help the sugar factories to pay a better price for sugarcane to the growers and improve their viability. A Technololgy Mission Programme has been taken up by Govt. of India recently to enhance the productivity of sugar factories.

7.86 There is need to augment the sugarcane supplies to the sugar mills as well as sugarcane yield per hectare. Besides, many sugar mills are in need of modernisation. Introduction of co-generation, automation in sugar processing etc should continue to be encouraged for optimising process parameters and improvement in productivity. Setting-up of sugar complexes with requisite downstream facilities would need to be supported for utilisation of molasses and bagasses. The sugar industry is controlled through compulsory licensing regime.The capacity licensed 203.71 lakh tonnes (as on 30.9.94) has already exceeded the 8th Plan target of 198.67 lakh tonnes whereas the installed capacity has been 116 lakh tonnes (as on 30.9.94). The wide gap between the licensed and installed capacity is distressing.

7.87 The 8th Plan document recommends delicensing of the sugar industry. However, sugar still continues to be under license and governmental control. The industry is subjected to various regulations right from the stage of establishment of sugar factory to marketing and distribution. However, the delicensing in sugar sector should be accompanied by reservation of cane areas to ensure adequate sugarcane for sugar factories. The various controls on the industry has led to inefficiency in the sugar sector.In view of the present condition of the industry and the imperative need to bring about greater efficiency in this sector and generate employment potential, there exists a strong case for decontrol of sugar industry. The decontrol of sugar prices can be successful only through the maintenance of adequate buffer stock to keep the market forces of supply and demand on a stable course.

Leather Industry

7.88 According to the 8th Plan document, there is a growing market for leather products abroad and India can increase its exports substantially. The export target of leather and leather manufactures by the end of 8th Five Year Plan (i.e. 1996-97) has been projected at Rs.5,463 crore.

7.89 The export performance of leather industry has been showing considerable improvement. The value of export went up from Rs.3,693 crore(1992-93) to Rs.4,139 crore in the year 1993-94. The export target for 1994-95 was Rs.5,000 crore. Around 17.17% increase in export value was recorded in dollar term during the period April-Dec'94 as compared with same period of 1993. It is likely that the 8th Plan export target in leather sector would be achieved.

7.90 The National Leather Development programme with UNDP assistance is currently being implemented by the Govt. for integrated development of the leather industry,.The implementation of the programme has helped the industry in export enhancement, upgradation of the training system for design and manufacture of footwear & garments, besides upgradation of artisans including women.

7.91 There is a constraint on the availability of hides and skins. To bridge the gap between requirement and availability, a series of measures would be necessary. These include setting-up of network of mini- modern carcass recovery centres, use of improved flaying tools, techniques and viable modern slaughter houses etc.

Textiles

7.92 The Eighth Plan lays emphasis on technologial upgradation, increasing capacity utilisation and production of value-added, diversified and quality goods for exports. To achieve this, emphasis is laid on export of non-quota items, higher value realisation and better marketing techniques.

7.93 As against the Eighth Plan target of spinning capacity of 3 crore spindles in the organised mill sector, the achievement upto 1994-95 was 2.92 crore spindles. However, the target for weaving capacity in the organised mill sector (2.10 lakh looms) is not likely to be achieved. The weaving capacity has decreased from 1.69 lakh looms in 1992-93 to 1.50 lakh looms as on 31.3.95. This decrease in weaving capacity of the mill sector has more than been compensated by the significant increase in the weaving capacity of the powerloom sector.

7.94 The Eighth Plan target for cloth production (2960 crore sq. m.) is likely to be exceeded, the estimated production in 1994-95 being 2772.5 crore sq. m. (excluding khadi, silk and wool). The Eighth Plan target for production of spun yarn (240 crore kg.) is also likely to be achieved in view of expansion of existing capacity and addition of new capacity. The cloth production in the organised mill sector has shown declining trend since 1986-87 mainly due to lack of modernisation, inability to exploit export market, increase in input costs and competition from the powerloom sector, etc.

7.95 Textiles and clothing exports excluding jute and handicrafts have increased to Rs. 21,314 crore during 1993-94 which represented 30 per cent increase over the previous year. In order to exploit full potential of textiles exports under the recent Agreement on Textiles and Clothing, there is need of upgradation of technology, introduction of Quality Systems, R&D on eco-friendly textiles, designing, cost competitiveness, etc.

7.96 The Eighth Plan envisaged production of 140 lakh bales of cotton of 170 kg. each . However, the production of cotton during 1993-94 was only 121.50 lakh bales. Thus, the production and availability of cotton needs be increased significantly. A long-term policy on cotton production and consumption is required to stabilise the prices of cotton and cotton yarn and to boost exports of cotton textiles.

7.97 The increase in the production of man-made fibres and yarn has not been in commensurate with the rising demand caused both on account of exports and the domestic consumption. In order to bridge the demand-supply gap, the import of all man-made fibres and yarns has now been placed under Open General Licence (OGL). There is a need to increase capacity utilisation in the man-made fibre industry and creating further capacity especially for the polyester staple fibre and polyester filament yarn.

7.98 The growing incidence of sickness and closure in the organised mill sector is continuing. The main reasons for sickness in the mill sector, particularly the composite units, are structural transformation, excess capacity, low productivity, competition from powerloom sector, surplus labour etc. The future of composite mills lies in technological upgradation and concentration on sophisticated product mix.

7.99 The Public Sector Undertakings i.e. National Textile Corporation (NTC) Ltd. and British India Corporation (BIC) Ltd. have been incurring continuous losses. BIC and eight out of the nine subsidiaries of NTC have been referred to BIFR. The Government has approved a new Turn Around Strategy for the textile mills under NTC which inter-alia involves selective modernisation of NTC mills at a cost of Rs. 2005 crore.

Jute

7.100 The Eighth Plan requires jute industry to compete on its inherent strengths to be achieved through modernisation and production of value added diversified jute and jute blended products. A UNDP assisted National Programme on Jute is under implementation for development of diversified products with jute and its blends, technology and process.

7.101 The production of jute goods during 1993-94 was 14.48 lakh tonnes and is expected to fall to a level of 13.50 lakh tonnes during 1994-95. The Eighth Plan target of jute goods production (16.00 lakh tonnes) is not likely to be achieved mainly due to decrease in demand both in domestic and international market, stiff competition from synthetics, decreased capacity utilisation etc. However, with the increasing volume of packaging commodities and preference to bio degradable eco-friendly packaging material, jute is expected to grow in demand.

7.102 The export of jute goods has also shown declining trend. It decreased from 237.1 thousand tonnes (Rs.387.24 crore) in 1991-92 to 203 thousand tonnes (Rs. 370.16 crore) in 1993-94. The export during 1994-95 is expected to be about 200 thousand tonnes (Rs. 430 crore). Vigorous efforts are being made for increasing export of jute goods with increasing thrust on diversified and value-added items.

7.103 The only Public Sector Undertaking viz. the National Jute Manufactures' Corporation managing six nationalised mills has been incurring continuous losses and has been referred to BIFR.

7.104 Jute industry needs to modernise itself; the process has been rather slow mainly due to non-availability of modern machinery at economic cost from indigenous sources and sharp market fluctuations affecting investments for modernisation.

Paper/Paper Board

7.105 While Eighth Plan had envisaged an installed capacity target of 35 lakh tonnes and a production target of 29 lakh tonnes, the actual achievement in the first 3 years had been 38 lakh tonnes of installed capacity and 24.80 lakh tonnes of production, in public/private sector respectively. Thus, the installed capaciy target has been exceeded, and the actual production is also likely to be achieved.

7.106 The industry is largely in the private sector. The share of public sector units of Hindustan Paper Corporation (HPC) in the above installed capacity is 2.5 lakh tonnes (6.5%). The PSUs are not performing well. A turn around policy to bring them to health is under consideration of the Government.

Newsprint

7.107 The Eighth Plan had laid down a target of installed capacity in newsprint at 3.50 lakh tonnes and a production target of 3.00 lakh tonnes. The actual achievement in capacity in first 3 years of the Plan is 5.35 lakh tonnes out of which 3.13 lakh tonnes are in the public sector mills (two in Central Sector and two in State Sector) and the balance in private sector. Against the target for production of 3.00 lakh tonnes, the actual production in the first 3 years had been 3.80 lakh tonnes compared to the demand of about 7 lakh tonnes. The balance is being met by imports. The country is spending more than Rs. 300 crore on the import of newsprint. Even though the prices are not administered, profitability in the industry is comparatively low and the private secotr is not coming forward to take up the manufacture of newsprint. In a recent policy decision announced, Government has placed newsprint import under Open General Licence on zero duty and removed quantitative restrictions on newsprint for big news paper.

Petrochemicals, Chemicals and Pesticides and Drugs and Pharmaceuticals.

7.108 The Eighth Plan envisages that greater emphasis would be laid on Performance Plastics (Polyamides, Polyacetals, Polycarbonates, Acrylonitrile Butadiene Styrene) consumption of which is linked to the growth of automobile, electronics, telecommunications and other consumer items. The petrochemical industry being technology-intensive the linkages between research, manufacturing, designs, engineering and academics were proposed to be strengthened. For the drug industry, vigorous and sustained R & D efforts leading to a strong technology base were envisaged for its healthy development.

7.109 The 8th Plan production targets in respect of most of the thermoplastics, synthetic rubber, petrochemical intermediates and man-made fibres are likely to be achieved. For basic chemicals such as, Caustic Soda, Soda Ash and Calcium Carbide and Benzene Hexachloride (a pesticide), the 8th Plan production targets are not likely to be realised due to factors such as power shortages and cheaper imports resulting from opening up of the economy. Even though the price and distribution of Molasses and the price of Alcohol were decontrolled in June 1993, some State Governments continued regulating these items. This resulted in a substantial increase in their prices which affected adversely the production of the Alcohol-based industries.

7.110 Consequent upon delicensing of the petrochemicals sector in 1991, several additional capacities of Olefins and Aromatic Complexes are coming up in the private and joint sectors. These include Haldia Petrochemicals Complex, Hazira Cracker, Auraiya Cracker, Gandhar Cracker, etc.

7.111 With the liberalisation of the economy, the private sector investment including direct foreign investment in the chemical and petrochemical sectors is likely to increase. It is likely inter-alia to lead to a general improvement in the consumption and production of petrochemicals in the years to come. While by 1996-97, the country will be self-sufficient in petrochemicals and polymers following import liberalisation, competition will regulate the market.

7.112 The Government brought out a new Drugs Policy 1994 which envisages, among other measures, delicensing of bulk drugs and formulations with a substantial reduction in the number of drugs under price control. There are 5 drugs PSUs, namely the Indian Drugs and Pharmacuticals Ltd. (IDPL), Hindustan Antibiotics Ltd. (HAL), Bengal Chemicals and Pharmaceuticals Lltd. (BCPL), Smith Stanistreet Pharmaceuticals Ltd. (SSPL) and Bengal Immunity Ltd. (BIL). Out of these, the revival packages approved by BIFR for IDPL, BCPL, SSPL and BIL are under implementation.

Science and Technology

7.113 Technology Upgradation is a continuous Process. Liberalisation of Industrial Policy and deregulation of Controls have led to greater competition from both domestic as well as International Companies. This has led to the need for technology upgradation to attain international competitiveness and offer contemporary levels of technology. A large number of industries both in public and private sectors have set up their corporate R&D facilities for product and process improvement and allied research. Organisations like Steel Authority of India Ltd., Bharat Heavy Electricals Ltd., Hindustan Machine Tools Ltd., Indian Petro-chemicals Corporation Ltd. and Hindustan Insecticides Ltd. have established in-house R&D facilities. Proposals are under negotiation stage to have latest technologies by entering into collaboration with the reputed foreign manufacturers by forming joint ventures and through interaction with various research organisations. Assistance of international development organisations like UNIDO and UNDP is also being availed of for setting up of research facilities in newer technologies. Government is also supporting a number of new R&D projects in various sectors under Technology Mission Programme.

Section 2

VILLAGE & SMALL INDUSTRIES AND FOOD PROCESSING INDUSTRIES

Village & Small Industries

7.114 The Village & Small Industries (VSI) sector comprises modern and traditional segments, the modern segment includes Small Scale Industries (SSI) and Powerlooms. The traditional segment includes industries like Handlooms, Handicrafts, Khadi and Village Industries (KVI), Wool Development and Sericulture. This sector has a vast potential of creating new employment opportunities at low investments.

7.115 The performance of VSI sector during 1992-95 in respect of production, employment and exports is given at Annex-7.6. There has been a marginal fall of two to three per cent in the achievement of production targets for 1993-94 in sub sectors like Khadi, Handlooms, Raw Silk, Powerlooms and Raw Wool. The exports from sericulture were 21 per cent lower than the target for 1993-94. Other subsectors have achieved the targets of exports in 1993-94.

7.116 The Eighth Plan gives priority to employment generation and relates it to economic growth. VSI sector provides job opportunities with lower investment than the organised sector. A larger contribution has been envisaged from small industries and unorganised sector in not only employment generation but also in value addition and exports.

7.117 Plan outlays and expenditure for the VSI sector for the period 1992-97 at current prices and 1991-92 prices are indicated at Annex-7.7. Two new schemes have been approved by the Government during 1993-94, namely, Prime Minister's Rozgar Yojana (PMRY) and setting up of Integrated Infrastructural Development Centres (IIDCs) in rural and industrially backward areas. PMRY intends to create job opportunities for unemployed educated youths by providing financial assistance from banks. IIDCs would promote industrialisation in rural and backward areas by providing infrastructural facilities. In the handloom sector, setting up of 3000 Handloom Development Centres (HDCs) and 500 Quality Dyeing Units (QDUs) scheme has been approved to help handloom weavers to take up production of value added items and increase their income levels and cooperativisation.

7.118 In the traditional segment of VSI sector more emphasis was laid on schemes which would improve the socio-economic conditions and income levels of weavers/artisans/ craftsmen. To provide social security network to these weavers/artisans/craftsmen, group insurance schemes and health package schemes have been taken up which are yielding satisfactory results.

Small Scale Industries (SSI)

7.119 The SSI sector has been contributing about 40 per cent to the gross turnover in the manufacturing sector and has more than 30 per cent of exports to its credit, including direct and indirect exports. In real terms, the small scale sector recorded a growth rate of 7.1 per cent in 1993-94 as against 5.6 per cent in 1992-93 and 3.1 per cent in 1991-92. These rates of growth were significantly higher than those achieved by the industrial sector as a whole. The SSI sector faces problems like inadequate credit, inadequacy of infrastructural facilities, outdated machinery and process technology, inadequacy of orders from large and medium sector and non adherence to quality standards.

Prime Minister's Rozgar Yojana

7.120 The Prime Minister's Rozgar Yojana (PMRY) has been under implementation from October 2, 1993 with an objective to create new job opportunities. Under the scheme, self-employment opportunities to educated unemployed youths, both rural as well as urban, are being provided with financial assistance from banks/financial institutions upto Rs.1 lakh, with a subsidy of 15% of the project/venture cost, subject to a maximum of Rs.7,500, without collateral guarantee. The beneficiary should be within 18-35 years of age, matric (passed or failed) or Industrial Training Institute (ITI) passed or having undergone Government sponsored technical courses for a minimum duration of six months, permanent resident of the area for at least three years, with family income not exceeding Rs.24,000 per annum and should not be a defaulter to any nationalised bank/financial institution/cooperative bank. Normal reservation for SC and ST and other backward classes is available under PMRY. Not more than 30 per cent enterprises out of the total ventures should be from business sector. State Governments/UT Administrations are operating the scheme through District Industries Centres (DICs). In the Eighth Plan about 7 lakh and in 1994-97, 2.2 lakh micro enterprises annually are to be set up. About 14 lakh new jobs are expected to be created during the Eighth Plan. Till March, 1994, 31797 beneficiaries have been provided financial assistance by the banks under PMRY. A number of bankable/viable schemes/ projects for the beneficiaries of PMRY have been prepared so as to enable them to submit viable projects to the banks. During the year 1994-95 (upto November, 1994) about 63,000 beneficiaries have been identified.

Integrated Infrastructural Development Centre

7.121 For the development of industrially backward areas, the Government have approved a scheme of setting up Integrated Infrastructural Development Centres (IIDCs) in industrially backward areas/regions for development of land/plots, construction of roads, drainage, provision of water, power distribution network within the industrial area, effluent treatment and disposal systems, telecom facilities, banks, post offices, etc. The cost of each IIDC will be around Rs.5 crore out of which Rs.2 crore will be given by the Centre as grant and Rs.3 crore will be obtained from Small Industries Development Bank of India (SIDBI) as a loan by the implementing agency. During the remaining period of the Eighth Plan, 50 IIDCs are proposed to be set up.

7.122 Out of the more than 7,500 products which are manufactured by the SSI sector, the reserved items contribute only a small portion and many reserved items are not being manufactured by the SSI sector at a noticeable level. There is a strong case for dereservation of items for the small scale sector. In the prevailing economic environment, there is a need to review the Reservation Policy to increase competition and enable the SSI sector to reap benefits of economies of scale, modern technology and investment. The items where large and medium scale would bring in latest technology and economies of scale could be considered for dereservation. As an alternative to excise concessions, the small scale industries could be offered one-time capital subsidy to enable them to stand in competition to large and medium industries. Strengthening of ancillary-mother unit relations and providing marketing support through large scale units/consortia of small scale units are other important areas that could be considered. However, any change may be introduced gradually so that SSI units presently engaged in manufacture of such items get time to adjust and modify their operations to face the competition from other units.

Khadi & Village Industries

7.123 Khadi production has been stagnant during the last three years. This sector employs a large number of persons but their earnings are very low and often below the subsistence level. The production cost of Khadi is comparatively higher due to high labour content. A High Power Committee headed by the Prime Minister had been constituted by the Ministry of Industry to examine and suggest appropriate policy measures for creating additional employment, providing new investment and simplification of labour laws and other statutory provisions to enable the industry to grow. Based on the recommendations of the High Power Committee an Action Plan has been prepared. About 20 lakh new jobs are proposed to be created in this sub-sector with an investment of about Rs.5,600 crore. Out of this investment two-thirds would be provided by financial institutions, commercial/cooperative banks, NABARD, etc, and one-third would be made available as budgetary support.

7.124 The KVIC would be adopting project approach to develop clusters of artisans for setting up new village industry units. Special projects are proposed to be set up like agro-processing and leather, thereby increasing the income levels of the rural population. A consortium of banks would be providing Rs.1,000 crore to the KVIC for disbursement to new KVI units which would be encouraged under the new 20 lakh jobs programme. The KVIC have constituted a Project Appraisal Committee which includes members from the concerned government departments, Planning Commission, NGOs, major KVI institutes, etc, for speedy implementation of the programme.

7.125 In the context of the celebration of 125th birth anniversary of Mahatama Gandhi, the KVIC have identified 125 blocks for taking up intensive development of Khadi and Village Industries to create employment of 1,000 persons per block. The KVIC has so far approved 93 blocks and is in the process of finalising the remaining blocks.

7.126 The rebate provided on KVI products would be provided in the form of Market Development Assistance (MDA) to enable this sub-sector to augment its marketing activities. Gradually, the interest subsidy would be reduced and economically viable village industry units would be promoted through Khadi institutions/coops. having sound performance track record. Technological innovations and R&D inputs would be arranged to reduce drudgery in operations, improve productivity and bring in uniform quality standards. This would enable the sub-sector to increase the demand of their products and improve income levels of artisans and workers. Exports of Khadi items like Muslin Khadi, Malmal, etc, would be encouraged. Village industries products having eco-friendly nature like Palm-gur, Honey, Natural Fibre based articles, Agarbattis, etc, would also be exported to western countries where such products are much in demand.

Textile (VSI)

Handloom Industry

7.127 Handloom industry is the second largest sector next to agriculture and is providing employment to about 110 lakh persons. Handloom industry is facing stiff competition from the powerlooms which have the advantage of higher productivity due to mechanised operations, low overheads and capability to process larger volumes than handlooms, with a wide variety of prints and designs. Non-availability of hank yarn at reasonable prices and deskilling of handloom weavers due to production of low value added items has affected marketing of handloom products and also reduced the income levels of weavers. There is an urgent need to increase design inputs and to bring in new designs in the manufacture of cloth.

7.128 Production of value added items in the handloom sector is imperative to enable them to face competition from powerlooms and to increase the earnings of handloom weavers. The Government have recently approved setting up of 3,000 Handloom Development Centres (HDCs) and 500 Quality Dyeing Units (QDUs) to bring more weavers under the cooperative fold and provide them improved designs, new colour combinations, raw materials at reasonable prices, market outlets and training to upgrade their skills and enable production of higher value added products. The total cost of the scheme is estimated at Rs.849.15 crore, including the Central Government's contribution of Rs.321.325 crore and concessional loans of Rs.527.825 crore through refinance from NABARD. Handloom Weavers' Cooperatives and Non-Governmental Organisations (NGOs) having a good track record and essential infrastructure would be selected to set up HDCs/QDUs for helping the handloom weavers in taking up high value added production and marketing of their products.

7.129 The Janata Cloth Scheme is being phased out and is being gradually replaced by higher value added items. The weavers engaged in the manufacture of Janata Cloth are being encouraged to manufacture high value added items to provide them gainful employment.

7.130 Two new schemes have been introduced in handloom sector. There are many melas/fairs/festivals being organised throughout the country based on regional and religious considerations. To take advantage of these, a new scheme has been taken up under which financial assistance is provided to the handloom weavers/artisans/craftsmen, cooperative societies/NGOs, etc, to exhibit their products in these melas/fairs/festivals.

7.131 The other new scheme pertains to promotion of export of table, bed and kitchen linen items produced in the handloom sector. Under this scheme, special emphasis would be given for modernisation of looms, R&D inputs, design development, colour fastness testing, use of vegetable dyes, processing and weaving and use of blended yarn, such as, wool, silk, jute and cotton, etc. The National Handloom Development Corporation, Apex/Primary Coop. Societies engaged in export of handloom products or items having potential for exports would be given financial assistance for improving designs, new product adoption, improvement in packaging, quality control, etc.

Powerlooms

7.132 The performance of powerloom sector during the first two years of the Eighth Five Year Plan indicates higher growth in respect of production and employment (Annex 7.6). This sector is able to achieve a good growth on its own and the Government is providing technological inputs.

7.133 Powerloom Service Centres (PSCs) are providing technical guidance to the powerloom industry. During the Eighth Five Year Plan twenty new PSCs are proposed to be opened, out of which two new PSCs have been opened at Komarapalayam (Tamil Nadu) under SITRA and at Dholka (Gujarat) under MANTRA. Computer Aided Design Centres are being set up in areas of powerloom concentrations to help the industry in improving the quality and design of the cloth and become export competitive.

7.134 A new group insurance scheme for powerloom workers was introduced in association with the Life Insurance Corporation of India during 1993-94. Under this scheme the powerloom workers are provided an insurance cover of Rs.10,000 at an annual premium of Rs.120, which will be shared equally by the Central Government, the concerned State Government and the beneficiary.

7.135 The powerloom industry needs modernisation and replacement of obsolete powerlooms. This will increase productivity, quality standards and income levels of the powerloom workers. Financial institutions should make available adequate credit for this purpose. Modern processing facilities need to be set up in the powerloom industry to improve the quality and competitiveness for export market. The powerloom workers are not getting safe workplaces, statutory facilities under labour laws like provident fund, medical facilities, gratuity, etc. A more strict implementation of labour laws for powerloom workers to improve their socio-economic conditions, is called for.

7.136 To make the powerloom sub-sector export oriented and cost competitive, five Powerloom Design & Development Institutes are proposed to be set up. These institutes would provide new designs, innovative colour combinations and modern techniques to improve cost competitiveness as well as exports.

Handicrafts

7.137 The main focus of the schemes of handicrafts is on increasing exports of Indian handicrafts, providing new materials at reasonable prices, training to artisans, protection to languishing arts and crafts, marketing support to artisans, etc. The Crafts Development Centres (CDC) Scheme envisages provision of these inputs to the artisans to increase their skills and incomes. There is an urgent need to provide better designs and feedback on new market trends in the exports of handicrafts. The possibilities of increasing exports of items like lace work, jardoji, wooden toys, etc, need to be explored.

7.138 Training and skill upgradation of artisans is urgent need of handicraft sub-sector, to increase production, income levels and exports. There are 516 training centres for carpets, art materials, wood crafts and textile crafts. Particularly for carpets, there is a need to set up a design and development institute for enhancing design and technological inputs for hand knotted woollen carpet industry. Post-weaving services need to be increased for operations like washing and finishing. The Ministry of Textiles have prepared a scheme to eliminate child labour from carpet industry by 2000 AD.

7.139 A new scheme has been introduced in the Handicrafts sub- sector from 1995-96 to increase exports from embroidery, zari and artware. Special training programmes would be conducted to encourage artisans to manufacture export oriented items. Raw materials, design inputs and upgradation of skills would also be provided. Primary Cooperative Societies/associations would be encouraged to take up export oriented manufacturing and suitable financial assistance would be made available to these organisations.

Sericulture

7.140 Sericulture is an export-oriented sub-sector, having vast potential for providing employment in rural areas. The Central Silk Board (CSB), a statutory organisation responsible for implementing developmental schemes in sericulture is carrying out R&D programmes for mulberry sericulture under Research & Training Institute at Mysore (Karnataka), Berhampore (West Bengal) and Pampore (J&K). With the assistance of Japan International Cooperation Agency (JICA), a Bivoltine Sericulture Technology Development Project is being implemented for evolving suitable mulberry bivoltine silkworm races.

7.141 India is the second largest producer of silk after China. The quality of Indian raw silk is inferior in comparison to the international quality. There is an urgent need to improve the quality of Indian raw silk to reduce imports and increase the prospects of exports of fabrics and made-ups. Research and development in sericulture, particularly in mulberry sericulture, needs to be focused on developing eco-stable multivoltine and bivoltine races which give higher quality raw silk and increased productivity. The extension work done by Central Silk Board needs to be enhanced to cover more sericulturists to increase raw silk production. In the non-mulberry sector, development of sturdy races particularly for muga, tasar, eri and oak tasar, production of disease free layings, preservation of forests for supplying food for seed worms of non-mulberry sericulture, etc, need to be taken up.

7.142 National Sericulture Project (NSP) is being implemented in 17 States out of which State Governments of traditional sericulture states like Andhra Pradesh, J&K, Karnataka, Orissa, Tamil Nadu and West Bengal are implementing NSP through the State Sericulture Directorates. In other 12 states NSP is being implemented by the CSB on pilot basis. Under this project, the Government will invest Rs.390 crore for creation of infrastructure. In addition, the financial institutions will provide credit of Rs.165 crore to the beneficiaries. The overall targets of NSP are development of 57,600 hectare of additional mulberry plantations, additional production of 6,000 tonnes of raw silk, additional employment to 10 lakh persons and increase in export earnings to the tune of Rs.900 crore. A recent review of NSP indicated that while the financial progress in the traditional silk producing states has been generally satisfactory, the physical achievements have been much below the targets. The anticipated production of raw silk, DFLs, cocoons, etc, has not materialised. There have been delays in acquiring land and constructing buildings for sericulture infrastructure under the NSP pilot project in the non-traditional states. The project implementing authority (CSB) should ensure better credit flow from banks to silk worm rearers, women's participation, R&D efforts in evolving eco-stable and sturdy silk worm races for mulberry and non-mulberry sericulture, new races and methods for augmenting multi and bi-voltine sericulture, etc, during the implementation of NSP.

Wool Industry

7.143 Major wool producing states are Himachal Pradesh, J&K, Uttar Pradesh, Rajasthan, Gujarat, Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu. The quality of Indian wool is not upto international standards. The productivity per sheep in India is also very low. There is an urgent need to improve the productivity levels by adopting improved breeding methods and better animal husbandry practices. The Government have initiated setting up of Industrial Service Centres and Quality Testing Laboratories to encourage alternative uses of wool and upgrade quality standards. Area based projects for development of wool and woollen products in wool producing States like Gujarat, Rajasthan, Himachal Pradesh, Karnataka, etc, would be taken up for implementation. Under this project, wool rearers would be provided animal husbandry and veterinary facilities alongwith modern looms to the woollen handloom weavers with design and other technical inputs and marketing support, etc. The weavers would be encouraged to form cooperatives and financial assistance towards equity of the cooperatives would be provided by the Central and State Governments. New designs should be provided to wool weavers to increase marketability of their products and their incomes. All institutes engaged in design development, like NID, may be involved.

7.144 The Wool Development Board has taken up an integrated sheep and wool development project covering aspects of breed improvement, health coverage, product development, marketing assistance and training to sheep breeders in sheep husbandary and improvement in wool quality by testing, scouring, using machine shearing, washing, etc. Based on the encouraging results, the project is being extended to other States like Maharashtra, Gujarat and Uttar Pradesh.

7.145 The Area Based Projects for Wool and Woollens Development which have been taken up in 1994-95 for implementation in Rajasthan would now be extended to other states like Gujarat, Himachal Pradesh, Jammu & Kashmir, Maharashtra, Karnataka, Andhra Pradesh etc.

Coir Industry

7.146 The main problems in this sector are poor working conditions, drudgery, lack of medical and educational facilities to the families of artisans and low earnings. Mechanisation of coir industry is necessary in view of the competition from mechanised coir industry in Sri Lanka and the need to increase exports. Setting up of mechanised defibring plants with financial assistance from the Central Government through NCDC has been approved. The Coir Board of India which is carrying out research and development for the coir industry, needs to step up R & D and to find alternative and diversified uses, induct new technologies, dyes and colour combinations, etc. There is a need to take up manufacture of pvc tufted coir products by inducting new technology from Germany and other western countries.

7.147 The Coir Board has taken up implementation of Mahila Coir Yojana. Under this scheme women artisans would be provided modified traddle ratts and financial assistance for procuring raw materials. Besides reducing drudgery this would help to create about 30,000 new jobs in the remaining period of the Eighth Plan.

7.148 The Government of India has approved Integrated Coir Development project at a total cost of Rs.44.24 crore for setting up mechanical defibring units. The cost of the project will be shared between the Central Government, National Cooperative Development Corporation (NCDC) and the cooperative societies. About 100 defibring units are proposed to be set up in Kerala during the remaining period of the Eighth Five Year plan. The pace of implementation of the scheme has been rather slow and needs to be speeded up. The scheme of encouragement to brown fibre manufacture needs to be extended to other coir producing states like Andhra Pradesh, Assam, Maharashtra, Goa, Orissa, West Bengal, etc.

Food Processing Industries

7.149 The Food Processing Industry ranks 5th in its contribution to value addition but tops the list in terms of employment content with approximately 15 lakh persons employed constituting 19 per cent of the country's industrial labour force. It accounts for only 5.2 per cent of th total investments in the industrial sector of the country but contributes 18 per cent of the GDP.

7.150 The Eighth Plan lays emphasis on the development of growth of food processing industries in the country with the main objectives of effective exploitation of agro potential, minimisation of post harvest losses in fruits and vegetables, export enhancement of agro products and employment generation. The main thrust in the development strategy for the sector is on strengthening/creation of basic infrastructure, modernisation, technology upgradation, quality assurance, intensification of R&D activities, improvement in packaging systems etc.

7.151 A number of major policy changes have been carried out in the food processing sector during the last 3 to 4 years with a view to to promote its growth along healthy lines. Some of the major policy changes are as follows :

i) Almost all food industries have been declared as a priority area.

ii) Almost all food products excepting brewing and distillation of alcohlic beverage and items reserved for small scale industries have been delicensed.

iii) Foreign equity investments have been allowed and automatic approval up to 51 per cent foreign equity in high priority industries which includes food industry has been allowed.

iv) Foreign technology agreements, procedures have been made easy.

v) With a view to encourage large number of Indian companies to take up deep sea fishing, the Ministry of Food Processing Industries has formulated and operationalised a New Deep Sea Fishing Policy for joint ventures, leasing and testfishing. The Ministry is gradually phasing out the 1981 and 1986 policies en charter. The 1989 policy, en charter, which was never put into operation, has been scrapped altogether.

7.152 Specifically from the export point of view, the following interventions have been brought about in the food processing industries sector :

i) Milk products have been decanlised;

ii) Quantitative restrictions and minimum export price for rice have been removed;

iii) 100 per cent EOUs have been given permission to sell upto 50 per cent of production in Domestic Tariff Area.

iv) Entrepreneurs are being encouraged to adopt modern technologies for higher unit value realisation.

7.153 As a result of these policies, during the last four years, 3,046 Industrial Entrepreneur Memoranda (IEM) envisaging an investment of Rs.38,409 crore and employment of 5.26 lakh persons have been received for various sectors of the food processing industry. Out of these, 2,592 IEMs envisaging an investment of Rs. 33,255 crore and employment of approximately 4.76 lakh persons are for non-urban areas. About 45 per cent of these investments are proposed to be made in backward areas. Of these, 371 proposals having an investment of approximately Rs. 3,462 crore and direct employment of approximately 45,000 persons have already been implemented.

7.154 The export performance of agro products during 1992-93 was not satisfactory, being a negative growth of minus two per cent in terms of US dollars, as against the overall export growth of the country of 3.7 per cent. However, it was in 1993-94 agro products registered an impressive increase of 27 per cent as compared to the overall export growth of 20 per cent. India's share in the world exports of fruit/vegetable juices, meat/meat products and fish and fish products is very low amounting to only 0.3 per cent, 0.3 per cent and 1.5 per cent respectively. Greater attention is needed to boost the growth of food processing sector so as to enlarge our share in the global trade of food products for maximising the much needed foreign exchange.

Primary food processing

7.155 Today there are about 34,000 modern rice mills compared to practically nil in 1970. The quantity of rice bran processed for oil extraction stood at about 30 lakh tons, indicating 56 per cent utilisation of the total potential. Through modernisation, there is tremendous potential for this ratio to go up.

7.156 Another area of concern is the pulses sector where about 10 to 15 per cent of the pulses are lost due to inefficient technology, poor storage facilities, etc. Per capita availability of pulses has been decreasing over the years. Productivity of pulses in India is also very low at 570 kg. per hectare compared to 1,733 kg. per hectare in USA, 1,286 kg. per hectare in China and 1,543 kg. per hectare in Japan. Concerted efforts would be required towards modernisation of the pulse milling industry to reduce losses.

Horticultural products

7.157 India is the world's second largest producer of fruits and vegetables. But, less than one per cent of the total production of fruits and vegetables is commercially processed in the country while this proportion is 70 per cent in Brazil and USA, 78 per in Phillippines and 83 per cent in Malaysia. Capacity utilisation of F&VP Industry is very low, being only about 37 per cent in 1993. The growth of this sector requires special focus on development of linkages between processors and growers, encouragement of Joint sector/assisted sector/cooperatives for creation of basic infrastructure/cold chain system, setting up of 100 per cent EOUs. etc.

7.158 There is a need for setting up Regional Research and Training Centres for F&V Products with a view to take up research in the areas of development of new products, enhancement of shelf life of the products, improvement in taste and diversification of the processed fruit and vegetable items and also to organise training for entrepreneurs on different aspects of this sector including quality assurance.

7.159 Linkages between agriculture and the food processing industry have to be further strengthened. Mushroom Research Centre of ICAR, Post Harvest Department of Agriculture University, Solan, Himachal Pradesh and other Horticulture Departments of the State Agriculture University should carry out research on F&V Products in consultation with the Ministry of Food Processing Industries so that reseach findings and latest technology/new products developed by them are taken to the factory-gate and also effectively used to remedy the problems of the industry.

Dairy and Livestock (including Poultry) Products

7.160 Dairy Products and Meat Industries are largely in the decentralised sector. In the organised sector, production of milk products (other than ice-cream) grew slowly by 4.8 per cent from 2.19 lakh tonnes in 1992 to 2.30 lakh tonnes in 1993. About 1 per cent of the total meat is converted into meat products. Besides 3,600 slaughter houses, there are only 5 modern abattoirs. A substantial increase in the number of modern slaughter houses is necessary for scientific processing of meat and effective utilization of by-products. Poultry meat pro- duction is picking up in the country. The bulk of our meat export goes to Malaysia and Middle East. The key constraints on the development of meat industry in India are lack of necessary infrastructural facilities, non-establishment of integrated production-cum-processing plants on scientific lines, non-development of commercial culture for production of quality meat, foot and mouth diseases, absence of cold storage chain, etc.

7.161 The National Livestock Products Council as envisaged in the Eighth Plan has not yet been set up. It is necessary to set up an apex body with participation of meat animal rearers, meat processing industry, exporters, technical organisations, Govt. agencies, etc. to accelerate the growth of this sector.

Fish and Fish Products

7.162 Marine fish production is stagnating at about 2.3 to 2.5 million tonnes. Exploitation of shrimp resources has reached almost saturation level. Substantial increase in fish production is possible from non-shrimp resources, effective exploitation of under-exploited and unexploited deep sea shrimp resources and development of shrimp farming on scientific lines.

7.163 The Government announced the New Deep Sea Fishing Policy in March, 1991. Under this Policy, a number of vessels under joint ventures, test fishing and leasing are permitted. There has been a good response to the scheme. Another achievement of the New Deep Sea Fishing Policy is the introduction of factory vessels for harvesting, processing and packaging on board the fishing vessels.

Consumer Processed Foods

7.164 Consumer Food Industry pertaining to eatable items comprises a very wide spectrum. Important industries with immense forward and backward linkages are soya products, cocoa products, high protein foods, soft drinks etc. It is significant to note that this industry involves about 75 per cent of value addition from primary to tertiary processing sectors. The consumption of processed foods is expected to increase substantially in the coming years. To promote the growth of the consumer foods industries, the Government has delicensed almost all food processing industries except beer, potable alcohol and wines. Automatic approval for foreign investment up to 51 per cent has been introduced in all sectors of food processing industries except those reserved for exclusive production in the small scale sector, milk products and malted foods.

7.165 The growth of the consumer processed foods has been hampered by the non-availability of proper packaging. Packaging of food products is essential from the production stage to the consumption stage. Though new packaging trends have emerged in India like aseptic bulk packaging of fruit pulps, packaging of fruit juice in flexible pouches, thermo formed cups and tray packaging of jams, jellies etc., packaging as an industry in India is still at infant stage. The major constraints affecting the growth of the packaging industry are high cost and non availability of packaging materials, high incidence of packaging duty, poor transportation and handling facilities, extremes of climatic conditions, poor purchasing capacity of people etc.

Public Sector Undertakings

7.166 Two Central PSUs, namely, Modern Food (India) Ltd. (MFIL) and North Eastern Regional Agricultural Marketing Corpn. Ltd. (NERAMAC) under the administrative control of th e M/o FPI, are engaged in production and marketing of food products. The overall performance of MFIL showed significant improvement in 1992-93. It earned a profit of Rs.1.4 crore against a loss of Rs.3.0 crore in 1991-92. However, the Company's profit came down to Rs.0.63 crore in 1993-94. For the period April 1994 to December 1993 the Company earned a profit of Rs.2.5 crore (approximately). The Company needs to strengthen its commercial viability by adopting measures such as diversification of products, aggressive marketing strategy including publicity campaigns, distribution channels, etc. and improvement in efficiency.

7.167 The North Eastern Regional Agricultural Marketing Corporation Limited (NERAMAC) was set up in March, 1982 with the objective of undertaking marketing and processing of fruits and vegetables grown in the North Eastern region. The performance of NERAMAC has not been satisfactory due to a variety of reasons. In 1993-94 the Company has made efforts to revive and rejuvenate its activities in areas of marketing and processing. The Company diversified its marketing activities during the first half of 1994-95 from the traditional agro products to products based on minor forest produce like Agarbati sticks, Ice-cream sticks, etc. The Corporation also commissioned a cashewnut processing unit at Agartala during the first half of 1994-95.

7.168 To sum up, while it is clear that the efforts put in by the Government by playing the role of a catalyst are paying dividends by way of increased capacities, enhanced foreign investment etc., much more remains to be done. The need to sustain a reasonable rate of growth for this industry is of vital importance since it is not only a good source of generating employment but also a potential foreign exchange earner. A number of problems continue to affect the industry adversely; these can be categorised into three main sub-heads: constraints at raw materials/inputs level, constraints at processing level and constraints at export level. The investment requirement in the food processing sector is enormous and it is unlikely that the requisite funds can be generated domestically. Foreign investments will need to be attracted especially in areas such as fishing where investment requirements are very large.

7.169 There are, however, other areas where concerted efforts will help individual sub-sectors of the industry, for example, a more coordinated approach between the agricultural institutions and food processing industries will help the food and vegetable processing sector and also the primary sector. Similarly, a growth in the packaging industry will give the required stimulus to the consumer foods industry. The role of banks in the growth of this industry is extremely important since about 70 per cent of the industry is in the informal sector. For the industry to grow as a whole, it is imperative to ensure that the informal sector gets the necessary funds from the banks. Unfortunately, as of now the banks have not really come forward to meet the working capital requirements of the informal sector.

Annex-7.1

List of Industries to the reserved for the Public Sector

1. Arms and ammunition and allied items of defence equipment, defence aircraft and warships.

2. Atomic energy.

3. Coal and lignite.

4. Mineral oils.

5. Minerals specified in the Schedule to the Atomic Energy (Control of Production and Use) Order,1953.

Annex-7.2

List of Industries in respect of which Industrial Licensing will be compulsory

1. Coal and Lignite.

2. Petroleum (other than crude) and its distillation products.

3. Distillation and brewing of alcoholic drinks.

4. Sugar.

5. Animals fats and oils.

6. Cigars and cigarettes of tobacco and manufactured tobacco substitues.

7. Asbestos and asbestos-based products.

8. Plywood, decorative veneers, and other wood based products such as particle board, medium density fibre board, block board.

9. Chamois leather

10. Tanned or dressed furskins.

11. Paper and Newsprint except bagasse-based units.

12. Electronic aerospace and defence equipment; All types.

13. Industrial explosives, including detonating fuse, safety fuse, gun powder, nitrocellulose and matches.

14. Hazarduous chemicals.

15. Drugs and Pharmaceuticals (according to Drug Policy).

16. Entertainment Electronics (VCRs, Colour TVs, C.D.players, Tape Recorders).

Annex-7.3

MID TERM REVIEW OF EIGHTH PLAN - TARGETS & ACHIEVEMENTS OF PRODUCTION

No.	Industry	Unit	1992-93 Target	1992-93 Actual	1993-94 Target	1993-94 Actual	1994-95 Target	1994-95 Anticip.	1995-96 Target	8th Plan Target
1	2	3	4	5	6	7	8	9	10	11
1	Iron ore	Mill.Ton	62.50	55.80	62.50	57.47	62.50	62.50	62.50	72.00
	Basic Metals									
2	Hot Metal (Integrated Ste	-do-	15.74	15.20	17.07	15.94	17.61	17.58	18.89	20.09
3	Pig Iron for sale (Integr	-do-	1.69	1.68	1.54	1.98	1.82	1.91	1.62	2.16
4	Crude Steel(Intgr St.)	-do-	14.17	13.36	15.33	13.67	15.31	15.62	16.85	18.23
5	Saleable Steel	-do-	16.62	11.37	17.67	11.98	17.38	13.33	14.32	15.87
6	Aluminium	-do-	525.00	482.23	480.00	465.50	533.00	485.00	525.00	656.00
7	Copper	-do-	44.00	45.28	39.00	39.00	45.00	45.00	42.00	52.00
8	Zinc ingots	-do-	153.00	126.60	154.10	145.10	131.00	145.00	155.00	167.00
9	Lead ingots	-do-	58.50	52.50	58.50	37.41	46.00	60.00	60.00	96.00
	Non-Metallic Mineral Products									
10	Cement	Mill.Ton	60.00	54.54	62.00	57.96	62.00	62.00	68.00	76.00
	Basic Chemicals									
11	Caustic soda	'000 ton	1100.00	1085.60	1150.00	1080.00	1130.00	1130.00	1167.00	1600.00
12	Soda ash	-do-	1520.00	1351.40	1550.00	1404.00	1420.00	1420.00	1430.00	2000.00
13	Calcium carbide	-do-	100.00	94.00	115.00	94.00	110.00	110.00	102.00	170.00
	Agricultural Chemicals									
14	Nitrogenous fertilisers	'000 ton	7700.00	7430.00	7800.00	7231.00	7950.00	7550.00	8400.00	9800.00
15	Phosphatic fertilisers	-do-	2750.00	2300.00	2200.00	1870.00	2331.00	2200.00	2400.00	3000.00
16	B.H.C.	-do-	20.00	23.80	24.50	23.53	24.00	24.00	21.00	25.00
17	D.D.T.	-do-	8.00	6.70	8.00	6.00	7.00	7.00	8.00	8.00
18	Malathion	-do-	3.00	2.30	3.00	3.00	3.00	3.00	3.00	4.00
	Thermo Plastics and Synth									
19	L.D. polyethylene	'000 ton	170.00	175.95	170.00	171.00	200.00	180.00	190.00	180.00
20	H.D. polyethylene/LLDPE	-do-	270.00	49.58	270.00	224.81	310.00	325.00	380.00	400.00
21	Polyvinyl chloride	-do-	230.00	276.47	300.00	358.45	496.00	500.00	550.00	450.00
22	Polypropylene	'000 tonne	100.00	95.20	100.00	91.36	100.00	110.00	180.00	155.00
23	Polystyrene	-do-	22.00	27.75	30.00	40.87	40.00	60.00	95.00	110.00
24	Styrene butadiene rubber	-do-	40.00	35.51	40.00	28.89	28.00	37.00	45.00	50.00
25	Polybutadiene rubber	-do-	16.00	17.32	16.00	14.80	18.00	17.00	28.00	25.00
	Petrochemical Intermediates									
26	Acrylonitrile	'000 tonne	26.00	26.52	26.00	26.00	27.00	22.00	24.00	80.00
27	DMT/PTA	-do-	290.00	357.34	370.00	369.23	450.00	425.00	480.00	450.00
28	Caprolactam	-do-	40.00	58.32	85.00	91.00	110.00	100.00	101.00	150.00
29	Detergent Alkylate	-do-	165.00	206.87	200.00	211.51	230.00	215.00	220.00	200.00
30	Methanol	-do-	185.00	219.90	260.00	262.10	265.00	265.00	275.00	300.00
31	Phenol	-do-	52.00	52.60	55.00	48.78	55.00	55.00	56.00	75.00
	Man-made fibres									

Annex-7.3 (CONTD.)

MID TERM REVIEW OF EIGHTH PLAN – TARGETS & ACHIEVEMENTS OF PRODUCTION

No.	Industry	Unit	1992-93 Target	1992-93 Actual	1993-94 Target	1993-94 Actual	1994-95 Target	1994-95 Anticip.	1995-96 Target	8th Plan Target
1	2	3	4	5	6	7	8	9	10	11
32	Viscose filament yarn	'000 tonne	58.00	47.95	57.00	53.00	52.00	59.00	60.00	60.00
33	Viscose staple fibre	-do-	170.00	162.45	190.00	183.30	190.00	180.00	190.00	200.00
34	Viscose tyre cord	-do-	10.00	7.50	8.00	7.50	7.00	10.50	10.00	10.00
35	Nylon filament yarn *	-do-	30.00	32.47	35.00	37.34	40.00	40.00	40.00	48.00
36	Polyester staple fibre	-do-	140.00	161.03	165.00	200.00	210.00	205.00	230.00	317.00
37	Polyester filament yarn *	-do-	215.00	245.01	260.00	286.21	320.00	300.00	350.00	363.00
38	Acrylic fibre	-do-	50.00	56.35	75.00	67.57	85.00	75.00	80.00	85.00
	* Under Broadbanding									
	Drugs and Pharmaceuticals									
39	Bulk Drugs	Rs. Crores	860.00	1150.00	1130.00	1320.00	1450.00	1518.00	1570.00	1500.00
40	Formulations	Rs. Crores	4620.00	6000.00	5960.00	6900.00	7300.00	7935.00	8030.00	6000.00
	Food Products									
41	Sugar	Million to	12.80	10.60	11.00	9.80	12.00	13.30	14.00	15.50
42	Vanaspati	'000 tonne	900.00	900.00	940.00	1000.00	1100.00	1100.00	1100.00	1050.00
	Textiles									
43	Spun Yarn	million kg	1940.00	1895.00	1860.00	2067.00	2150.00	2090.00	2150.00	2400.00
44	Cloth (mill sector)	mill.sq.m.	2810.00	2000.00	2255.00	1990.00	2000.00	1875.00	2000.00	4150.00
45	Cloth (decentralised)	Mil.sq.mtr	19350.0	23045.00	21530.00	25482.0	25000.00	25850.00	26300.00	25450.00
46	Jute manufacture	'000 ton	1480.00	1310.00	1400.00	1448.00	1400.00	1350.00	1400.00	1600.00
	Leather and Rubber Goods									
47	Leather footwear(Orgn.)	Mill. pair	27.00	16.53	30.00	20.00	22.00	22.00	30.00	42.00
48	Rubber footwear (orgn.)	-do-	45.00	28.42	47.50	35.60	38.00	32.00	40.00	60.00
49	Bicycle tyres (Organ.)	Million no	35.00	19.30	38.00	20.44	22.00	22.00	30.00	50.00
50	Automobile tyres	-do-	28.00	19.56	29.00	20.60	21.00	21.00	25.00	32.00
	Paper and Paper Products									
51	Paper and paper board	'000 ton	2250.00	2025.00	2362.00	2200.00	2250.00	2480.00	2730.00	2900.00
52	Newsprint	-do-	313.00	311.00	350.00	361.00	500.00	450.00	480.00	300.00
	Industrial Machinery									
53	Machine Tools	Rs.Crs.	950.00	1043.80	1200.00	890.00	1050.00	810.00	850.00	1150.00
54	Mining Machinery	-do-	80.00	82.40	90.00	88.70	88.00	98.00	110.00	130.00
55	Metallurgical Machinery	-do-	110.00	143.60	130.00	119.90	110.00	170.00	200.00	200.00
56	Cement Machinery	-do-	35.00	169.50	120.00	323.70	300.00	350.00	390.00	75.00
57	Chem. & Phar. Machinery	-do-	400.00	506.90	450.00	795.40	720.00	730.00	800.00	650.00
58	Sugar Machinery	-do-	90.00	102.80	120.00	78.30	73.50	85.00	95.00	150.00
59	Paper & Pulp Machinery	-do-	40.00	60.30	60.00	49.20	47.25	48.00	50.00	60.00
60	Textile Machinery	-do-	600.00	1100.00	1200.00	1150.00	1200.00	1200.00	1200.00	800.00
61	Boilers	-do-	900.00	965.10	900.00	841.20	840.00	700.00	700.00	1050.00

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Annex-7.3 (CONTD.)

MID TERM REVIEW OF EIGHTH PLAN - TARGETS & ACHIEVEMENTS
OF PRODUCTION

No.	Industry	Unit	1992-93 Target	1992-93 Actual	1993-94 Target	1993-94 Actual	1994-95 Target	1994-95 Anticip.	1995-96 Target	8th Plan Target
1	2	3	4	5	6	7	8	9	10	11
	Electrical Power Equipments									
62	Steam Turbines	Th MW	2.59	3.12	3.78	3.74	4.11	4.11	4.11	3.96
63	Hydro Turbines	-do-	0.75	0.26	1.09	0.80	0.96	0.96	0.96	1.00
64	Transformers	MKVA	38.00	34.80	15.00	33.50	36.00	36.00	40.00	60.00
65	Electric Motors	MHP	7.00	5.30	6.00	6.00	6.93	6.00	6.10	8.00
	Construction Machinery									
66	Earthmoving Equipment	Nos.	2750.00	2149.00	2700.00	1605.00	2100.00	2135.00	2500.00	4200.00
	Agricultural Machinery									
67	Tractors	Th.Nos.	155.00	146.40	170.00	138.60	147.00	157.00	180.00	240.00
	Rail & Water Transport Equipment									
68	Elec.Locomotives	Nos.	140.00	140.00	135.00	158.00	170.00	155.00	123.00	200.00
69	Diesel Locomotives	-do-	225.00	555.10	555.00	139.00	135.00	135.00	110.00	290.00
70	Railway Coaches	-do-	1800.00	2500.00	2481.00	2212.00	1400.00	1900.00	1400.00	2500.00
71	Railway Wagons	Th.Nos.	25.00	25.00	30.00	19.65	12.00	12.00	12.00	40.00
72	Ship Buildings & Repairs	Rs.crores	175.00	578.40	62.00	486.90	440.00	500.00	550.00	200.00
	Road Transport Equipment									
73	Commercial Vehicles	Th.Nos.	170.00	133.20	150.00	140.70	141.75	220.00	250.00	200.00
74	Passenger Cars.	-do-	185.00	162.60	170.00	209.70	240.00	250.00	300.00	250.00
75	Jeeps	-do-	40.00	39.30	45.00	48.10	72.00	45.00	50.00	45.00
76	Scooters, Motor Cycles and Mopeds	-do-	2000.00	1118.00	1600.00	1329.30	2640.00	1600.00	1900.00	2400.00
78	Bicycle(Org.Sect)	-do-	7000.00	6964.40	7500.00	7739.70	8000.00	9000.00	10000.00	9000.00
	Mechanical Components & Consumer Go									
79	Ball & Roller Bearnings	Mill Nos.	110.00	93.80	105.00	97.70	110.00	100.00	105.00	130.00
80	Typewriters	Th.Nos.	120.00	108.10	110.00	78.30	84.00	78.00	78.00	130.00
81	Sewing Machines(Org.Sec.)	-do-	100.00	127.00	150.00	111.80	120.75	100.00	95.00	160.00
	Electrical Components									
	Consumer Durables									
82	ACSR & A A Conductors	Th.Tons	80.00	25.60	55.00	27.20	31.50	28.00	30.00	100.00
83	Dry Cell	Th.Nos.	1300.00	1192.50	1300.00	1214.90	1312.50	1220.00	1250.00	2000.00
84	Storage Batteries	Mill.Nos.	4250.00	2693.90	4000.00	2819.70	3520.00	2800.00	2900.00	5000.00
85	Domestic Refregrators	Th.Nos.	1400.00	997.10	1200.00	1276.90	1485.00	1600.00	2000.00	2200.00
	Electronics									
	(A).Consumer Electronics	Rs.Crores	3800.00	3300.00	3900.00	4050.00	4600.00	4600.00	5400.00	8500.00
	(B).Industrial Electronic	-do-	1700.00	1700.00	1950.00	1750.00	2300.00	2300.00	2750.00	4500.00
	(C).Communication & Broadcasting	-do-	2200.00	2800.00	3400.00	3150.00	4200.00	4200.00	5200.00	6000.00

Annex-7.3 (Concld.)

MID TERM REVIEW OF EIGHTH PLAN - TARGETS & ACHIEVEMENTS OF PRODUCTION

No.	Industry	Unit	1992-93 Target	1992-93 Actual	1993-94 Target	1993-94 Actual	1994-95 Target	1994-95 Anticip.	1995-96 Target	8th Plan Target
1	2	3	4	5	6	7	8	9	10	11
	(D) Computer Systems	-do-	1000.00	1040.00	1250.00	1050.00	1500.00	1500.00	1850.00	3300.00
	(E).Components	-do-	2200.00	2200.00	2650.00	2600.00	3100.00	3100.00	3600.00	7600.00
	(F).Export oriented Hardware production	-do-	400.00	350.00	600.00	550.00	1500.00	1500.00	2700.00	2000.00
	(G).Software	-do-	550.00	575.00	900.00	750.00	1300.00	1300.00	1800.00	2600.00
	(H).Strategic Electronics	-do-	650.00	385.00	400.00	500.00	450.00	450.00	500.00	1500.00

Annex-7.4

Central Public Sector Profile, 1993-94

	Cognate Group	Total Enterprises	Total Investment	Capital Employed	Net Profit
			[Rupees in Crore]		
I.	Enterprises under contruction	6	1191.66	---	---
II.	Enterprises Manufacturing/ Producing Goods:				
(i)	Steel	9	20846.22	18025.28	(-)116.73
(ii)	Minerals & Metals	13	6949.92	7110.13	231.04
(iii)	Coal & Lignite	9	16551.88	11986.96	511.45
(iv)	Power	4	31075.36	22340.86	1013.56
(v)	Petroleum	14	18827.82	30201.49	3947.48
(vi)	Fertilizers	8	5796.44	2057.65	(-)401.08
(vii)	Chemicals & Pharmaceuticals	21	2976.14	3181.68	(-) 15.88
(viii)	Heavy Engineering	15	2805.28	2046.38	(-)369.91
(ix)	Medium & Light Engineering	24	2605.01	3976.72	(-) 49.02
(x)	Transport Equipment	12	2690.09	2729.27	(-)157.67
(xi)	Consumer Goods	19	3092.03	66.84	(-)699.26
(xii)	Agro Based Industries	4	65.46	99.64	(-) 3.73
(xiii)	Textiles	14	3784.54	297.71	(-)637.48
	Sub Total	166	118066.19	104120.61	3252.77
III.	Enterprises Rendering Services				
(i)	Trading & Marketing services	18	2528.62	12572.73	129.00
(ii)	Transportation services	11	9595.51	9833.46	(-) 31.57
(iii)	Contract & Construction services	10	1898.99	426.56	(-)234.45
(iv)	Industrial Development & Technical consultancy services	12	6108.16	4744.93	231.52
(v)	Tourist services	9	176.08	161.67	3.94
(vi)	Financial services	7	18130.87	19713.99	546.10
(vii)	Telecommunication services	2	6445.78	7504.94	520.26
(viii)	Sec-25 Companies	5	189.72	228.51	17.21
	Sub Total	74	45073.73	55186.79	1182.01
	Grand Total	246	164331.58	159307.40	4434.78

Source : Public Enterprises Survey 1993-94.

Annex- 7.5

MIDTERM APPRAISAL - CENTRAL SECTOR OUTLAYS FOR I & M SECTOR

(Rs. Crores)

Sl. No.	Ministry/ Department	Eighth Plan Outlay	1992-93 Actual Expdr.	1993-94 Actual Expdr.	1994-95 R.E	1992-95 Total
1	2	3.	4.	5.	6.	7.
1.	Ministry of Steel	14579.00	2587.47	2482.95	3651.18	8721.60
2.	Ministry of Mines	2083.00	281.14	220.22	264.89	766.25
3.	Department of Fertilizers	5484.00	253.47	306.79	772.82	1333.08
4.	Ministry of Petroleum & Natural Gas	2552.00	99.73	172.16	443.25	715.14
5.	Department of Chem. & Petrochemicals	2402.00	314.35	399.80	794.88	1509.03
6.	Deptt.of Heavy Industry	2771.00	433.90	263.99	495.91	1193.80
7.	Deptt.of Indus.Development	1162.00	881.22	747.45	276.50	1905.17
8.	Ministry of Surface Transport(Shipbuilding & Repairs)	152.00	10.65	13.85	16.36	40.86
9.	Department of Electronics	588.00	67.71	153.18	155.24	376.13
10.	Department of Atomic Energy	1300.00	147.53	144.47	149.13	441.13
11.	Ministry of Civil Supplies & Public Distribution (Civil supplies)	21.00	2.44	4.15	4.40	10.99
12.	Min. of Finance	1400.00	418.21	1180.45	716.58	2315.24
	a. Economic Affairs Industrial Financial Institutions (IDBI, IFCI, ICICI, IRBI & SIDBI)					
	b. Currency & Coinage	0.00	33.37	30.98	60.26	124.61
13.	Ministry of Textiles	172.00 *	23.71	4.99	161.00	189.70
14.	Deptpartment of Scientific & Industrial Research (CEL)	19.00	5.16	7.99	4.50	17.65
15.	Min. of Planning (Other General Eco.Services-NIC)	300.00	58.17	56.88	80.00	195.05
16.	Min. of Commerce	177.00 *	23.80	52.87	99.00	175.67
17.	Department of Supply	13.00	1.98	3.41	4.70	10.09
18.	Ocean Development	15.00	3.37	0.96	3.70	8.03
19.	Department of Bio-technology (IVCOL & BIBCOL)	5.00	5.33	4.52	9.32	19.17
	Total (1 to 19)	35195.00	5652.71	6252.06	8163.62	20068.39

* Revised outlay

ANNEX-7.6

MID-TERM APPRAISAL - VSI SECTOR - PHYSICAL TARGETS & ACHIEVEMENTS

S/NO.	SUB-SECTOR	UNIT	1991-92 ACHIEV.	1992-93 ACHIEV.	1993-94 ACHIEV.	1994-95 TARGETS	1994-95 ANT.ACHV.	1995-96 TARGETS	1996-97 TARGETS AT1991-92 PRICES
1.	SMALL SCALE INDUSTRIES								
	A. PRODUCTION	Rs/Cr.	160000	169600	241650	260000	264600	300000	233436
	B. EMPLOYMENT	Lakhs	125.30	128.32	139.39	140.00	145.00	150.00	150.50
	C. EXPORTS	Rs/Cr.	13883	17784	25300	18000	26400	30000	20200
2.	KHADI								
	A. PROD. KHADI CLOTH	Mill.Mtrs.	109.11	105.00	108.00	115.00	120.00	135.00	160.00
	B. EMPLOYMENT	Lakhs	14.20	14.50	14.50	14.75	15.50	16.75	16.50
3.	VILLAGE INDUSTRIES								
	A. PRODUCTION	Rs/Cr.	2264.13	2523.00	3232.00	4000.00	4000.00	4500.00	3760.00
	B. EMPLOYMENT	Lakhs	35.96	38.05	39.41	38.00	42.00	48.00	46.25
4.	COIR INDUSTRY								
	A. PROD. COIR FIBRE	000 Tons	215.00	229.00	240.00	240.00	260.00	270.00	277.00
	B. EMPLOYMENT	Lakhs	5.50	5.50	5.50	5.50	5.50	5.50	5.50
	C. EXPORTS	Rs/Cr.	74.12	96.00	102.00	120.00	132.00	150.00	116.00
5.	HANDLOOMS								
	A. PROD. HANDLOOM CLOTH	Mil.Sq.Mt.	4812.00	5262.00	5440.00	5750.00	5750.00	6500.00	7000.00
	B. EMPLOYMENT	Lakhs	106.00	106.00	110.00	112.00	112.00	115.00	117.00
	C. EXPORTS	Rs/Cr.	806.31	1033.00	1191.00	1300.00	1500.00	1800.00	1500.00
6.	POWERLOOMS								
	A. PROD. POWERLOOM CLOTH	Mil.Sq.Mt.	10964.00	17826.00	18482.00	20000.00	20100.00	22000.00	20000.00
	B. EMPLOYMENT	Lakhs	55.00	55.00	56.00	60.00	65.00	70.00	65.00
7.	SERICULTURE								
	A. PROD. RAW SILK	Mill.Tons	11863.00	13900.00	15196.00	16500.00	16500.00	18000.00	21400.00
	B. EMPLOYMENT	Lakhs	54.50	54.77	56.00	60.00	60.00	62.00	65.00
	C. EXPORTS	Rs/Cr.	675.57	720.00	792.00	1000.00	900.00	1200.00	3070.00
8.	HANDICRAFTS								
	A. PRODUCTION	Rs/Cr.	13207.00	15550.00	18250.00	20000.00	20000.00	24000.00	29620.00
	B. EMPLOYMENT	Lakhs	48.25	53.05	58.30	64.20	64.00	70.00	77.65
	C. EXPORTS	Rs/Cr.	1810.00	2523.00	3360.00	3870.00	4000.00	5000.00	3935.00

ANNEX-7.7

MID TERM APPRIASAL- OUTLAYS AND EXPENDITURE

VILLAGE & SMALL INDUSTRIES AND FOOD PROCESSING INDUSTRIES

(RS. IN CRORES -AT CURRENT PRICES)

S.No.	NAME OF THE SUB-SECTOR	EIGHTH PLAN APPROVED OUT LAY	1992-93 ACTUAL EXPENDT.	1993-94 ACTUAL EXPENDT.	1994-95 ACTUAL EXPENDT.	1995-96 B.E.	1996-97 EST. (B/SUPP.)
A.	VILLAGE & SMALL INDUSTRIES						
A1.	DEPT. OF SSIA&RI						
1.	S. I. D. O.	627.00	90.04	107.05	235.00	229.60	260.00
2.	N. S. I. C.	65.00	13.00	15.46	19.00	22.00	25.00
3.	KHADI & VILLAGE INDUSTRIE	900.00	193.00	195.50	214.00	343.00	450.00
4.	COIR INDUSTRY	30.00	5.87	6.66	7.00	10.00	12.00
5.	COPERATIVE UNIONS(NAFCI, NCCT,NCUI)	3.00	0.47	0.50	0.50	0.80	1.00
6.	APPROPRIATE TECHNOLOGY	2.50	0.50	0.50	0.50	0.60	1.00
7.	RURAL INDUSTRIAL DEV.	0.00	0.00	1.00	2.00	1.00	1.00
	TOTAL(DEPTT. OF SSI,A&RI)	1627.50	302.88	326.67	478.00	607.00	750.00
A2.	MINISTRY OF TEXTILES (VSI)						
8.	HANDLOOMS	621.00	29.81	50.35	104.00	124.50	150.00
9.	POWERLOOMS	18.00	0.66	2.81	5.90	4.50	6.00
10.	SERICULTURE	270.00	63.45	75.65	99.44	92.00	100.00
11.	HANDICRAFTS	223.00	28.73	35.38	40.00	50.00	55.00
12.	WOOL DEVELOPMENT	20.00	0.30	1.13	5.00	5.00	6.00
13.	N. I. F. T.	5.00	2.81	2.87	9.45	4.00	8.00
14.	EXPORT PROMOTION/STUDIES					2.00	3.00
	SUB-TOTAL: TEXTILES (VSI)	1157.00	125.76	168.19	263.79	282.00	328.00
	TOTAL (VSI)	2784.50	428.64	494.86	741.79	889.00	1078.00
B.	MINISTRY OF FOOD PROCESSING INDUSTRIES	146.00	32.89	40.00	35.55	42.00	50.00

ANNEX- 7.8

MID TERM APPRAISAL -OUTLAYS AND EXPENDITURE

VILLAGE & SMALL INDUSTRIES AND FOOD PROCESSING INDUSTRIES

AT 1991-92 PRICES (RS. IN CRORES -AT 1991-92 PRICES)

S.No.	NAME OF THE SUB-SECTOR	EIGHTH PLAN APRD. OUTLAY AT 1991-92 PRICES	1992-93 ACTUAL EXPENDT.	1993-94 ACTUAL EXPENDT.	1994-95 ACTUAL EXPENDT.	1995-96 B.E.	1996-97 EST.
A.	VILLAGE & SMALL INDUSTRIES						
A1.	DEPT. OF SSIA&RI						
1.	S. I. D. O.	627.00	82.22	90.19	178.37	162.85	172.36
2.	N. S. I. C.	65.00	11.87	13.02	14.42	15.61	16.57
3.	KHADI & VILLAGE INDUSTRIE	900.00	176.26	164.70	162.43	243.30	298.31
4.	COIR INDUSTRY	30.00	5.36	5.61	5.31	7.09	7.96
5.	COPERATIVE UNIONS(NAFCI, NCCT,NCUI)	3.00	0.43	0.42	0.38	0.57	0.66
6.	APPROPRIATE TECHNOLOGY	2.50	0.46	0.42	0.38	0.43	0.66
7.	RURAL INDUSTRIAL DEV.	0.00	0.00	0.84	1.52	0.95	0.66
	TOTAL(DEPTT. OF SSI,A&RI)	1627.50	276.60	275.20	362.81	430.80	497.18
A2.	MINISTRY OF TEXTILES (VSI)						
8.	HANDLOOMS	621.00	27.22	42.42	78.94	88.31	99.44
9.	POWERLOOMS	18.00	0.60	2.37	4.48	3.19	3.98
10.	SERICULTURE	270.00	57.94	63.73	75.48	65.26	66.29
11.	HANDICRAFTS	223.00	26.24	29.81	30.36	35.47	36.46
12.	WOOL DEVELOPMENT	20.00	0.25	0.95	3.80	3.55	3.92
13.	N. I. F. T.	5.00	2.56	2.42	7.17	2.84	5.30
14.	EXPORT PROMOTION/STUDIES					1.42	1.99
	SUB-TOTAL: TEXTILES (VSI)	1157.00	114.81	141.70	200.23	200.04	217.38
	TOTAL (VSI)	2784.50	391.41	416.90	563.04	630.84	714.56
B.	MINISTRY OF F.P.I.	146.00	30.04	33.70	26.98	29.79	33.15

ANNUAL INFLATION RATES OF 9.5, 8.4, 11.0, 7.0 AND 7.0 PER CENT HAVE BEEN ASSUMED FOR THE YEARS 1992-93, 1993-94, 1994-95, 1995-96 AND 1996-97 RESPECTIVELY.

CHAPTER 8

SCIENCE & TECHNOLOGY AND ENVIRONMENT

Overview

8.1 The major thrust in the Science & Techology (S&T) sector during the Eighth Five Year Plan, inter-alia, include :

i) basic research in frontline areas;

ii) innovative research in areas of S&T with emphasis on Research & Development (R&D) activities in emerging technologies which provide the opportunity of securing a position for leadership and self-reliance;

iii) diffusion of appropriate technology and technology support for ancillaries of large units;

iv) integration of S&T in socio-economic and rural sectors to fulfil the basic needs of water, food, health and nutrition, shelter, education, energy, clothing, employment, etc.

8.2 Concerted efforts have been made to implement well defined, time bound programmes in the various disciplines of S&T like Atomic Energy, Space, Biotechnology, Ocean Science, Industrial Research etc. Special emphasis has been laid particularly for inculcating the spirit of using S&T as an important input to the development process.

8.2.1 Science and Technology Advisory Committees have been set up in most of the development departments like Steel, Coal, Mine, Petroleum, Transport etc. for formulation, implementation and monitoring of S&T programmes relevant to the concerned sector.

8.2.2 In order to promote science and technology activities at the grass root level, State Science and Technology Councils/ Departments have been strengthened and their interaction with various scientific institutions and development departments ensured for effective implementation of location specific projects/ programmes.

8.3 To take an overall view of the scientific efforts and policy guidelines for the development of science and technology in the country, a Cabinet Committee on Science and Technology was set up at the apex level. For the implementation of the recommendations of the Scientific Advisory Committee to the Cabinet, an Empowered Committee of Secretaries on Science and Technology has also been constituted.

Milestones

8.4 There has been a number of signficant events during the Eighth plan period in the S&T sector.

8.4.1 The successful launch of indigenously built INSAT-II A and II-B has resulted in several facilities like video conferencing, expansion of TV services to more areas, etc. PSLV D-II was successfully launched and the remote sensing satellite (IRS P-2) placed in the orbit. A programme entitled 'Integrated Mission for Sustainable Development' (IMSD) has been launched in several districts for the formulation of location specific development plans. National Institute of Ocean Technology was set up at the Indian Institute of Technology (IIT), Madras with the objective of undertaking research in the fields of ocean energy, marine instrumentation, ocean engineering system etc.

8.4.2 Some of the useful contribution of atomic energy research pertain to : successful development of U-233 based fuel, fabrication of MOX fuel assemblies for power reactors, development and promotion of radio isotopes and radiation applications for the industrial modernisation of the country, lasers for application in industry and medicine, etc.

8.4.3 In other areas of S&T, technology mission mode projects have been launched in the areas of sugar production technologies, advance composites, fly ash disposal and utilisation, seismological observations, aquaculture, biological pest control, biofertilisers and leather for the validation and demonstration of the relevant technologies, which have been considered to hold great promise for the development effort.

8.5 Some of the significant achievements vis-a-vis special features in respect of the major S&T departments/ agencies are briefly indicated below :

Atomic Energy

8.6 The thrust of the atomic energy research during the Eighth Plan has been mainly on design and development of nuclear reactors for power generation, for basic research, isotope production etc. which have resulted in the development of several spin-off technologies as well.

8.7.1 The Bhabha Atomic Research Centre (BARC) has developed a number of useful technologies for power reactors have been developed for in-service inspection systems and for the inspection of coolant channels, remote video inspection system, vibration-based diagnostic system for identification of coolant channels besides fabrication of several fuel pins for Pressurised Heavy Water Reactors (PHWRs) involving thorium utilisation and plutonium recycling.

8.7.2 Fabrication of Mixed Oxide (MOX) fuel; development of Uranium-233 based fuel; radio-isotope production capability including specialised radio isotopes like Cobalt-60, Carbon-14, Phosphorous-32 etc. for their use in medicine and agriculture; a new version of "Tritium-in-air" monitor to meet the requirements of nuclear power stations in the country; establishment of irradiation technology for the preservation and hygienisation of perishable foods in their natural form by gamma radiation; development of a variety of remote handling and robotic equipments for the effective and safe operation of nuclear facilities; operationalisation of Waste Immobilisation Plant (WIP) at Tarapur for the processing of high active liquid wastes; development of a super-computer system having peak processing speed of 640 MFlops, based on parallel processing technique to meet the high speed computing needs of the country etc. are some of the achievements.

8.7.3 Some of the research spin-offs include: development of a process for desalination of Water; Reverse Osmosis filteration process; production of invert sugar syrup using immobilised enzyme; detection of leakage in pipe lines; manufacture of low carbon ferro alloys; design and fabrication of ozone generator; production of boron, etc.

8.8 The Indira Gandhi Centre for Atomic Research (IGCAR) is now among the world leaders in sodium technology which is essential for the design and development of 500 MWe Protype Fast Breeder Reactor (PFBR). For the fabrication of various PFBR components such as steam generator, speed drive etc. Linkages have been established. In the case of technology for the chemical plant control system and the application of specific-chip-design, efforts have been made for transfer of these technologies to ECIL and other industries.

8.9 The achievements at the Centre for Advanced Technology (CAT) pertain to electron accelerator-cum- storage ring, viz. the 450MeV Synchrotron Radiation Source (SRS) named INDUS-1. It has also taken up the development of two accelerators viz. (i) A 750 KeV, 20 KW DC Accelerator for the cable irradiation and (ii) A Radiotherapeutic Electron Accelerator based on 20 MeV Microtron already developed as injector to INDUS-1; lasers for their application in the industry, medicine and research sectors etc.

8.10 Some of the important contributions of the Variable Energy Cyclotron Centre (VECC), Calcutta have been : Fabrication of photon multiplicity detectors which have been tested successfully in CERN (European Centre for Nuclear Research) Laboratory, Geneva; fabrication and installation of superconducting cyclotron, the fifth in the world; and the designing and commissioning of the first ever large Electron Cyclotron Resonance (ECR) Ion source, the latest successful heavy ion source.

8.11 One of the major national programmes under execution at the Tata Institute of Fundamental Research (TIFR) is the Giant Metre wavelength Radio Telescope (GMRT) being built at Narayangaon near Pune. 18 antennas have so far been completed and the project is expected to be completed in 1995. Gravitational experiments at Gauribidanur conclusively proved the absence of the fifth force in Nature postulated a few years back.

8.12 At the Tata Memorial Research Centre (TMC), some of the important R&D achievements relate to : laser surgery for head, neck and oesophageal cancer; and the establishment of long term bone marrow cultures. The activities of Saha Institute of Nuclear Physics (SINP) and the Institute of Physics are mainly centred around the pelletron facilities and to develop proper infrastructure facilities for undertaking pelletron based experiments.

8.13 Besides these achievements, DAE has established an efficient facility in non-destructive testing of materials and a mechanism is being worked out to make this facility flow to the industry. So far out of a total number of 71 technologies developed, 31 have been transferred to industry. In addition, MOUs were signed with National Research Development Corporation (NRDC), National Thermal Power Corporation (NTPC), TIFR, Indian Railways, Defence Research & Development Organisation (DRDO) etc. for transfer of technologies and know-how.

8.14 During the remaining period of the Eighth Plan while the main emphasis of the DAE would continue to be on the engineering design and development of 500 MW Pressurised Heavy Water Reactors (PHWRS), safety research, instrumentation, decontamination of reactors, robotics development, immobilisation of high level waste and spent fuel reprocessing, research in the areas of Radiation ionisation spectroscopy, Plasma physics and Development of materials and crystals would also be initiated. By evolving an order of priority critical areas of research would be promoted and some of the important programmes like the GMRT, Advanced Centre for Training, Research & Education in Cancer (ACTREC) at Vashi, National Programme on Lasers etc. expedited.

Biotechnolgy

8.15 The major thrust in the Eighth Plan has been on the R&D in emerging fields of biotechnology, R&D for biotechnology product development, technology transfer and demonstration, integrated manpower development, augumentation of infrastructural facilities and their optimal utilisation, special biotechnology programmes for specific groups and weaker sections etc.

8.16 In the field of agriculture and allied areas, tissue culture techniques have been developed for the improvement of horticulture plants, plantation crops, ornamental plants etc. for the domestic as well as export market and also for forest tree species through two tissue culture Pilot plant facilities, set up at National Chemical Laboratory (NCL), Pune and Tata Energy Research Institute (TERI), New Delhi. Tissue Culture Cardamom project in the states of Kerala, Karnataka and Tamil Nadu has demonstrated a substantial increase in the yield per ha. Other major programmes include Oil Palm Demonstration Project in the states of Andhra Pradesh, Karnataka and Maharashtra; field demonstrations of biofertilisers like Blue Green Algai (BGA), Azolla and Rhizobium resulting in the increase of crop yield and also field demonstrations for biological control of pests, diseases and weeds for various crops like cotton, chickpea, ground nut, tobacco etc.; a multi-institutional coordinated project on transgenic cotton to develop cotton varieties resistant to bollworm; setting up of three national gene banks for the conservation of medicinal and aromatic plants at National Bureau of Plant Genetic Resources (NBPGR), New Delhi, Tropical Botanical Garden Research Institute (TBGRI), Trivandrum and Central Institute of Medicinal & Aromatic Plants (CIMAP), Lucknow; sericulture biotechnology programme for the development and demonstration of immuno-diagnostic kits for the early detection and control of various diseases of silk worm, improvement of cocoon yield, development of transgenic silk worm etc.

8.17 In the area of Animal Biotechnology, cattle herd improvement has been demonstrated through Embryo Transfer Technology (ETT) and techno-economic viability of prawns and carp farming. R&D efforts for health care include: identification of a new cholera strain from Bangaladesh, development of specific DNA probe for diagnosis of tuberculosis, construction of genomic library of Plasmodium vivax antigen gene, cloning of chloroquin resistant Plasmodium falciparum gene, development of immunodiagnostic kits against hepatitis C and E, E.coli diarrhoea, etc.

8.18 R&D in the environment and biodiversity conservation led to the development of ELISA, PCR and DNA probe for the detection of pathogenic bacteria, viruses and Entamoeba histolytica in drinking water, identification of microbial strain for desulphurisation of fossil fuel, laboratory level optimisation of desulphurisation of gas etc.

8.19 In the biotechnology industry programme, several technologies have been transferred to the industries leading to the development of various products like pregnancy slide test, Dot ELISA pregnancy test, amoebic liver abscess detection kit, efficient alcohol producing yeast strain, Leishmaniasis detection kit etc. A National bio-informatics network has been set up with linkages at the national level through NICNET and at the international level through VSNL Gateway and ERNET (DOE).

8.20 An integrated manpower development programme includes PG/PD programme in 23 academic/ research institutions, short term training courses, national and overseas associateships, training programe for industrial R&D personnel as well as biotechnology popularisation programme.

8.21 National Institute of Immunology (NII) has developed leprosy vaccine and standardised non-surgical ETT in cows. Other important developments at NII include bovine Y-chromosome specific probe for the identification of male embryo, drug targetting system to deliver large variety of drugs. The International Centre for Genetic Engineering and Biotechnology (ICGEB) has developed recombinant hepatitis B vaccine, AIDS diagnostic kit, human gamma interferon, recombinant bovine growth hormone, and diagnostic kits for gall midge resistance in rice.

8.22 With a view to develop suitable economically viable technology packages for validation and field trials, transfer of technology for large scale production and commercialisation to users, three Technology Mission Mode projects in the field of biofertilisers, biological pest control and semi-intensive aquaculture have been launched and several special biotechnology programmes like installation of a meat meal plant, screening of various Tribes in different States for genetic disorders, vermi composting etc. have been initiated for the benefit of SC/ST population, Weaker Sections and Women.

8.23 The efforts under the international collaboration resulted in establishing three gene banks for medicinal and aromatic plants and launching of a project for establishing Asian Bioinformatic Network and to undertake technology assessment on the potential of new biotechnolgies for IPM, agroforestry and rainfed farming etc.

8.24 There is need to formulate a biotechnology profile for the country spelling out the areas of thrust, role vis-a-vis programmes of the various departments/ agencies/ institutions, resources required etc. including the monitoring mechanisms. The large scale demonstration, extension and training programmes on biotechnology application may be implemented by the concerned development departments and appropriate mechanisms evolved for transfer of technology.

Ocean Development

8.25 The thrust in the areas of Ocean Science and Technology has been on Antarctic research, polymetallic nodules programme, development of ocean data and information system including application of remote sensing technology, marine pollution monitoring, marine instrumentation, wave energy, R&D and manpower development etc.

8.26 In the Antarctic research programme, the 12th and the 13th scientific expeditions have been undertaken with emphasis on multidisciplinary approach, reduction in logistic support, increase in scientific content and better utilisation of available ship time. A laser heterodyne system was tested and the millimetre wave experiment was conducted. An Antarctic Study Centre has also been set up in Goa.

8.27 Under the Polymetallic Nodules Programme, the significant achievements include survey and maping of deep seabed area of 1,50,000 sq. km. in the Central Indian Ocean, development of a mining system using remotely operated vehicle by Central Mining Engineering Research Institute (CMERI), Durgapur and its testing in a shallow basin, development of technology for extraction of metals from nodules through pilot plant campaigns by NML, Jamshedpur and RRL, Bhubneshwar.

8.28 The Coastal Ocean Monitoring and Prediction System is being operated through 11 scientific institutions for monitoring the level of pollution along the coast. The information on pollution level has been disseminated to the Pollution Control Board of the coastal States. Two indigenously built coastal research vessels are being procured for monitoring of the coastal pollution.

8.29 Under the Marine Satellite Information System (MARSIS) programme, Potential Fishing Zone (PFZ) maps have been prepared and disseminated among the users; shore to fishing vessel communication system has been developed; and coastal area maps on wetlands, shore line changes etc. have been completed for the States of Kerala and Tamil Nadu besides the coral reef mapping of the Gulf of Kutch, Gulf of Mannar, Lakshadweep and Andaman and Nicobar Islands. For monitoring the sea level variation due to climatic changes tide gauge programme has been initiated. The National Ocean Information Service (NOIS) has helped in the exchange of oceanographic data/ information through a network of 13 maritime data centres which are being linked through the NICNET.

8.30 Other important continuing programmes include : manpower development through universities etc. and demonstration of technical capability for the generation of electric power from the sea waves at Vizhinjam harbour (Thiruvananthapuram). A major initiative by the Planning Commission has resulted in the setting up of a National Institute of Ocean Technology (NIOT) for undertaking R&D in areas of wave energy, deep seabed mining, marine instrumentation, coastal zone management etc.

8.31 The main areas where the future oceanographic research would be pursued during the Eighth Plan relate to survey work under polymetallic nodule programme for the relinquishment of pioneer area (alloted to India) to the International Seabed Authority, collection of 50 tonnes of nodules, continuation of the pilot plants operations at National Mettalugical Laboratory (NML), Jamshedpur and Regional Research Laboratory (RRL), Bhubneshwar, environmental impact assesment study of seabed mining; strengthening of the NIOT; generation of maps on new parameters like chlorophyll, suspended sediments, erosion/depositional features etc. in different maritime states; launching the data buoys programme with Norwegian Agency for Development (NORAD) assistance. The activities to be undertaken by DOD would be mainly on R&D and demonstration. The programmes like MARSIS, COMAPS, etc., which have made significant progress would eventually be transferred to the State governments or to the other concerned organisations like the Pollution Control Boards etc.

Science and Technology

8.32 The focus of the programmes on Science and Technology has been in the broad areas of R&D promotion, special technology development and coordination, S&T for socio-economic development, development of medium range weather forecasting system, improvement of weather forecasting and related research and support to autonomous scientific institutions/ societies for promotion of research in frontier areas of science and engineering.

8.33 Under R&D promotion, more than 400 R&D projects have been supported; National facilities in the areas of liquid crystals, neurosciences, X-ray crystallography, climate research, robotics etc. set up; and the national programmes on lasers, superconductivity etc. initiated. The special technology development programmes have been initiated in the areas of building materials, orthopaedic devices, mini-micro hydel power, robotics, compressed natural gas, geotechnical centrifuge, CFC substitutes, parallel computer, cobalt recovery, magnesia from sea etc. Technology mission mode projects in the areas of sugar production technologies, advanced composites and fly ash utilisation and disposal have been launched. The Technology Information Forecasting & Assessment Council (TIFAC) completed a number of technology forecasting/ assessment studies in a large number of areas like information technology, micro electronics, high purity and high volume industrial gases, etc. Other achievement of TIFAC is the finalisation of 8 Home Grown Technology (HGT) which are expected to strengthen the linkages between the lab and industry through commercialisation and signing of MOUs between TIFAC and CMC for the operationalisation of TIFACLINE, a technology information system and between TIFAC and Confederation of Indian Industries (CII) for strengthening the mechanism of transfer of technologies developed through TIFAC. For commercialisation of indigenously developed technologies, a Technology Development Fund has recently been created. The areas of international S&T cooperation comprise of materials science and engineering, biotechnology, computer sciences, catalysis etc. The Advanced Research Centre (ARC), Hyderabad developed a number of powder metallurgy products for use by Indian Army, Navy, Hindustan Aeronautics Ltd. (HAL), Bharat Heavy Electricals Ltd. (BHEL) etc. The areas of joint programmes with developed countries include surface engineering, biotechnology, marine sciences, solar energy technologies etc.

8.34 For the socio economic development of Rural and Urban Poor, Women, Weaker Sections, Scheduled Castes and Tribal Population etc. a number of technologies have been developed on carp breeding; seed raising; rain water harvesting; soak pits, water filters, water testing kits, low cost toilets etc. Development of technologies apart, efforts have been made through S&T Entrepreneurship Development Programme for the creation of a number of job opportunities through training and awareness. Several science popularisation programmes like Bharat Jan Gyan Vigyan Jatha, national children science congress, Radio serial and TV serials on science themes have also been initiated. 22 database centres have also been set up in different geo- environmental settings for developmental planning under the NRDMS programme. The Department played an important role in the promotion of S&T activities in all the States and UTs.

8.35 The other important areas where considerable support was extended by DST are : natural disaster management; upgradation of seismic instrumentation, seismic surveillance etc. through a collaborative programme with Russia; development of super computing capability for global weather and climate modelling through indigenously developed parallel processing system; conversion of analogue plotting instruments with digital recording devices by the Survey of India; preparation of health and disease atlas, district planning map series by NATMO etc. Valuable contributions of the 13 autonomous scientific institutions supported by DST are in the fields of palaeobotany, microbiology and genetic engineering, material sciences, plasma research, astronomy and astrophysics geomagnetism, tropical meteorology, medical S&T, Himalayan geology etc.

8.36 Besides these, India Meteorological Department has successfully commissioned a sophisticated computer based image processing system and an earth station under INSAT II programme; and the seismological observatory network was augumented. Its modernisation programme has resulted in successful long range seasonal prediction of monsoon rainfall over the country, prediction of cyclones and effective monitoring of earthquake events.

8.37 During the remaining period of the Eighth Plan, while the major emphasis would be to strengthen R&D efforts particularly in the areas of drug design, bio-diversity, plasma chemistry, nano-materials/carbon, bio-process engineering, noise control, software engineering, mathematical sciences, software engineering, superconductivity, development of various instruments, biosensors/ molecular electronics etc.; special efforts would be made on the aspect of transfer of know-how to industry. TIFAC's efforts would be on strengthening of the information system, generation of special reports of task forces and promotion of various home grown technologies. The new programmes on the upgradation of seismological instrumentation and related geophysical studies in Penninsular Shield would be taken up on a mission mode with World Bank assistance.

8.38 The Science and Society programmes would comprise of the activities of Mahila Vigyan Kendras, on-job scientific and technical training for women, development and application of technology for weaker sections by involving young scientists etc. Under NRDMS programme the project for upgradation of GRAM-GIS package would be launched with UNDP assistance. Science and Technology Communication and Popularisation programme would aim at training in S&T communication, support to regional science magazines in regional languages, publication of popular science books, preparation of software for folk media etc.

8.39 The International S&T Cooperation aims at making new S&T arrangements with Kyrghistan, Turkmenistan and Belarus and undertaking new arrangements with many countries like Israel, Japan, Uzbekistan, Mauritius, USA, European Union and South Africa in the areas of biotechnology, material and information technology, manufacturing science, astronomy, astrophysics, molecular structure, spectroscopy, modern biology etc.

8.40 A permanent campus for the National Centre for Medium Range Weather Forecasting would be constructed at Noida, Uttar Pradesh, where the existing supercomputer would be replaced and satellite based telecommunication facilities extended to all the State Agricultural Universities and AMFUs to facilitate medium range weather forecasts 5 days in advance.

8.41 The IMD would be commissioning 3 X-band weather radars, 4 wind - finding-cum-weather radars, High Resolution Picture Transmission Satellite Ground Equipment at Madras and 3 S-band Doppler radars; switching computer at RTH, New Delhi upgraded; seismological observatories modernised; and a Central Training Institute for Meteorology and a new regional meteorolgical centre in North Eastern Region established. A major new initiative would be the design of a large Himalayan Infrared and Optical Telescope (HIROT) for deployment at an elevation of 4500 mtr. in Himalayas to study neutron stars, black holes, cosmology etc.

8.42 Support to these programmes notwithstanding there is need to lay emphasis on the application of research results for technology development and the eventual improvement in quality of life. For this, an integrared programme on seismology may be evolved for improvement of seismological observation and related research activities; in the implementation of the technology development and demonstration projects, active participation of industries/ users ensured; Science and Technology Advisory Committees of the various socio economic ministries and Inter- Sectoral Science and Technology Advisory Committee of DST reactivated so that the existing S&T institutional infrastructure facilities and expertise would be optimally utilised by the users/ user departments. There is immediate need to tie up the S&T entrepreneurship development programme of DST with the ongoing employment generation programmes. Likewise the Science Communication and Popularisation Programmes as well as science and society related R&D programmes need to be tied up with the programmes of the State S&T Councils/ Departments to ensure the implementation of location specific programmes with S&T intervention and active participation of voluntary organisations. The total modernisation programme of IMD needs reformulation through a programme of replacement of old equipment, installation of new facilities, strengthening of manpower, capital works programme etc., to facilitate its implementation in a phased manner depending on the availability of resources.

Scientific and Industrial Research

8.43 The main focus of the Council of Scientific & Industrial Research (CSIR) during the Eighth Plan has been on a few selected areas of high priority oriented to industrial development, export promotion and to those that provide internationally competitive technical services to the industries. Accordingly, for the purpose of deciding priorities in funding the R&D programmes of the national laboratories have been considered under four groups viz. Industry/economy oriented, Societal, Basic research and Research support activities and technical services.

8.44 Some of the significant achievements of CSIR during the Eighth Plan include : development of technology for Centchroman, a non-steroidal female contraceptive; agrochemicals like Acephate (insecticide), Glyphosate (herbicide) and Thiophenate methyl (fungicide); wood substitute for door shutters; improved Fe- molybdenum catalyst for conversion of ethanol to formaldehyde; 10-TPD modern oil expeller; manufacture of a semi synthetic antibiotic Roxythromycin; design and development of two-seater aircraft; establishment of tissue culture Pilot Plant Facility etc. Some important products developed in the industrial development sector are : a Zeolite catalyst by NCL for use in a non-toxic, non corrosive, zero pollution route for linear alkyl benzene; catalytic conversion to reduce pollution from 2/4 stroke engine vehicles by National Environmental Engineering Research Institute (NEERI); 50 TPD oil expellers to reduce residual oil contents from 9% to 6% by CMERI; a light weight (78 Kg) corrosion fee and high impact strength fibre reinforced plastic gear-case; bimetallic and alumina catalysts by IIP; water proofing polymer by NCL; design packages for 100 TPD and 50 TPD cement plants etc. Other R&D contributions include physical and biological monitoring of air, soil/sediments and water quality; technologies for the production of hydro-fluorocarbons, development of designs for effluent treatment plants, waste water treatment plants and power plants; low cost alternate building materials for weaker sections and disaster mitigation in the buildings through the use of appropriate designs and materials etc. Due to the initiatives taken by CSIR, the cashflow from external sources has grown from about Rs. 64 crore in 1990-91 to about Rs. 95 crore during 1993-94 and the value of industrial production based on CSIR knowhow from Rs. 840 crore in 1988-89 to about Rs. 2,250 crore in 1993-94.

8.45 A number of competitive technologies are being developed by CSIR and capabilites built up in the new generic technologies for the future as well as for the societal needs in the country. In the area of drugs 1/4th of the patents in the country and nearly all patents taken abroad came out of CSIR system alone. The CSIR has gained enough experience in the export of technologies and has also strengthened the system of patenting activities in the laboratories as well as at the Headquarters. For example, the NCL, Pune has contract R&D agreements with DU- PONT, GE, HOECHST etc. and has developed strategic alliances with the FMC etc., the Indian Institute of Chemical Technology (IICT) has contracted an R&D agreement with ABBOT and has licensed technology in the area of FLORAFRICA and the Central Leather Research Institute (CLRI) has similar agreements with the IDRC, SATRA, HUNI etc.

8.46 Future thrust of CSIR would be on selective modernisation of various CSIR laboratories, upscaling of technologies, extension of societal programmes, construction of high speed wind tunnel facilities. While continuing the ongoing R&D programmes, a technology mission mode project on leather technologies would also be launched during the Eighth Plan. Besides these, the ongoing programmes on human resource development would be continued and the residential accomodation projects on hand completed.

8.47 The broad heads under which the activities of DSIR are being undertaken are : Technology Promotion, Development and Utilisation (TPDU) to promote inhouse R&D by industry, to attain technological self reliance and to enhance efficacy of transfer of technology; Development and promotion of National Information System on S&T (NISSAT); Commercialisation of R&D results as well as promotion of growth of indigenous technologies through National Research Development Corporation (NRDC) and R&D activities of the Central Electronics Ltd. relating to solar photovoltaic cells, ferrites, light emitting diodes etc.

8.48 The support to these schemes has resulted in providing recognition to 175 new R&D units in industry and 120 non- commercial scientific and industrial R&D institutions; commercialising a range of products such as CNC controls, freeze dryers, cryogenic containers etc.; publication of a number of technology evaluation reports in the areas of fertilisers, cement, steel etc.; setting up 10 S&T information centres in the areas of leather, food technology, machine tools, drugs and pharmaceuticals, textiles, chemicals, compact disks, advanced ceramics, bibliometrics and crystallography and creating 5 regular facilities to access the international data centres at New Delhi, Madras, Calcutta, Pune and Bangalore. NRDC has acquired 92 new technologies in the fields of invert sugar, mosquito repellent, carbon fibre, glycol based automotive engine coolants, detergent grade zeolite powder etc. from R&D laboratories and concluded 123 technology licencing agreements with the industries. Several new initiatives have been taken up by NRDC which include technology consultancy, contract research, foreign patent protection and small and medium industry innovation programme. The R&D projects of Central Electronics Ltd. (CEL) have resulted in developing new technology for the production of ultra high efficiency solar cells in collaboration with the University of New South Wales, Australia; new Solar Photovoltaics (SPV) systems for specific applications to enlarge SPV market which include indigenous submersible pump, brushless DC motors, battery chargers etc.; standardising process parameters for commercial volume production of the high frequency and microwave ferrites/ferrite components and new electronic systems for railway signalling and safety.

8.49 Despite the achievements made by the by CSIR, there are certain improvements to be introduced. The steps needed for these are : further restructuring of the non-plan outlay, projectisation of the programmes especially the modernisation aspects of the CSIR laboratories etc. For the creation of technology transfer fund, a joint approach with the DST is required.

8.50 There have been certain non-measurable benefits of TPDU schemes such as : useful interactions in many areas for the promotion of industrial research, for the import of technology and related aspects and for the promotion of consultancy organisations in the developmental activities. As a result of the linkages between companies and national laboratories/ institutions have been built up; nationwide awareness created for the technology absorption, consultancy capabilities, mechanisms of transfer of technology etc; and primary data obtained on many asepcts relating to technology imports and utilisation and bringing out several useful reports on various aspects of industrial technology development and its utilisation. In the case of NISSAT, setting up of Information Centres etc. is not enough but marketing mechanisms are required to be evolved to make the S&T information system self sustaining. It should also widen its operational framework instead of limiting itself to S&T libraries; handle larger volumes of information transfer activities; identify priority areas in consultation with the industry and pay attention towards the development of databases and information systems concerned with technology, business and industry. CEL should continue their efforts to obtain atleast partial financial support from the concerned user agencies. Since the NRDC and CEL are business organisations, there is a need to work out a plan so that these public sector undetakings would be gradually less dependent on the budget support and should finally become self supporting in the long run.

8.51 Efforts are being made to promote industrial research and to establish effective linkages with the national laboratories, educational institutions and the users/ industries. Incentives are also being provided such as income tax relief on R&D expenditure, weigted tax deduction of 125% for sponsored research programmes, custom duty exemption etc. However, industry-related need-based R&D programmes, linkages with the industries, multi-agency R&D programmes, technology development and adaptation have not come up upto the expectations. Keeping in view these drawbacks, and in the context of the New Economic Policy, major effort has been made in creating a Technology Development Fund (TDF) through 5% R&D Cess on all payments on imported technology for encouraging the commercialisation of indigenous technology and adaptation of imported technology. Besides, the R&D programmes in the areas of agro-chemicals, industrial catalysts, new materials, new drugs including plant-based activities are being initiated. In order to further encourage and strengthen the need-based user-oriented R&D programmes, the following few aspects need urgent attention :

8.51.1 Any new initiatives by the R&D institutions/ laboratories should be within the framework of the economic revolution which the country has been passing through, the market-related investments and the incentives as well as the budget contraints. The R&D activity is one area where the markets are likely to remain somewhat unproductive for the simple reason that the social benefits from the R&D efforts are seldom captured completely in the market rates of return. There is, therefore, a need for substantial government intervention in the R&D area by using the market-related instruments and market incentives.

8.51.2 In this context, notwithstanding the TDF to be operated by the DST, the feasibility of instituting another incentive scheme for the R&D institutions could be considered. In the large industrial units, a cess of 2% to 3% of the turnover, allowing deduction for their in-house R&D effort, may be levied. Small units may be totally exempted from this. A corpus fund will, thus, be created which might be supplemented initially by an equal amount by government and the total fund operated by the DSIR projectising the requirement of R&D - both basic and applied - on the basis of a proper analysis in collaboration with the industry and the scientists. Over a time, the government contribution in the corpus fund should become zero. While this type of government intervention would gradually help the R&D sector to stand on its own, it is expected to produce many benefits to the industry in a competitive framework, by increasing their productivity, efficiency and returns.

8.52 The changing global scenario following the GATT and its components the Trade Related Intellectual Property Rights (TRIPS) relating to patents has posed new challenges for the technology upgradation and commercialisation of technology, vis-a-vis, patenting the R&D efforts. In this context, major efforts are needed for creating an awareness amongst the research institutions and universities regarding the various aspects of Intellectual Property Rights (IPR) and patents. Some of the key issues that need attention in this regard include : increased investments in the R&D in order to bring about new inventions, evolving guidelines for an early identification and valuation of the IPR, establishing an internal assessment mechanism, undertaking a worldwide patent search prior to initiation of R&D, creating systems for management and marketing of patent portfolios, restructuring of S&T organisations and R&D instutitons, fiscal incentives for R&D in industry etc.

8.53 S&T has been recognised as one of the important factors for development and has adopted planned programmes for the development of S&T infrastructure and capability for technological advancement. Significant contributions have also been made in the frontier areas of science and technology, although the transfer of technology is still in the process of taking concrete shape. In order to make the S&T efforts more directed towards the user needs, the S&T deptts./ laboratories should have effective collabroation and linkages for developing well-defined target-oriented technology development programmes. The major effort should be on the application-oriented applied research, appropriate to the user needs and also its being location specific. In this regard, the demonstration of R&D results will have to be further strengthened for developing proven technologies for extension/ commercialisation. The user ministries/ deptts. in their plan must identify the S&T needs and tie up with the ongoing S&T efforts of the research laboratories. The demands from the S&T agencies should be placd accordingly for an effective utilisation of capabilities of the research laboratories. At the same time, fundamental research in the frontier areas of science need to be pursued for achieving excellence. There has to be a judicious mix of basic research and applied/ user based R&D programmes.

Space

8.54 The main thrust of the programmes has been on the development and operationalisation of indigenous satellites, launch vehicles etc. for providing space based services in the areas of communication, resources survey, environment monitoring, meteorology etc. The major on-going activities include launching of multi purpose second generation communication satellites, develop capabilities for Augmented Satellite Launch vehicle (ASLV), Polar Satellite Launch Vehicle (PSLV), Geo Synchronous Launch Vehicle (GSLV), building and launching of second generation remote sensing satellites as well as strengthening of organisation and infrastructure of various centres including Vikram Sarabhai Space Centre (VSSC), ISRO Satellite Application Centre, Space Application Centre (SAC), Physical Research Laboratory, Master Control Facility etc. In addition, new programmes relating to continuation of PSLV, GRAMSAT for rural health and education, development of satellites like low earth satellite, third generation INSAT, direct broadcast satellite, microwave/ optical remote sensing satellite, installation of second launch pad, integrated management for sustainable development using remote sensing for micro level planning, setting up of Antrix Corporation etc. have been initiated.

8.55 The launch of INSAT-2A & 2B has brought in various communication services such as establishment of 533 transmitter links for television, diversion of more than 50% telecom traffic and improvement of disaster warning etc. With successful launch of second development flight of PSLV capabilities have also been developed and proved many new major technologies like the solid booster, inertial navigation system, on-board computers etc. Other benefits relate to test facilities on ground, launch base related facility namely MST, Propellant storage and handling, high precision radars, launch and mission control centres etc. Successful flight testing of solid booster and liquid stage of PSLV have helped the development of GSLV to launch INSAT-2 class satellite indigenously. In the areas of space sciences, important activities include satellite based science mission using SROSS satellite on board ASLV and PSLV, scientific studies using MST Radar facilities, infrared telescope, sounding rocket borne experiment as well as geo-sphere, bio-sphere programme. The microwave data from the European Remote Sensing Satellite (ERS-1) is regularly received and processed for various user projects.

8.56 Remote sensing applications have been operationalised in a number of important thematic areas such as forest maping, large area crop inventory, regional geological maping, ground water targeting and flood maping and a number of national level projects have been undertaken on a mission mode with the active participation of various user ministries/ departments. Most importantly the remote sensing technology has been most fruitfully applied in the formulation of IMSD programme. Under this, locale specific plans have been generated using remote sensing data which are appropriately integrated with colateral meteorological data. The detailed action plans have been generated for 10 selected districts viz. Ahmednagar, Anantapur, Bhiwani, Bijapur, Chandrapur, Dharmapuri, Hassan, Jhabuva, Kalahandi and Panchamahal.

8.57 During the remaining period of the Eighth Plan, the major activities would be to launch second generation multi- purpose communication satellite like INSAT- 2 C and 2 D for improving the communication facilities -television, telephones, meteorology etc.; to launch remote sensing satellite IC and ID; design, development, fabrication and launching of GSLV besides continuation of PSLV programme for placing various remote sensing satellites having experimental payloads for undertaking various missions in the areas of oceanography, cartography and environmental sciences. Other programmes envisaged relate to further remote sensing applications, design and development of third generation INSAT class satellites, space sciences programme etc.

8.58 Under the technology transfer programme of the Deptt. of Space, by 1993, a total number of 216 technologies have been transferred to industry in the areas of Polymers, Resin Chemicals, Special materials, Telecom transponders, TV hardware, Computer software like GIS, Optical solar reflector, pneumatic vibration isolators, CCD Camera, anodising process of aluminium alloys etc. Of these more than 60% are in the fields of telecom, Meteorology and TV Hardware.

8.59 Admittedly, there is a need for DOS to take certain steps for advance action in the indigenous technological development of strategic items especially in achieving self reliance in GSLV development, for launching INSAT class of satellite to face the present embargo and building up of necessary inventories by involving Indian industries. Stock piling of inventories may be essential for future INSAT Systems to face any eventuality of sanctions on components. The user sectors like Telecom, I&B, Meteorology, NIC etc. may have to expand their ground segment for full utilisation of the available live transponders with the launching of INSAT-2C and 2D by the end of the plan period. The Eighth Plan outlay of Rs. 1,804 crore includes an outlay of Rs. 200 crore for IEBR. But the services of D/o Space under the existing circumstances cannot earn profits as they are neither directly consumer linked as in the case of DOT, I&B etc. nor any society/ PSU works for DOS to earn sizeable profits. NRSA is the only agency which earns about Rs. 6-8 crore/ year. The M/s ANTRIX Corporation formed only in 1992 has yet to gear up its network for bagging high value awards from SE Asian countries, EEC etc. In view of this, the provision of Rs. 200 crore for IEBR may not materialise. In order to achieve self reliance, DOS might strengthen the capabilities in the areas of component development in space qualified electronic items for future INSAT system; launch vehicle segment; dedicated communication satellite system design like LECOSS; hardware for liquid propellant system for GSLV class of vehicle; microwave remote sensing which enables penetrating cloud coverage; building up of enough inventory for INSAT class satellites etc.

Forensic Science and Police Wireless

8.60 Forensic Science activities are undertaken at the Central Forensic Science Laboratories (CFSLs) in New Delhi, Calcutta, Hyderabad and Chandigarh; the Government Examiners of Questioned Documents (GEQDs), in Shimla, Hyderabad and Calcutta; and the National Institute of Criminology and Forensic Science (NICFS) in New Delhi. During the Eighth Plan, in all 23 schemes have been taken up in the areas of qualitative and quantitative analysis of organic compounds; characterisation of residue from fire arms; individualisation of human hair; the determination of proper age of persons dead or alive; analysis of glass, soil and cement using differential thermal analyser; the study of metabolites of drugs and poisons; application of antigen-antibody technique in Forensic Toxicology and biochemical and serological studies of lectins etc. The Major visible impact of these schemes can be seen in the development of a new spectrophotometric method for the determination of Psilocin and psilocybin, morphological study of fired cartridge and detection of gun-shot residue particles by scanning electron microscope. Another long desired objective that has been achieved is the creation of several sophisticated equipment facilities like inductively coupled plasma optical emission spectrometer, energy dispersive X-ray analysis system, high speed refrigerated centrifuge, electrophoresis equipment, video super- imposition equipment and video spectral comparator etc.

8.61 The thrust of the S&T activities under Police Wireless schemes has been on the testing and evaluation of high speed telecommunication systems for the police telecommunication network. A major outcome of these schemes is the finalisation of the detailed specifications for the computerised Message Switch and micro earth stations in consultation with the various manufacturers in this field. During the Eighth Plan, these would be tested and evaluated at the selected state capitals for their compatibility. Some of the other areas in which work has been in progress relates to : development of computerised message concentrators, Multi Access Radio Telecommunication (MART) interface to work with the dedicated satellite network of the police, high speed data switch for the training and the packet radio system for induction in the police telecommunication.

8.62 In the area of Forensic Science and Police Wireless, the plan component was introduced for the first time during the Seventh Plan for providing S&T inputs. No specific programme has so far been approved in the form of project/scheme through SFC/EFC mechanism. The approvals are accorded for individual equipments/training/ manpower etc. on a piece meal basis. Efforts may be made to speed up the approval mechanism so that the plan programmes could be implemented effectively.

8.63 An outlay of Rs. 4,119 crore (at 1991-92 prices) was made during the Eighth Plan for the Central S&T Depts/ Agencies against which an expenditure of Rs. 3,157 crore (in nominal terms) was incurred during the first three years leaving a balance of Rs. 962 crore (in nominal terms) for the remaining two years of the Eighth Plan. The Annual Plan (1995-96) outlay for the Central S&T Deptts./ Agencies is Rs. 1,487 crore, a step up of about 19% over the Annual Plan (1994-95). The progress of plan outlay and expenditure for the Central S&T Agencies/ Departments and for the S&T sector in States/ UTs is given at Annex 8.1 and 8.2.

Environment, Forestry and Wastelands Development

8.64 The concern over the degradation of our environment and forests was brought out in the Eighth Plan and it was indicated that environmental degradation seriously threatens our economical and social progress. The major tasks put forth to meet this challenge in the Plan were :

i) To protect the natural environment;

ii) To regenerate and restore degraded ecosystems and increase their productivity and to generate employment through these activities;

iii) To decentralise control over nature and natural resources;

iv) To develop and share an understanding of nature and natural processes;

v) To formulate a national policy for environment and an appropriate institutional and legal framework in support of the policy;

vi) To ensure co-ordinated and integrated Governmental action aimed at conserving nature and natural resources;

vii) To make individuals and institutions more accountable to the people for their actions impinging on environment and ecosystems; and

viii) To monitor the state of environment.

8.65 These tasks are undertaken principally by the Ministry of Environment & Forests which is the nodal agency for promotion and coordination of environmental and forestry programmes. The tasks are accomplished through the Ministry's regional and subordinate offices and autonomous institutions. The works carried out by these agencies are complementary and are achieved progressively through measures taken up for abatement of pollution, conducting investigations, surveys and studies for conservation and management, promotion of environmental education and creating awareness, enacting environmental legislations and law enforcement and through ecoregeneration and ecorestoration activities.

8.66 The period since the launching of the Eighth Plan has been eventful from domestic and international stand point. It has witnessed events such as the United Nations' Conference on Environment & Development (UNCED) held at Rio de Jenerio, Brazil in June 1992. India has become a signatory to the convention on climate change and the Convention for Conservation of Biological Diversity. India has also become a party to the Rio Declaration on Environment & Development and the agenda 21. For a more focussed attention to environmental issues a new commission on Sustainable Development under aegis of the United Nations has also been established. In order to translate intention into concrete action new and additional financial resources are required. The replenishment of global environmental facility adequately is absolutely necessary. At home, major structural achievements in the nature of economic liberalization have been initiated. We are a developing country and we share global concern for environment. Our priorities, however, have to be based on our own needs and perceptions taking into account the constraint in availability of financial resources. Poverty alleviation through accelerated economic growth is, therefore, of as much concern to us as is the need to protect environment. In our view there is, in the long run, no conflict between environment and development. Various efforts are being made to integrate environmental concerns into the decision-making process. Environmental standards and environmental management plans prescribed are important measures taken to protect environment. The same applies to environment audit which is being made mandatory for major industries.

Progress of the Plan

8.67 During the first three years new dimensions have been given in protecting the natural environment. Thrust was given to the management of hazardous wastes, adoption of clean technologies by the industries, establishing common effluent treatment plants for clusters of small scale industries, development of criteria for environmentally friendly products, phasing out of Ozone depleting substances and creating mass awareness programmes.

8.68 Special attention was given for protecting our Biosphere Reserves, National Parks and Sanctuaries. Management Action Plans have been prepared for the Biosphere Reserves and guidelines have been framed for ecodevelopment activities in the manipulation zones. To protect ecosystems like the Mangroves, Wetlands and Coral Reefs a National Committee was constituted which advises on the implementation of management action plans and to identify new mangrove and wetland areas. For the identified areas steering committees have been constituted at the state level to monitor activities like natural regeneration, afforestation, wildlife conservation, fisheries development and creation of awareness and research.

8.69 With the aim of regenerating degraded ecosystems and to create employment opportunities the National Wastelands Development Board was reconstituted under the Department of Wastelands Development in the Ministry of Rural Development. The Board attempts to regenerate non forest wastelands. Similarly a newly constituted board under the Ministry of Environment & Forests, the National Afforestation and Ecodevelopment Board is undertaking afforestation and ecodevelopment activities in the degraded forests and adjacent areas. A major scheme, Association of Scheduled Tribes and Rural Poor in the Regeneration of Degraded Forests, has gained momentum and provides employment and usufructs to the tribals living inside and near forests. Various Social Forestry projects also provides employment to local people especially women.

8.70 The Ministry operates a number of environment education and awareness programmes through their autonomous institutions and NGOs. Other than these environmental education programmes a new scheme entitled Paryavaran Sudhar Pariyojana attempted to create environmental awareness and involvement of people through active participation, reporting on illegal acts pertaining to forests, wildlife, pollution and environmental degradation, feedback regarding afforestation and survival of plants and monitoring including collection of samples, analysis of ambient air and water quality.

8.71 To enhance effective regulatory measures to protect the environment and to conserve our natural resources the Government has brought out the National Consevation Strategy and Policy Statement on Environment and Development and the Policy Statement for the Abatement of Pollution. In association with various agencies the Ministry of Environment & Forests also brought out an Environment Action Programme. The Ministry also came up with various legislative measures by way of amending the existing acts and rules in accordance with the National Conservation Strategy and the Policy Statement for Abatement of Pollution.

Ganga Action Plan

8.72 Phase-I of Ganga Action Plan comprises 261 schemes. At the beginning of the Eighth Five Year Plan 140 schemes had been completed. Vigorous efforts at completion of the remaining schemes have resulted in completion of 230 schemes leaving only 31 schemes which are also in advanced stage of completion. The details of completed schemes and the completion schedule for remaining schemes are at Annex. 8.3 and 8.4 respectively. In the meanwhile, however, the cost estimate of Ganga Action Plan Phase-I has been revised from the originally approved level to Rs. 468 crore. An expenditure of Rs. 379.7 crore has been incurred as on date. The remaining schemes are delayed due to reasons such as litigation problems in acquisition of land and contractual obligations. It may be recalled that a beginning was made under Ganga Action Plan Phase-I by taking up 25 Class I towns accounting for 1340 MLD of sewage out of a total load of 1485 MLD. A target of intercepting, diverting and treating 873 MLD was set for GAP-I.

8.73 While in physical and financial terms the river cleaning works have proceeded by and large on the lines envisaged in the Eighth Five Year Plan document, in qualitative terms the results are not of unequivocal nature. It was envisaged that Ganga Action Plan Phase I on completion would result in outside bathing quality of water in the river. As can be seen from the following table in terms of biochemical oxygen demand and dissolved oxygen the results have been fairly satisfactory except at Kanpur and Allahabad.

8.74 Two important achievements under Ganga Action Plan are worth reporting in the mid-term appraisal. First, at the instance of the Planning Commission the university system was involved in conducting evaluation of GAP I. The evaluation reports suggested careful site selection for the schemes based on socio-economic surveys, adoption of energy intensive anaerobic treatment technologies, uninterrupted power supply for electric crematoria and proper maintenance of the same, delinking of sewage drains and storm water, popularisation of sludge cake as manure, detailed evalu-

SUMMER AVERAGE VALUES FOR WATER QUALITY AT IMPORTANT STATIONS

STATIONS	DISSOLVED OXYGEN (mg/l)		BIOCHEMICAL OXYGEN DEMAND (mg/l)	
	1986	1994	1986	1994
Rishikesh	8.1	9.64	1.67	2.03
Hardwar D/S	8.1	8.82	1.80	2.08
Kanpur U/S	7.2	6.98	7.17	4.99
Kanpur D/S	6.7	4.6	8.57	8.52
Allahabad U/S	6.4	8.2	11.40	2.27
Allahabad D/S	6.6	7.37	15.50	3.57
Varanasi U/S	5.6	7.2	10.13	1.83
Varanasi D/S	5.9	6.8	10.60	2.87
Patna U/S	8.4	7.04	1.95	1.6
Patna D/S	8.1	7.18	2.20	1.55
Uluberia	NA	6.77	NA	3.18
	DO should be 5 mg/1 or more		BOD should be less than 3 mg/1	

ation of potential gas yielding capacity of STPs, as well as association of private organisations and mass awareness. These suggestions are being studied by the Ministry of Environment & Forests with a view to incorporating them in the new river cleaning programmes.

8.75 Second, the possibility of integrated and holistic evaluation within the framework of benefit cost analysis is being explored by associating a number of expert agencies such as ITRC, NEERI, AIIPH, IIM Ahmedabad, etc. It is important to realise that in environmental field economic rationale has so far been missing. Targets have either been in qualitative terms or in such unrealistic quantitative terms that they are not commensurate with the costs.

8.76 Realising the need to clean up highly polluted stretches in the major rivers of the country it was decided to take up selected rivers in the states for pollution control under a National River Action Plan which has already been approved for being launched as a Centrally Sponsored Scheme with a 50% (Central) and 50 % (State) funding pattern. Projectisation of the National River Action Plan is currently on and it is hoped that concrete projects would be initiated shortly. Phase II of Ganga Action Plan has also, in the meanwhile been taken up as a CSS in the 50% : 50% pattern. Under this, in the first instance, Yamuna, Gomati and Damodar are beeing taken up. EFC shemes for Yamuna and Gomati have already been approved. YamunaAction Plan has, in particular, attracted substantial external funds through the Japanese OECF. At present EFC memo covering the remaining Class I towns as also Class II towns on river Ganga is under consideration.

8.77 Though to a great extent GAP Phase -I could improve the the water quality of River Ganga, it is observed that improvement in the water quality in terms of coliforms , heavy metals and pesticides needs improvement. Therefore, future action in river cleaning would have to take into account adoption of suitable technologies and investments to control river pollution in an integrated way. The water quality data provided by different agencies also often varies. It calls for more scientific and collaborative efforts for monitoring the quality of river waters.

Environment and Ecology

8.78 The process of evolving the legislative and institutional framework is a continuing one. By and large, all major States and Union Territories have set up seperate Pollution Control Boards as well as Departments for Forestry and Environment. With domestic and International Assistance such as the one being received under the World Bank Industrial Pollution Control Project (US $ 155 million) the State Pollution Control Boards are being equipped with necessary facilities in order to strenghten their capabilities. A vast network of monitoring stations under the National Ambient Air Quality Monitoring Network, Global Environment Monitoring System, MINARS, has been installed with a view to continuously monitor the quality of air and water. A number of carrying capacity studies have been initiated and are likely to be completed shortly. These are for the following areas:

i) Doon Valley;

ii) National Capital Region; and

iii) Damodar

Some more areas are to be taken up.

8.79 Dissemination of environment data in an efficient manner on a widest possible scale amongst researchers and the public at large can go a long way in solving environmental problems. Agencies involved in this exercise should build this component in their environment awareness programme. An integrated survielance system for all pollutants and toxic substances would need to be created.

8.80 Chairman, Planning Commission (Prime Minister), had expressed a desire during the first meeting of the reconstituted Planning Commission that the apparent confrontation between environment and development should be reconciled by the Planning Commission. In compliance with this desire an Expert Group was set up under Member (Science,Technology and Environment), Planning Commission which consisted of chief executives from both the public and the private sectors as also eminent experts from the related areas. The report of the Group has been submitted. The report stressed the need to streamline procedures for environmental clearance which are transparent and uniform. It was also suggested to set up a time-frame for giving clearances. The report suggested finalisation of standards in terms of the safeguards to be built into the formulation of project. The need to create an environment awareness and to internalize this concept in project formulation and in the construction and operational phases were also stressed in the report.

8.81 A very far reaching notification by the Ministry of Environment & Forests gazetted in 1994 makes it obligatory for almost all developmental activities, small and large, to conduct an environmental impact assessment study which has to be evaluated and assessed by an impact assessment agency (Ministry of Environment & Forests) who may consult a Committee of Experts, if deemed necessary. The assessment shall be completed within a period of 90 days and the decision on the approval conveyed within 30 days after completion of public hearing, wherever required. As per the Notification no developmental activity can be taken up unless the conditions stipulated under the respective environmental and forestry clearance have been complied with. Having acheived substantial progress in terms of the software and the hardware the emphasis now on would have to be on enforcement and performance evaluation of assets created. Monitoring mechanism will, therefore, need to be reoriented in the case of major projects and programmes to achieve this objective.

8.82 Given great emphasis on conservation of Biodiversity it is essential to draw up time bound inventorisation programmes of the flora and fauna of all the regions of our country. The Botanical and Zoological Surveys should redefine their roles to inventorise the Biodiversity and also attempt to study theirreproductive biology in-situ. Foresters also should view the reserves and sactuaries not merely as repositories of a selected number of timber yielding trees and a few large mammals but reorient their concepts to conserve the rare and endangered species including micro-organisms.

8.83 Even though various agencies attempt to create data on environment, adequate data bases for various regions are still lacking. The present system of environment assessment and preparation of environment management plan made mandatory for clearance of projects necessitates availability of updated data base for the Industries to prepare Environmetal management plans. To have a more positive decision making process vis.a.vis giving clearances to development projects it would be desirable to associate experts from industries in the Environmental Appraisal Committees.

8.84 Inadequate data on environment at the state level makes it difficult to judge the problems faced and to allocate sufficient resources. The states should also establish Natural Resource Management Groups at district level to closely monitor the state of environment. With the collation of adequate data they could bring out status reports which are frequently updated.

8.85 The results of the Fourth Cycle of Forest Survey (1993) have become available recently. A number of points emerge from the analysis of results :

Table 1

(in sq.km.)

Sl. no.	Category	1991 assessment	1993 assessment	Difference
1.	Dense forest (Crown density 40% & over)	385,008	385,576	+ 568
2.	Open forest (Crown density 10% to less than 40%)	249,930	250,275	+ 345
3.	Mangroves	4,244	4,256	+ 12
	Total	639,182	640,107	+ 925

Table 2

(In sq.km.)

III Cycle	Total Forest cover IV cycle	Overall increase	Overall forest cover in uninterpreted area of III cycle	increase dueto Interpretational corrections	Net increase
639,182	640,107	925	700	203	22

8.85.1 First, whereas the assessment of forest cover in first three cycles (1987, 1989 and 1991) was based completely on visual interpretation of the satellite imagery, the fourth cycle (1993) has been analysed with the help of computer. As a result it has become possible to bring under systematic interpretation substantial area left uninterpreted during the third cycle. Use of advanced science and technology in this important area is a positive sign, and is most welcome as it makes for a precise and accurate analysis.

8.85.2 The present 1993 assessment (IV cycle) gives the forest cover of the country at 6,40,107 sq.km. It is mentioned that in the third assessment a total of 19,093 sq.km. was uninterpreted but in the present assessment no area has remained uninterpreted. The 1993 assessment of the forest cover includes the actual forest cover to the extent of 700 sq km. in the uninterpreted area also. Besides, there has been interpretational correction to the extent of 203 sq.km. Thus while comparing the forest cover figures of IV and III assessment, it is revealed that though there has been an overall increase of 925 sq.km. of forest cover in the IV assessment the real increase is only 22 sq.km. The comparative situation is given Table 1&2.

8.86 State-wise details of forest cover are at Annex. 8.5. While analysing the State-wise changes in the forest cover, it is revealed that owing to the peculiar situation of shifting cul-

Table 3

(in sq.km)

Sl. No.	Category	1991 assess-ment	1993 assess-ment	Changes in 1993 assess-ment
A.	North Eastern Region			
1.	Dense Forst	88,633	88,664	+ 31
2.	Open Forest	77,144	76,478	-666
	Total	165,777	165,142	-635
B.	Rest of the country			
1.	Dense Forest	296,375	296,912	+ 537
2.	Open forest	172,786	173,797	+1011
3.	Mangrove	4,244	4,256	+12
	Total	473,405	474,965	+1560
	Grand total	639,182	640,107	+ 925

tivation, the country can be broadly classified into two regions namely the North-Eastern region and the rest of the country. This broad division gives figures as shown in Table 3.

8.87 The above analysis reveals that whereas there has been a decrease of 635 Sq. Km. of forest cover in the North- Eastern region, there has been an overall increase of 1560 sq.km. of forest cover in the rest of the country, thus resulting in a gross increase of 925 sq. km. in the forest cover in the IV cycle. Though the overall increase may appear to an achievement, if we look at the qualitative forest cover loss, then we find that the dense forest in almost all the major states have gone down. Thus, it seems we have achieved a partial success in the protection of the natural environment.

8.88 The Wildlife scenario in the country is not very encouraging. According to the All India Tiger census 1993, the tiger population has gone down in number. There has been a loss of 553 tigers in between two censuses being carried out in 1989 and 1993. This area needs an in-depth discussion. In spite of provisions of the Wildlife Act (amended) being very stringent and tough in content, poaching of wildlife still continues. There has been a change in the demand pattern, from tigers' skins to their bones, and full analysis of this is required so as to prevent poaching at the inital stages. Wildlife Conservation has assumed new dimensions under Eco-Development Scheme in and around national parks and sanctuaries. A project for World Bank assistance with regard to Eco-Development scheme is in the pipeline and hopefully the project will come through either this year or in the beginning of the next year.

National Afforestation & Eco-Development Board

8.89 A newly created National Afforestation and Eco- development Board (NAEB) for promoting afforestation, tree planting, ecological restoration and eco-development activities has been formed. This signifies the importance which India gives to forests as the NAEB pays special attention to regeneration of degraded forests.

8.90 The achievements of the Board under Afforestation / tree planting under point No. 16 of the Twenty Point Programme are at Table 4.

8.91 The NAEB serves as a vital interface between externalagencies and the State Governments. Tree planting is the main focus, particularly through the following two schemes of NAEB : (i) Area Oriented Fuelwood and Fodder Scheme (ii) Integrated Afforestation and Eco-Development Project. Efforts are being made to ensure that weaker sections and women emerge as the major beneficiaries of the activities of NAEB. Till 1994-95, 237781 ha. degraded forests has been taken up for plantation under Area Oriented Fuelwood and Fodder Project of the NAEB. The monitoring and evaluation of the plantations done so far requires to be taken up so as to assess the survival of the seedlings planted.

Table 4

Seedlings in lakh

Area in hectares

	Target		Achievement	
	Seedlings Distribution (for planting on private lands)	Area (Public lands includ-ing forest lands)	Seedlings Distribution (for planting on private lands)	Area (Public lands including forest lands)
1991-92	15000.00	1050000.00	14194.81	1015714.10
1992-93	14500.00	1064000.00	12450.87	1062225.52
1993-94	13509.00	1165300.00	10600.50	908304.41

* Tentative

Wasteland Development

8.92 In 1992 Government reviewed the situation and felt the need to focus sharply on the development of non-forest wastelands. It was therefore, decided in July, 1992 to create the Department of Wastelands Development (DOWD). The National Wastelands Development Board (NWDB) has now been placed under the newly created Department of Wastelands in the Ministry of Rural Development. The reconstituted NWDB will be mainly responsible for the development of wastelands in non-forest areas aimed at checking land degradation, putting such wastelands in the country to sustainable use and increasing biomass availability specially fuelwood and fodder. The Board is to adopt a mission approach for enlisting peoples' participation, harnessing science & technology for planning and implementation of wastelands development. A number of estimates are available on the extent of wasteland in the country but none of these are perhaps accurate, as these are not based on any comprehensive field survey.

Objectives of the NWDB

8.93.1 From the mandate of the reconstituted NWDB, it flows that wastelands have to be brought under sustainable use in order to meet the felt needs of the people in the rural areas specially for fodder and fuelwood. Programmes initiated during the Eighth Plan Period must, therefore, be designed to accomplish the following objectives :

a) Generation of employment - Many studies have shown that afforestation and wastelands development offers a very appropriate cost effective opportunity for employment generation.

b) Generation of income - Almost 80% of the wasteland in the non-forest areas is privately owned. Therefore, the rehabilitation of this category of land would form the core of any wastelands development programme outside the forest land. By integrating trees in agriculture as in agro-forestry, in which both ecological and economic requirements are met, is possible to increase crop yields, generate income and create employment besides improving the productivity of land.

c) Biomass production - The fuel and fodder requirement would be met by planting on the available private lands in rural areas. This will result in enhanced biomass production besides fulfilling the gap of demand and supply ratio of fuel and fodder.

(d) Tree Cover - To fulfil the mandate of National Forest Policy 1988 to have 1/3rd of the total of the land mass in the country under tree cover the establishment of tree cover outside the notified forest area is a necessity. This will ultimately increase the tree cover in the country. The strategy of the Department of Wastelands Development has the following four aspects : (i) Identify / develop cost effective models for various agro-climatic zones involving minimum external input. (ii) Establish an interface between financial institutions and the corporate sector. (iii) Development of village commons. (iv) Communication and extension through people's involvement.

8.93.2 The problem of land ceiling is being addressed by some State Governments and the laws relating to leasing out lands to corporate sector for sufficiently long period of time to make the scheme attractive from the point of view of industry. New initiatives such as Jojoba, cashew, tea and rubber plantation are also being taken up on a trial basis by the Department of Wastelands Development. The NWDB operates the following six schemes : (i) Integrated Wasteland Development Project; (ii) Technology Development and Extension Scheme; (iii) Support to NGOs for Wasteland Development; (iv) Communication; (v) Investment Promotion Scheme; and (vi) Wasteland Development Taskforce. An exercise for harmonisation of data-base on wastelands generated by different organisations has been initiated at the instances of the Planning Commission. Once a reconciliation of the database has been achieved and becomes available it would be possible to initiate specific projects to achieve the ultimate objective of development of wastelands.

8.94 The activities of NAEB and NWDB being complementary there is a need for closer interaction between the Boards at the central level and a need to create a proper coordinating mechanism at the State level involving the various departments undertaking their activities.

8.95 Afforestation works are also undertaken through the Employment Generation Schemes. The Ministry of Environment & Forests has to persuade the states to dovetail these schemes with the major programmes undertaken by them and to establish a closer working relation with the Forestry wing in the Ministry, the NAEB and the NWDB.

Island Development Authority

8.96 The Island Development Authority (IDA) and its Standing Committee have been revived. Two meetings of IDA and three meetings of the Standing Committee have been held since the launching of the Eighth Five Year Plan. It has been decided that only major policy matters involving inter-ministerial co-ordination only need to be referred to these bodies.

Other Aspects

8.97 In realisation of the ecological fragility of the Himalayan environment another Expert Group was set up under Member (Science & Technology and Environment) to formulate a National Policy for the Integrated Development of the Himalayas. This Group has also submitted its report. The recommendations which touch on various facets of development are being presently examined.

Financial Requirements

8.98 The Eighth Five Year Plan was set under severe resource constraints. Even though the approved Plan outlay for the Ministry of Environment and Forests at Rs. 1,200 crore may have appeared small in relation to its expectations as an ambitious Plan with an outlay of over Rs. 4,700 crore had been originally posed, it is significant that the approved Plan outlay was nevertheless a reasonably big jump over the level of Seventh Plan Expenditure (Rs. 679.30 crore). (The approved outlay was Rs.797 crore).

8.99 The Annual Plan outlays for the Ministry of Environment & Forests are shown at Annex. 8.6 along with the progress of expenditure. Similarly details for States and Union Territories are set out at Annex. 8.7 and 8.8. While Ministry of Environment and Forests at the Centre serves as a nodal ministry in this area, at the same time a number of policies and programmes have been initiated through several other ministries some of which have a predominantly environmental focus. Substantial funds flow through these other agencies into the environment sector.

8.100 Out of the 8th Plan allocation of Rs.1,200 crore for the Ministry of Environment & Forests, an amount of Rs.938.19 crore have been spent during the first three years at current price level (1992-93 Rs.274.67 crore; 93-94 Rs.303.52 crore; 94-95 Rs.360.00 crore). The outlay for the Ministry of Environment & Forests for 1995-96 is Rs. 370.50 crore.

8.101 The reconstituted NWDB under the Department of Wastelands Development had an outlay of Rs. 26.40 crore transferred from the Ministry of Environment & Forests. The allocation for 1993-94 and 1994-95 were Rs. 50 crore and Rs.60 crore respectively.

8.102 The Plan outlays for Ecology and Environment in the State Sector for the first three years of the Plan were Rs.28.22 crore, Rs.29.61 crore and Rs.33.73 crore, respectively. For Forestry and Wildlife the State Sector outlay were Rs.579.35crore, Rs.676.73 crore and Rs.763.59 crore, respectively.

Annex 8.1

MID-TERM APPRAISAL EIGHTH FIVE YEAR PLAN (1992-97)

PROGRESS OF EXPENDITURE

SCIENCE & TECHNOLOGY SECTOR

(Rs. in Crore at current prices)

S.No.	Departments	Eighth Plan 1992-97 Outlay (at 1991-92 prices)	1992-93 Actuals	1993-94 Actuals	1994-95 A.E.	1992-95 A.E.	1995-97 Balance
1.	Deptt. of Atomic Energy (R & D)	600.00	84.09	100.21	149.13	333.43	266.57
2.	Deptt. of Ocean Dev.(Incl. I&M)	130.00	31.18	35.84	48.00	115.02	14.98
3.	Deptt. of S & T (Incl.Mateorology)	640.00	130.17	179.81	225.00	534.98	105.02
4.	Deptt. of Bio-Tech. (Incl. I&M)	265.00	73.17	78.00	86.87	238.04	26.96
5.	Scientific & Ind. Research (Incl.I&M)	655.00	118.89	140.15	164.79	423.83	231.17
6.	Deptt. of Space	1804.00	360.03	546.27	600.00	1506.30	297.70
7.	Forensic Science & Police Wireless	25.00	0.00	1.39	4.00	5.39	19.61
	Total (S & T)	4119.00	797.53	1081.67	1277.79	3156.99	962.01

A.E. : Anticipated Expenditure.

Note: The figures in respect of the balance for the period 1995-97 are in nominal terms.

Annex 8.2

MID-TERM APPRAISAL EIGHTH FIVE YEAR PLAN (1992-97)
PROGRESS OF EXPENDITURE STATES/UTs.
SCIENCE & TECHNOLOGY SECTOR

(Rs. in Lakh at current prices)

S.No.	States/UTs	1992-97 Outlay (at 1991-92 prices) *	1992-93 Actual	1993-94 RE	1994-95 BE	1992-95 AE	1995-97 Balance
1.	Andhra Pradesh	200.00	13.00	15.00	15.00	43.00	157.00
2.	Arunachal Pradesh	47.00	9.00	12.00	14.00	35.00	12.00
3.	Assam	462.00	83.00	125.00	145.00	353.00	109.00
4.	Bihar	782.00	119.00	15.00	139.00	273.00	509.00
5.	Goa	300.00	21.00	50.00	60.00	131.00	169.00
6.	Gujarat	550.00	39.00	40.00	40.00	119.00	431.00
7.	Haryana	662.00	36.00	84.00	93.00	213.00	449.00
8.	Himachal Pradesh	275.00	33.00	50.00	40.00	123.00	152.00
9.	Jammu & Kashmir	190.00	25.00	31.00	37.00	93.00	97.00
10.	Karnataka	800.00	151.00	400.00	252.00	803.00	-3.00
11.	Kerala	2193.00	478.00	371.00	770.00	1619.00	574.00
12.	Madhya Pradesh	641.00	101.00	190.00	270.00	561.00	80.00
13.	Maharashtra	568.00	47.00	72.00	90.00	209.00	359.00
14.	Manipur	400.00	66.00	64.00	82.00	212.00	188.00
15.	Meghalaya	193.00	41.00	60.00	110.00	211.00	-18.00
16.	Mizoram	195.00	33.00	35.00	38.00	106.00	89.00
17.	Nagaland	100.00	9.00	22.00	27.00	58.00	42.00
18.	Orissa	4556.00	139.00	189.00	364.00	692.00	3864.00
19.	Punjab	750.00	37.00	59.00	52.00	148.00	602.00
20.	Rajasthan	700.00	96.00	117.00	150.00	363.00	337.00
21.	Sikkim	250.00	43.00	32.00	34.00	109.00	141.00
22.	Tamil Nadu	1000.00	121.00	125.00	234.00	480.00	520.00
23.	Tripura	225.00	37.00	48.00	48.00	133.00	92.00
24.	Uttar Pradesh	1000.00	166.00	427.00	580.00	1173.00	-173.00
25.	West Bengal	1833.00	58.00	68.00	154.00	280.00	1553.00
	Total State	18872.00	2001.00	2701.00	3838.00	8540.00	10332.00
	UNION TERRITORIES						
1.	A & N Islands	135.00	36.24	24.00	23.75	83.99	51.01
2.	Chandigarh	15.00	1.99	4.00	10.00	15.99	-0.99
3.	Dadar & Nagar Hav.	38.00	0.00	5.50	5.50	11.00	27.00
4.	Delhi	30.00	1.32	2.50	7.00	10.82	19.18
5.	Daman & Diu	40.00	2.01	4.00	16.50	22.51	17.49
6.	Lakshadweep	127.61	17.37	18.11	21.86	57.34	70.27
7.	Pondicherry	13.00	0.50	7.00	15.00	22.50	-9.50
	Total	398.61	59.43	65.11	99.61	224.15	174.46
	Grand Total	19270.61	2060.43	2766.11	3937.61	8764.15	10506.46

* Includes Environment A.E. : Anticipated Expenditure.

Note: The figures in respect of the balance for the period 1995-97 are in nominal terms.

Annex 8.3

STATUS OF SCHEMES

1. Ganga Action Plan :

GAP Phase-I : 100% CSS

Physical Progress

Scheme	U.P.	Bihar	West Bengal	Total
1. Sewage Interception & Diversion	40 (40)	17 (17)	23 (31)	80 (88)
2. Sewage Treatment Plants (STP)	9 (13)	3 (7)	10 (15)	22 (35)
3. Low Cost Sanitation (LCS)	14 (14)	7 (7)	22 (17)	43 (43)
4. Electric Crematoria	3 (3)	8 (8)	15 (17)	26 (28)
5. River Front Facilities (RFF)	8 (8)	3 (3)	24 (24)	35 (35)
6. Other Schemes	28	3	1	32
	102 (106)	41 (45)	95 (110)	238 (261)

Total Scheme Completed : 238

Annex 8.4

Likely completion during balance period of 8th Plan schemes of GAP-I

Scheme	U.P.	Bihar	West Bengal	Total
(a) 1994-95 (12/94-3/95)	1	-	3	4
(b) 1995-96	3	4	12	19
Total (3)	4	4	15	23

Annex 8.5

Statewise Comparative Situation of Forest Cover

(Sq.km)

States/UTs	1991 Asessment	1993 Assessment	Change in 1993
(1)	(2)	(3)	(4)
1. Andhra Pradesh	47,290	47,256	-34
2. Arunachal Pradesh	68,757	68,661	-96
3. Assam	24,751	24,508	-243
4. Bihar	26,668	26,587	-81
5. Goa (including Daman & Diu)	1,225	1,250	-5
7. Gujarat	11,907	12,044	+137
8. Haryana	513	513	-
9. Himachal Pradesh	11,780	12,502	+722
10. Jammu & Kashmir	20,064	20,443	+379
11. Karnataka	32,199	32,343	+144
12. Kerala	10,292	10,336	+44
13. Madhya Pradesh	135,785	135,396	-389
14. Maharashtra	44,044	43,859	-185
15. Manipur	17,685	17,621	-64
16. Meghalaya	15,875	15,769	-106
17. Mizoram	18,853	18,697	-156
18. Nagaland	14,321	14,348	+27
19. Orissa	47,205	47,145	-60
20. Punjab	1,343	1,343	-
21. Rajasthan	12,835	13,099	+264
22. Sikkim	3,033	3,119	+86
23. Tamilnadu	17,713	17,726	+13
24. Tripura	5,535	5,538	+3
25. Uttar Pradesh	33,609	33,961	+352
26. West Bengal	8,015	8,186	+171
27. A & N Islands	7,622	7,624	+2
28. Chandigarh	5	5	-
29. Dadra and Nagar Haveli	206	206	-
30. Delhi	22	22	-
31. Lakshadweep	-	-	-
32. Pondicherry	-	-	-
Total:	639,182	640,107	+925

Annex 8.6

Ministry of Environment & Forests

Plan Outlays Under Major Heads

(Rs.in Crore)

	Eighth Plan Outlay	1992-93 Actuals	1993-94 BE	1993-94 RE	1994-95 Outlay	1995-96 Outlay
	(1)	(2)	(3)	(4)	(5)	(6)
Environment & Ecology	325	41.09	64.33	83.33	72.74	80.00
Ganga Action Plan	350	54.19	65.00	65.00	78.00	79.00
Forests & Wildlife	250	59.35	83.25	83.25	98.95	107.50
NWDB/NAEB	275	112.48	98.00 *	98.00	103.00 @	104.00
Civil Works		5.57	7.22	7.22	7.31	+++
Total	1200	272.68	317.80	336.80	360.00	370.50

* Excluding Rs. 50 crore for NWDB under the Department of Wastelands Development Board (Ministry of Rural Development)

@ Excluding Rs. 60 crore for NWDB under the Department of Wastelands Development Board (Ministry of Rural Development)

+++ Included in the Major Heads

Annex 8.7

Plan Outlays For States/UTs - Environment & Ecology

(Rs. Lakshs)

States/UTs	VIII Plan	1992-93	1993-94	1994-95
Andhra Pradesh	0.00	77.00	35.00	45.00
Arunachal Pradesh	24.00	5.00	6.00	7.00
Assam	439.00	100.00	100.00	80.00
Bihar	669.00	113.00	119.00	119.00
Goa	100.00	20.00	20.00	20.00
Gujarat	950.00	180.00	180.00	65.00
Haryana	600.00	84.00	102.00	110.00
Himachal Pradesh	185.00	37.00	38.00	41.00
J & K	880.00	179.00	194.00	210.00
Karnataka	300.00	60.00	100.00	307.00
Kerala	730.00	145.00	170.00	180.00
Madhya Pradesh	2476.00	848.00	748.00	700.00
Maharashtra	243.00	58.00	60.00	45.00
Manipur	100.00	25.00	25.00	22.00
Meghalaya	213.00	50.00	50.00	50.00
Mizoram	25.00	5.00	5.00	5.00
Nagaland	40.00	6.00	6.00	5.00
Orissa	666.00	104.00	104.00	324.00
Punjab	435.00	120.00	127.00	28.00
Rajasthan	1296.00	200.00	257.00	397.00
Sikkim	150.00	30.00	30.00	34.00
Tamilnadu	2000.00	23.00	50.00	220.00
Tripura	125.00	25.00	27.00	21.00
Uttar Pradesh	1500.00	172.00	225.00	165.00
West Bengal	754.00	110.00	70.00	41.00
A & N Islands	25.00	5.00	5.00	5.00
Chandigarh	142.00	7.75	25.00	27.20
Dadra and Nagar Havel	10.00	0.00	0.00	0.00
Daman & Diu	5.00	1.00	1.00	0.00
Delhi	220.00	30.00	60.00	77.00
Lakshadweep	0.00	0.00	10.09	8.14
Pondicherry	9.00	2.00	12.00	15.00
Total:	5311.00	2821.75	2961.09	3373.34

Annex 8.8

Plan Outlay For States/UTs
Forests and Wildlife

(Rs. Lakh)

States/UTs	VIII Plan Outlay	1992-93 Exp	1993-94 BE	1993-94 RE	1994-95
Andhra Pradesh	6842.00	927.00	750.00	705.00	1600.00
Arunachal Pradesh	4710.00	944.00	1100.00	990.00	1200.00
Assam	11260.00	1727.00	2584.00	1887.00	2584.00
Bihar	18391.00	1730.00	3264.00	1177.00	3264.00
Goa	1030.00	194.00	217.00	208.00	217.00
Gujarat	32000.00	5770.00	5300.00	4875.00	5317.00
Haryana	11770.00	2980.00	3449.00	2930.00	3090.00
Himachal Pradesh	21000.00	4090.00	4550.00	3500.00	4169.00
J & K	9880.00	1472.00	1919.00	1648.00	1896.00
Karnataka	20676.00	3471.00	5420.00	4843.00	5668.00
Kerala	9075.00	3274.00	1750.00	1804.00	2350.00
Madhya Pradesh	18782.00	3628.00	5039.00	4748.00	5090.00
Maharashtra	50221.00	2812.00	7714.00	6926.00	11110.00
Manipur	2300.00	495.00	560.00	374.00	490.00
Meghalaya	5978.00	1213.00	1200.00	1150.00	1100.00
Mizoram	3105.00	614.00	650.00	598.00	675.00
Nagaland	2850.00	124.00	500.00	360.00	471.00
Orissa	10535.00		4338.00	3496.00	4801.00
Punjab	5593.00	725.00	719.00	313.00	733.00
Rajasthan	32655.00	3846.00	3500.00	4500.00	5900.00
Sikkim	1750.00	316.00	350.00	315.00	315.00
Tamilnadu	19500.00	4559.00	4340.00	4340.00	4587.00
Tripura	2600.00	530.00	610.00	415.00	360.00
Uttar Pradesh	36454.00	5966.00	4920.00	3836.00	4085.00
West Bengal	13559.00	1570.00	1575.00	2090.00	3547.00
A & N Islands	2500.00	392.03	449.05	449.00	533.20
Chandigarh	718.00	201.95	225.00	225.00	102.13
Dadra and Nagar Haveli	790.00	198.62	200.00	200.00	250.00
Daman & Diu	105.00	26.91	20.00	20.00	33.00
Delhi	715.00	220.00	278.00	278.51	509.00
Lakshadweep	85.00	16.00	16.50	16.50	17.00
Pondicherry	258.00	58.17	73.00	72.00	96.00
Total:	355687.00	57935.31	67672.55	59797.01	76359.41

CHAPTER 9

STATE PLANS : TRENDS AND REFORMS

Balanced development

9.1 The State Sector of the Five Year Plans consists of the Plans of the States and the Union Territories, Special Area Programmes like Hill Area Development Programme (HADP), Western Ghat Development Programme (WGDP), North Eastern Council (NEC) and Border Area Development Programme (BADP) which are hundred per cent financed by Central Government and the Tribal Sub-Plans (TSP). From the beginning of planning, balanced development of all the regions of the country has been a long-term objective. Formulation of the detailed Plans and schemes of the States and development of backward areas within them is the primary responsibility of the concerned State Governments.

9.2 The Planning Commission helps the States in their efforts through transfer of resources for the operational Annual Plans. Resources so transferred for the Central support which consists of Normal Central Assistance, Open Market Borrowing, Negotiated Loans from financial institutions and Additional Central Assistance for externally aided projects. In the rare cases of States who have faced severe financial difficulties on account of disturbed conditions, such as Punjab and Jammu & Kashmir, Special Plan Loans were also envisaged. In addition to Central support, the State Governments are expected to contribute their own resources (State's Own Resources - SOR).

9.3 Since inception, the procedure for formulating the Annual Plans of the States and Union Territories had consisted first of requesting them to send detailed draft proposals of the following year to the Planning Commission. Parallelly, a joint exercise to estimate resources were being undertaken in consultation with the Finance Departments of the States. Detailed official level discussions of the proposals were then being organised between the Planning Commission, Ministries of Government of India and the State/U.T. Government. The recommendation of the official level discussions were considered thereafter in meetings of the Deputy Chairman, Planning Commission with Chief Ministers of the States and the sizes of Annual Plans arrived at. Finally, the inter-sectoral outlays were finalised through readjustment of the official level proposals within overall Plan sizes so determined. The procedure suffered from the infirmity that the proposals of the State Governments and official discussions took place without any formal cognizance of the availability of resources. More often than not, the recommendations were essentially formulated in the light of needs and often in excess of resources available. This caused avoidable difficulty not only in the meetings of Deputy Chairman, Planning Commission with the Chief Ministers and but also in subsequent allocation of the finally approved Plan size amongst different sectors/sub-sectors.

New procedure

9.4 After the Eighth Plan started, the matter was given some thought. It was felt necessary that the procedure be changed and a new one could be placed in position. This has been done commencing with the formulation of the Annual Plan 1993-94. In the new procedure, the first step is joint assessment of resources. This is followed by meetings between the Deputy Chairman, Planning Commission and Chief Ministers of the States in which the sizes of the Annual Plans are decided. Then only are the States requested to formulate and send to the Planning Commission detailed proposals within the sizes determined. Thereafter, official level discussions are held as usual to finalise the sector/sub sector-wise outlays. The new process has the merit of allowing ab initio preparation of a detailed Plan which can be related to resources in sight and the total agreed outlay for the Annual Plan.

Earmarking of outlays

9.5 Along with review of procedure of formulation of Annual Plan, an exercise to review the scheme of earmarking of outlays which has been practised since 1969, was undertaken. The system of loans and grants (of Central Assistance) tied to specific schemes and projects was replaced by a system of block loans and grants introduced in 1969. This was accompanied by putting in place a scheme of earmarking in order to ensure adherance of States to important Plan priorities and projects. The intention was to earmark corresponding outlays within the Annual Plan and subsequently adjust the Central Assistance if there was a shortfall in the actual expenditure with reference to the outlays so earmarked. A reduction in Central Assistance could be effected on a pro-rata basis if shortfall in the earmarked outlays took place. When the scheme of earmarking was started, outlays for Agriculture & Allied Services, important major Irrigation Schemes, externally aided projects and specified projects for generation and transmission of power were to be earmarked. Subsequently, Minimum Needs Programme was added to the list of earmarked schemes.

9.6 The scheme of earmarking has been continued in successive Five Year Plan periods and also in the Eighth Five Year Plan. This was reviewed extensively in 1992-93. As a result of periodic additions of areas to be earmarked over the years, the extent of earmarking had significantly increased, amounting to as much as 75-80% of the outlays of the States in some cases. Since the States had no freedom to divert the earmarked outlays on their own, an element of rigidity had crept in. It was decided by the Commission to allow greater flexibility to the States by reducing the extent of earmarking and making the areas to be earmarked highly selective and State specific to some extent. Presently, the extent of earmarking is being restricted to 50% or less of the total approved outlays of the States. A statement on Statewise approved / revised approved outlays including earmarked outlays as well as expenditure for 1992-93, 1993-94 and 1994-95 is provided at Annex - 9.1.

Central Support

9.7 In the Central support for Plans of the States, the Central Assistance - both Normal and Additional, is from the budget. The National Development Council (NDC) has laid down the manner in which the Central Assistance is to be distributed. According to the latest formulation, which was approved by NDC in 1991, after taking away the requirement for Special Area Programmes, TSP and externally aid projects, 30% of the Central Assistance remaining is to be given to the Special Category States and balance 70% distributed among the non Special Category States on the basis of formula which includes criteria like population, per capita income, performance in relation to targets and special problems.

9.8 The instruments available now with the Commission for removing regional and inter State disparities are (i) regulating the normal Central Assistance and (ii) Special Area Programmes formulated to target sensitive and backward areas. The Programmes which presently exist in the latter category, are designed for environmentally fragile hill areas (HADP), security sensitive border areas (BADP), targetting tribal people (TSP) and remote and underdeveloped States in the north east (NEC). It is in regulating the Central Assistance only that any general effort is being made in the State sector of the Plan to address the problem of inter-State disparity and to promote balanced regional development.

Disparities

9.9 Despite planning for more than four decades, the inter State disparities continue to exist. The statement at Annex - 9.2 shows the State-wise income data from 1980-81. Though the figures for some States for 1993-94 are not available, it is more than apparent that States like Bihar, Uttar Pradesh, Orissa, Madhya Pradesh have not only failed to make any significant improvement in their position but, perhaps, fallen behind even further after 1991-92. While these States may have been remiss in making effort to contribute their own resources for development, it is a matter of concern that the objective of balanced development has not been achieved.

9.10 In the present scenario where with economic liberalisation and dismantling of industrial licensing, investments tend to flow to those States having better infrastructure which may also be States relatively better placed in terms of per capita income (i.e. per capita Net State Domestic Product), there is a need for according a higher priority for infrastructure development with public funding, wherever undertaken, to be focussed in States with poor infrastructure. The States may also be relatively more economically backward.

9.11 Additional Central Assistance for externally aided projects is now passed on in full to the States by the Central Government. Over the last few years, these disbursements to the States have increased considerably and they now form a significant source of Plan funding. It is seen that disbursements of external aid are flowing increasingly to a few States with as much as 62.30 % going to four States during 1992- 95. By and large, the States which are able to implement externally aided projects faster and to draw the assistance, are also those States which are more developed and have the better infrastructure. A statement on Statewise disbursements for Externally Aided Projects during 1992-93, 1993-94 & 1994-95 (at current prices) is provided at Annex - 9.3.

9.12 No doubt the donors have considerable influence in choosing location of projects they assist. Since, however, posing of projects of the State Governments or even of the Central Government for that matter, to donors can be modulated, there is a need to keep in mind the requirement of balanced regional development in directing external aid to the projects implemented in different States.

Utilisation

9.13 During 1992-95, a total amount of Rs. 81973.68 crore have been spent against Rs. 181735.00 crore envisaged in Eighth Plan for States & UTs. The degree of utilisation works out to 45.11 % only against the prorata 60 % . Sectorwise analysis (Annex - 9.4) shows that in Communication & Rural Development sectors, 59.29% and 57.74% respectively, of the Eighth Plan outlay have been spent. The Social Services sector and Transport sector have utilised about 47.29% and 50.03% of their respective Eighth Plan outlays. Important sectors like Energy (42.77%), Agriculture & Allied activities (43.75 %), Industry & Minerals (43.88 %), Special Area Programmes (43.00 %), Irrigation & Flood Control (40.81 %) and Science Technology & Environment (37.06 %) have performed less than the average of 45.11 % in the first three years of Eighth Five Year Plan.

9.14 The expenditure pattern of the State sector shows that the priorities of the Eighth Plan, in terms of shares of different sectors, have generally been maintained during 1992-95. Whereas in case of sectors like Rural Development and Social Services, the percentages of the Plan expenditure to total expenditure during 1992-95 in real terms were 1.59 % and 1.19% higher than those envisaged in the Eighth Plan, the percentages of expenditure to total were lower for Irrigation & Flood Control and Energy Sectors by 1.62 % and 1.39 % respectively. Also 34.53 % of the total expenditure was made on infrastructure sectors including Energy, Transport and Communication , against the desired 35.03 per cent as envisaged in the Eighth Plan. The Social Services Sector, however, had a share of 25.71 per cent of the total expenditure during 1992-95, which is higher than the 24.52% envisaged in the Eighth Plan.

Shortfalls

9.15 The major concern relating to State sector of the Eighth Five Year Plan is the shortfall in expenditure in relation to the Plan Outlay. At Annex - 9.5 and Annex - 9.6 are two tables indicating the originally approved Annual Plan outlays and actual expenditures State and U.T. wise for the first three years at current prices and 1991-92 prices respectively. In 1992-93 only eight States out of 25 were able to reach or exceed the approved Annual Plan outlay for that year. For 1993-94 and 1994-95 the corresponding numbers are six and thirteen respectively. If the three years are taken together, only seven states have achieved or exceeded the approved Annual Plan outlays.

9.16 The shortfalls in Annual Plans 1993-94 and 1994-95 show that the revised procedure for formulation of annual Plans where the sizes are resource related, has to be made more effective and assessment of resource particularly, promises of States in this regard, made carefully.

9.17 The statement at Annex - 9.7 shows the performance of the States during 1992-95 in relation to the Eighth Plan Outlay. None of the States has spent more than 60 % of the Eighth Plan outlay. Only three States have spent nearly 60% of the Eighth Plan outlay. The average for all States is only 44.52%. Nine States are below this average and Bihar has managed to reach only 18.19% of the Eighth Plan outlay. A statement on sectorwise outlays for 1995-96 of the States and UTs is provided at Annex - 9.8.

Expert Committee on Plan Funding for UTs

9.18 Delhi and Pondicherry which are Union Terririoties (UTs) with legislature, should have their tax efforts and Balance from Current Revenues properly reflected in the financing of their respective Annual Plans. To explore this and also to find out the possibility of providing incentives to the Union Territories for efforts towards resource mobilisation and reduction in Non-Plan Revenue Expenditure, a committee was set up under the Chairmanship of Member, Planning Commission to examine and suggest the manner in which the funding of the Plans of Union Territories could be done. After extensive discussions with the Union Territories, the committee has recommended that the two UTs with Legislative Assembly should have the funding of their plans as close to financing pattern of plans of non-special category States. Accordingly, these UTs should be provided with share in Central Taxes, non-plan grants on a normative basis and also borrowing powers from agencies other than Central Government. For other UTs, without Legislative Assembly, the Committee has recommended that the present system of funding their plan with some marginal changes to provide incentives for resource mobilisation shall be continued.

Hill Area Development Programme

9.19 In order to supplement efforts of the States in mitigating problems caused by increasing pressure of population and the conflicting needs of development and ecological preservation, Hill Area Development Programme (with Western Ghat Development Programme - WGDP) was started in the Fifth Five Year Plan. The Programme has continued in the Eighth Five Year Plan. The Programme is operated in designated hill areas of the country which consist of :

a) two hill districts of Assam viz., North Kachar and Karbi Anglong

b) Eight districts of Uttar Pradesh viz., Dehradun, Pouri Garhwal, Tehri Garhwal, Chamoli, Uttar Kashi, Nainital, Almora and Pithoragarh.

c) A major part of district Darjeeling of West Bengal

d) Nilgiris district of Tamil Nadu and

e) 163 talukas of Western Ghats comprising 62 talukas in Maharashtra, 40 in Karnataka, 29 in Tamil Nadu, 29 in Kerala and three in Goa.

9.20 The Special Central Assistance which is given for hill areas is 90 % grant and 10 % loan. This is in addition to normal State Plan and is not meant to replace activities under the State's normal Plan. Hence, States receiving funds under HADP are expected to prepare sub plans for designated hill areas indicating flows from both normal State Plan and Special Central Assistance. This is to ensure that the schemes are properly dovetailed and integrated with State Plan schemes. The actual utilisation of Special Central Assistance under HADP and WGDP State wise in the first three years of the Eighth Five Year Plan is at Annex - 9.9.

Western Ghats Development Programme

9.21 After the Eighth Plan started, evaluation of the Western Ghats Development Programme in the different States has been taken up. This has been completed for Tamil Nadu. This evaluation brings out that the overall impact of the WGDP in Tamil Nadu was less than expected because of inadequate resource allocation, lack of coordination among the implementing agencies of the various sectoral schemes and lack of community participation or awareness about the Programme among the local people.

9.22 Field work of evaluation of WGDP in Maharashtra has been completed and the report expected shortly. Evaluation in Karnataka has been commissioned and is in progress. Other State Governments namely Goa and Kerala, are being persuaded to undertake similar evaluation studies in the near future.

9.23 Constituent States of WGDP have been urged to prepare perspective plans for their respective areas. Independent consultants have been engaged for this purpose. Perspective plans of Tamil Nadu and Maharashtra have since been prepared.

9.24 Perspective Plan for the period 1994-95 to 1998-99 prepared by Tata Consultancy Services for WGDP area of Tamil Nadu suggests a change in orientation of the WGDP from current " sectoral approach " for better integration of the Programme contents. The sectors which should receive major attention are Forestry, Soil Conservation and Horticulture. The Perspective Plan has pointed out that only 1 % of the total WGDP area of the State could be treated under soil conservation since inception of the WGDP in the State. Keeping in view the area to be treated during the next seven years, it has been estimated that optimally around Rs. 785 crore (at 1993-94 prices) would be required. This implies a fund requirement per year of around Rs. 100 crore as compared to current allocation of the order Rs. 7 crore.

9.25 The Perspective Plan for WGDP area of Maharashtra prepared by Kirloskar Consultant Limited for the period 1995-96 to 2009-10 has highlighted that the existing number of watershed delineated in Western Ghats area are 3671, but an additional 2497 watershed need to be covered during the period mentioned above for which outlay required would be Rs. 1477 crore (at 1993-94 prices).

Border Area Development Programme

9.26 BADP continues to be 100% centrally funded programme. The Eighth Plan contemplate that coverage of the Border Area Development Programme would be increased. Accordingly a review of the Programme had been made and with effect from the second year of the Plan i.e. 1993-94, the Programme has been extended to States which have international border with Bangladesh.

9.27 The Programme now covers the States of Jammu & Kashmir, Punjab, Gujarat, West Bengal, Assam, Meghalaya, Mizoram and Tripura. At the same time, the Programme has also bccn revamped. While its objective continues to be balanced development in remote inaccessible areas situated near the border for ensuring effective administration, its contents have been reoriented to give a sharper focus for tackling special problems which arise in areas contiguous to international border. With the setting up of two Committees particularly one at the State level, considerable flexibility has been given to the States to formulate and implement schemes to meet the Programme objective. Freedom in implementation has been allowed whereby the schemes can be executed by any of the following agencies : -

(a) State Governments

(b) Central Government and

(c) Non Governmental Organisations

9.28 One important project which continues to be funded under BADP is the Indira Gandhi Nahar Project in Rajasthan. This project is of considerable importance for security and benefits to the people on the western border. The allocations to the project out of the Programme are expected to help the State Government to complete it by 2007. The allocations for IGNP out of BADP have been as follows :

Year	Allocation (at Constant Prices) (Rs. Crore)
1992 - 1993	47.49
1993 - 1994	43.81
1994 - 1995	45.52
1995 - 1996	42.55

9.29 A detailed statement indicating expenditure under BADP in the first three years of the Plan State wise is at Annex - 9.10.

North Eastern Council

9.30 After enactment of the North Eastern Council Act, 1971 the North Eastern Council (NEC) was established in 1972 in order to promote Integrated Development of the North Eastern Region. NEC includes the States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. Under this Act, NEC was envisaged as an Advisory Body empowered to discuss matters of common interest in the sphere of economic and social development to two or more States. However, over the years, NEC has evolved into an advisory, planning, funding and development agency but is not an implementing agency. Funds are provided to the NEC through the Ministry of Home Affairs. The projects financed by NEC are implemented either by the State or by the Central/Public Sector Undertakings.

9.31 The Eighth Plan outlay for NEC is Rs. 1160 crore. In real terms, the North Eastern Council is estimated to have spent Rs. 705.55 crore during 1992-95 which is 60.82 % of the eighth plan outlay. In 1995-96, an outlay of Rs. 296.45 crore (at 1991- 92 prices) has been provided to NEC. The actual expenditure in the first three years and the approved outlay for 1995-96 at 1991-92 prices are at Annex - 9.11.

9.32 One important development in financing NEC's plans has been the use of Extra Budgetary Resources in addition to budget support. This was not contemplated when the Eighth Plan was formulated. This additional financing has been possible because some of the important NEC schemes in Power Sector are being implemented through Public Sector Undertakings. These schemes contemplated financing the projects through equity and debt. While the former is being provided out of budget support the latter has been raised by the Undertakings from loans from financing institutions and borrowings from banks (based on Statutory Liquidity Ratio).

9.33 According to the Eighth Plan, 49.50 % of the outlay was to be used for development of Transport and Communications in the region. The second priority in the NEC Plan is development of Power sector for which 37.50% of the outlay was to be utilised. Priority has been given to this sector and expenditure has been in excess of the proportion originally contemplated for the Eighth Plan. The small shift in actual expenditure / outlays during the first three years of the Plan, in favour of Power

Sector is because major Hydro Electric Power Projects taken up under NEC Plan have reached a stage where fund requirement is very high. The major power sector projects are (i) Doyang HEP (75 MW), (ii) Ranganadi HEP (405 MW), (iii) Ranganadi Transmission Line (170 Kms). and (iv) Rokia Gas Based Power Project (2x8 MW).

Tribal Sub-Plan

9.34 TSP strategy was started in the Fifth Five Year Plan in order to raise the level of economic condition and protecting the interest of the Scheduled Tribes through legal and administrative support. It is in operation in eighteen States and two Union Territories through 194 Integrated Tribal Development Projects (ITDP), 250 Modified Area Development Approach (MADA) Pockets and 77 clusters of tribal concentration. The Government of Jammu & Kashmir is in the process of forming ITDPs and MADA Pockets.

9.35 Special Central Assistance (SCA) for Tribal Sub Plan is provided to the State Governments/UTs as an additive to States' Plan for implementation of various socio-economic programmes in identified projects and for the tribals residing outside these identified projects in the States/UTs. It helps in encouraging State Governments to invest more in Tribal Sub Plan areas. Special Central Assistance (SCA) is generally used for family oriented income generating schemes in the sectors of agriculture, animal husbandry, horticulture, minor irrigation, forest education, soil conservation, minimum needs programmes, village and small scale industries etc. and infrastructural development incidental thereto. The outlay and expenditure during each year of the Eighth Five Year Plan under Special Central Assistance are given in the following Table No. 9.1.

Reform process_

9.36 The process of reforms initiated in 1991 has also influenced the thinking of the State Governments to some extent. Though the response has been somewhat mixed, a few States have taken steps which are indeed bold in nature. Not only has disinvestment of State Level Public Enterprises been promised or already effected but privatisation also carried out for a few enterprises. Several States have allowed their enterprises to make public issues and reduced budget support to the enterprises. The enterprises been encouraged to approach the financial institutions for raising loans. A few States have made efforts to rationalise tax structure and improve collection of taxes. Abolition of entry tax and octroi by some States is another important feature of the reforms effected.

Financial and Fiscal Reforms

9.37 In line with the trend from the recent past to lessen the hold of the Government on non-essential items/activities, a number of States have initiated action for privatisation of some of the undertakings in part or in whole by disinvestment of Government equities from these enterprises and opening up of the enterprises for public investment by public issue of shares etc. Other steps contemplated include merger of corporations/ undertakings with overlapping functions, opening up areas hitherto reserved for public sector for private units to co- exist with Government units to introduce an element of competition and to make it necessary for the latter to operate efficiently to exist in business.

9.38 In the case of loss-making Public Ent - prises, efforts are being made to help them turn around, or privatise them alternatively, wherever possible or even phase them out unless

Table No. 9.1

Special Central Assistance under Tribal Sub Plan

[at 1991-92 prices]

(Rs. in Crore)_

VIIIth Plan Outlay	1992-93 Outlay	1992-93 Exp.	1993-94 Outlay	1993-94 Exp.	1994-95 Outlay	1994-95 Exp.	1995-96 Anti.Approved Outlay
1250.00	228.31	228.26	248.53	248.40	208.73	208.73	234.04

they happen to serve a significant social objective. Keeping in line with the policy of making State level Public Enterprises to be independent of budgetary Support, they have been permitted to borrow money from the open market on specific conditions. The State Governments have also been making efforts to rationalise the tax structure and improve the collections with the existing taxes. In the case of sales tax, slabs have been reduced and the rates have been rationalised. A few states have taken bold steps in the field of reforms specially in Transport, Power & Industries sectors, highlights of which are given below :

Transport

9.39 Under the Transport sector, Railways, National Highways, major ports and airports are in the Central sector. State Highways, road transport, Inland Water Transport and minor ports are in the State sector.

9.40 Before the 8th Plan, the entire expenditure on State Highways was met through budgetary resources of the State's. With the liberalisation of the economy, States in general have become aware of the need to evolve private sector in the development and maintenance of roads and bridges. Some States like Madhya Pradesh have already negotiated with private entrepreneurs for the construction and maintenance of some bridge projects. Other States like Gujarat, Haryana, Maharashtra, Tamil Nadu & West Bengal etc. are actually persuing proposals for private investment in specific road/bridge projects. States in the North Eastern region, J&K, Punjab find lukewarm response from private sector.

9.41 In the road transport sector, Path Kar has been abolished. Government are considering the proposal for uniform Motor Vehicle Taxation in the States; However, the proposal is not yet finalised. States of Andhra Pradesh, Maharashtra and Tamil Nadu with 100% nationalisation of road transport services are not enthusiastic to denationalise their routes. North Eastern States have mentioned that private bus operators are not forthcoming to operate transport services in their States. However, States of Haryana, Madhya Pradesh, Punjab & Uttar Pradesh etc. have been successful in inducing private bus entrepreneurs to operate on certain selected routes.

9.42 The Planning Commission has taken a decision that incremental road transport traffic demand should be met through private bus operators and that State Road Transport Undertakings should not augment their fleet for this purpose. Accordingly, there is no need for State Governement capital contribution to their respective State Road Transport Corporations. As regards funds for replacement of over-aged buses, the same should be met from the Depriciation Reserve Fund. This policy is being uniformally followed for all the State Road Transport Undertakings except for those operating in difficult and remote areas where private operators are reluctant to operate.

9.43 As at present, there is excess staff in State Road Transport Undertakings. States have been advised during Plan discussions to consider evolving suitable voluntary retirement scheme to bring down the staff strength. Very little seems to have been done on this account.

9.44 The maritime States like Gujarat have succeeded in involving private sector in the development of minor ports. Other States are also actively pursuing proposals for private investment in their ports.

Power

9.45 In September, 1991, the Government of India has announced private sector policy for investment in Power Sector in order to bring an additionality of resourceds in capacity addition programme in the Electricity Sector. Government has formulated a scheme to increase greater participation by private sector enterprises in electricity generation supply and distribution. The scheme widens the scope of private investment in the Power Sector and has modified financial, administrative and legal environment for the private enterprises to make investment in the Electricity Sector attractive. The new environment is based on the amendments to the electricity legislation on which Electricity Sector in India is based.

9.46 In line with the Policy announced by the Government of India for private investment in the Power Sector a number of State Electricity Boards have signed MOUs with the Indian as well as foreign private investors for setting up power generating stations in the respective states.

9.47 Brief details of the MOUs signed for the Power projects by each state is given below :

Name of the State	No. of Projects	Capacity (MW)
Andhra Pradesh	33	13873.0
Arunachal Pradesh	2	648.0
Assam	5	507.5
Bihar	2	702.5
Delhi	1	800.0
Gujarat	9	4930.0
Haryana	7	1575.0
Himachal Pradesh	8	1891.0
Karnataka	28	5495.0
Kerala	12	520.5
Maharashtra	7	4957.0
Madhya Pradesh	13	5902.0
Orissa	12	4456.0
Rajasthan	12	3890.0
Tamil Nadu	12	7420.0
Uttar Pradesh	18	4872.0
West Bengal	6	2590.0
Group of Power Projects	1	10000.0
Energy Efficiency Central	1	200.0
	189	75229.5

9.48 Some States like Orissa and Meghalaya have taken up plans for restructuring of State Electricity Boards. While Orissa plans to have separate Corporations for thermal generation, transmission & distribution and hydel generation with 100 % state ownership to start with. Meghalaya is contemplating privatisation of the operations of the SEB. States like U.P. and Haryana are reported to have been formulating plans for restructuring of the operations of the State Electricity Boards.

Industries

9.49 With the liberalisation of the Indian economy which commenced in July 1991 with new Industrial Policy, and the other economic reforms, many States have brought out new industrial policy in line with the new National Industrial Policy, 1991 and are taking measures to simplify various procedures, rules, enactments and State laws for making it easy for the entrepreneurs to invest for setting up industrial units both in the large & medium industries and the VSI sectors. Rajasthan has also announced new mineral policy in line with the new National Mineral Policy - whereby private sector will be encouraged to make investment for commercial exploitation of minerals such as base metals, iron ore, etc., which hitherto were reserved for the public sector.

9.50 By and large, the thrust of new industrial policy brought out by the States is on encouraging private sector to set up industries based on comparative advantage available in the States and also ensure a balanced regional development through targetted industrialisation of the backward regions/districts and areas. The States are also providing various incentives to private entrepreneurs for encouraging them to invest in the States. While, by and large, various subsidies hitherto being made available to private entrepreneurs for setting up large and medium industries are being withdrawn, subsidies such as for power, capital investment, transport, raw materials particularly in the North East States, etc. will continue to be available to private entrepreneurs for setting up village and small industrial units as a matter of policy.

9.51 The thrust of the new State policies would be on developing industrial infrastructure, including industrial estates, growth centres, export promotion industrial parks, etc. inter-alia for encouraging direct foreign investment in the States.

9.52 The States are also encouraging private sector including multinationals to make investment in industrial infrastructure such as roads, power, etc.

9.53 The States are taking measures to tackle sickness of the State level public enterprises - which also includes disinvestment of potentially viable units and closure of potentially non-viable units. The progress reported from the States of Andhra Pradesh, Maharashtra, Gujarat, Tamil Nadu, Kerala, Rajasthan, Madhya Pradesh in this regard is quite impressive. Besides, States are encouraging modernisation and upgradation of technologies of the existing State public enterprises for making them internationally competitive. Special incentives are being made available for this purpose.

9.54 In order to have better interaction with investors, States such as Rajasthan, Haryana, West Bengal, Maharashtra, Gujarat, Andhra Pradesh, etc., are organising regular seminars, symposia and conferences. Across the board discussions with the entrepreneurs have also been made a regular feature by many States for sorting out problems regarding various clearances. A significant achievement in this regard is reported from the States such as Haryana, Rajasthan, Maharashtra, Gujarat, Andhra Pradesh, Kerala, Tamil Nadu, etc. A single window clearance mechanism has been introduced in West Bengal.

9.55 As a matter of new industrial policy, the State Governments would only play a promotional and facilitating role in future for industrial development and encourage private sector to make investments in setting up industrial units

9.56 In order to provide up-to-date information to entrepreneurs on industrial climate prevailing in the States, incentives and subsidies available, procedures required to be followed for getting various clearances and agency(ies) to be approached, etc., many States are regularly publishing brochures and using other media.

ANNEX - 9.1

ANNUAL PLANS - 1992-93 TO 1994-95 - APPROVED/REVISED/EARMARKED OUTLAY - STATES/UTs

(Rs. Crore)

SL. NO.	STATES/UTs	ANNUAL PLAN - 1992 - 93						ANNUAL PLAN-1993-94	
		ORIGINALLY APPROVED OUTLAY	EARMARKED OUTLAY	APPROVED REVISED OUTLAY		EARMARKED REVISED OUTLAY	ACTUAL EXPENDITURE	ORIGINALLY APPROVED OUTLAY	EARMARKED OUTLAY
1.	2.	3.	4.	5.		6.	7.	8.	9.
1.	Andhra Pradesh	1660.00	1016.14	1675.00		956.41	2364.04	1851.00	931.34
2.	Arunachal Pradesh	245.00	123.78	235.35		104.56	233.61	290.00	153.06
3.	Assam	960.00	627.37	700.00		433.88	655.44	1027.00	520.92
4.	Bihar	2202.73	1556.99	1100.00		777.29	1149.18	2300.00	1275.93
5.	Goa	152.50	63.14	153.42		64.64	141.96	170.00	59.05
6.	Gujarat	1875.00	1276.23	1875.00		1230.24	1939.75	2137.00	1296.05
7.	Haryana	830.00	464.01	804.57		427.00	748.36	920.00	411.74
8.	Himachal Pradesh	486.00	320.71	490.50		307.84	490.98	560.00	107.01
9.	Jammu & Kashmir	820.00	409.73	623.00		338.43	620.00	880.00	448.11
10.	Karnataka	1915.00	1231.82	1915.00		1103.23	1971.41	3025.00	1428.63
11.	Kerala	913.00	515.74	750.00		444.76	825.32	1000.00	508.56
12.	Madhya Pradesh	2400.00	1654.29	1792.00		1197.81	1992.03	2400.00	1205.13
13.	Maharashtra	3160.00	2020.11	3208.80		2055.45	3372.80	3804.00	1975.27
14.	Manipur	210.00	121.50	171.30		81.07	170.95	230.00	114.94
15.	Meghalaya	241.00	134.94	241.00		135.10	198.98	281.00	148.90
16.	Mizoram	160.00	101.71	165.18		106.42	165.17	185.00	104.72
17.	Nagaland	185.00	95.66	110.19		61.67	110.55	203.50	91.15
18.	Orissa	1405.00	955.70	1055.00		710.29	1054.33	1450.00	897.17
19.	Punjab	1500.00	811.97	856.50		468.78	885.30	1250.00	621.25
20.	Rajasthan	1400.00	969.16	1410.00		929.52	1406.67	1700.00	839.31
21.	Sikkim	110.00	56.85	110.00		52.58	102.53	120.00	59.89
22.	Tamil Nadu	1751.00	1040.75	1766.75		928.30	1934.59	2101.00	1068.96
23.	Tripura	282.00	179.75	240.00		160.56	217.94	310.00	168.30
24.	Uttar Pradesh	3853.00	2856.11	3149.99		2300.35	3457.61	4050.00	2165.56
25.	West Bengal	1501.00	793.18	703.50		462.53	881.59	1550.00	612.95
	TOTAL (States)	30217.23	19397.34	25302.05		15838.71	27091.09	33794.50	17213.90
	UNION TERRITORIES								
26.	A & N Islands	155.00	32.82	155.00	#	32.82	125.83	156.50	56.83
27.	Chandigarh	68.00	15.20	68.00	#	15.20	65.32	80.00	17.73
28.	D & N Haveli	18.15	13.16	18.15	#	13.16	18.16	22.00	12.57
29.	Daman & Diu	14.50	5.42	14.50	#	5.42	14.45	16.00	7.59
30.	Delhi	920.00	364.37	909.63		357.95	911.07	1075.00	554.33
31.	Lakshadweep	25.00	8.75	25.00	#	8.75	19.32	32.00	17.74
32.	Pondicherry	90.00	43.44	90.00		37.17	87.77	108.00	52.58
	TOTAL (UTs)	1290.65	483.16	1280.28		470.47	1241.92	1489.50	719.37
	TOTAL (States & UTs)	31507.88	19880.50	26582.33		16309.18	28333.01	35284.00	17933.27

ANNEX - 9.1 Contd.

ANNUAL PLANS - 1992-93 TO 1994-95 - APPROVED/REVISED/EARMARKED OUTLAY - STATES/UTs

(Rs. Crore)

SL. NO.	STATES/UTs	APPROVED REVISED OUTLAY	EARMARKED REVISED OUTLAY	ACTUAL EXPENDITURE	ANNUAL PLAN - 1994 - 95 ORIGINALLY APPROVED OUTLAY	EARMARKED OUTLAY	APPROVED REVISED OUTLAY	EARMARKED REVISED OUTLAY	ANTI. EXPENDITURE
1.	2.	10.	11.	12.	13.	14.	15.	16.	17.
1.	Andhra Pradesh	1851.00	970.58	2867.46	2130.00	1106.11	2170.00	1114.86	2170.00
2.	Arunachal Pradesh	263.91	147.22	263.91 *	335.00	173.81	332.97	174.10	332.97 *
3.	Assam	872.00	359.91	862.19	1051.00	580.30	997.20	538.47	1052.98
4.	Bihar	750.00	470.57	750.00 *	2400.00	882.49	900.00	258.48	900.00 *
5.	Goa	144.50	45.21	147.94	182.00	81.43	163.38	66.63	163.38
6.	Gujarat	1900.00	992.31	1900.00 *	2240.00	1116.63	2240.83	1118.52	2240.83 *
7.	Haryana	839.08	349.07	806.82	1025.00	406.24	1019.05	426.64	1079.90
8.	Himachal Pradesh	562.82	195.58	570.73	650.00	188.84	666.32	207.18	660.32
9.	Jammu & Kashmir	684.00	369.47	653.74	950.00	336.47	868.00	349.27	950.00
10.	Karnataka	3025.00	1385.16	3025.46	3275.00	1234.81	2800.00	1019.23	3396.94
11.	Kerala	1019.77	585.70	1013.06	1260.00	594.08	1260.60	594.08	1386.10
12.	Madhya Pradesh	2018.21	1142.44	2235.88	2750.00	1377.21	2253.29	1125.03	2549.59
13.	Maharashtra	3832.80	1997.37	3832.80 *	4400.00	2507.52	4758.00	2096.32	4758.00 *
14.	Manipur	174.84	86.38	174.84 *	240.00	91.16	214.50	88.51	214.50 *
15.	Meghalaya	281.00	148.99	195.99	281.00	139.71	232.12	123.26	220.35
16.	Mizoram	181.90	110.30	174.31	207.66	117.21	202.53	116.23	192.41
17.	Nagaland	168.41	76.26	168.41 *	220.00	91.04	84.39	26.99	134.36
18.	Orissa	1095.19	736.96	1095.19 *	1951.00	938.81	1464.18	861.31	1464.18 *
19.	Punjab	1140.00	521.41	1142.80	1450.00	658.90	1374.46	687.79	1450.00
20.	Rajasthan	1704.76	751.04	1743.32	2450.00	1210.14	2450.00	1214.96	2450.00
21.	Sikkim	100.12	55.28	121.62	135.00	60.29	135.00	63.19	136.05
22.	Tamil Nadu	2102.21	1068.96	2234.45	2750.00	1348.25	2750.75	1305.61	2795.26
23.	Tripura	220.03	139.45	224.16	310.00	169.14	244.57	101.03	250.30
24.	Uttar Pradesh	2800.00	1336.88	3249.58	4562.00	2214.69	3639.84	1328.11	3870.31
25.	West Bengal	1020.94	485.72	1217.00	1706.00	752.26	1483.31	577.72	1483.31
	TOTAL (States)	28752.49	14528.22	30671.66	38910.66	18377.54	34705.29	15583.52	36302.04
	UNION TERRITORIES								
26.	A & N Islands	156.50	56.83	154.13	205.00	107.40	200.00	107.40	199.49
27.	Chandigarh	80.00	17.73	79.83	88.00	21.58	88.00	21.58	88.00
28.	D & N Haveli	22.00	12.57	23.96	25.00	17.67	27.00	17.67	25.99
29.	Daman & Diu	16.00	7.59	15.64	18.50	9.52	21.50	9.52	25.22
30.	Delhi	960.00	378.74	959.83	1560.00	674.63	1560.00	674.63	1560.00 *
31.	Lakshadweep	32.00	17.74	23.30	32.00	18.97	32.00	18.97	32.67
32.	Pondicherry	108.00	55.90	108.00 *	135.00	69.61	135.00	68.77	135.00
	TOTAL (UTs)	1394.50	547.10	1364.69	2063.50	919.38	2063.50	918.54	2066.37
	TOTAL (States & UTs)	30146.99	15075.32	32036.35	40974.16	19296.92	36768.79	16502.06	38368.41

* : Expenditure details not yet intimated, approved revised outlay used.

: Revision not sought; approved outlay repeated.

ANNEX – 9.2

PER CAPITA NET STATE DOMESTIC PRODUCT AT CONSTANT (1980-81) PRICES
(1980-81 TO 1993-94) AS ON 21.4.95)

Sl. No.	State/U.T.	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86
1	2	3	4	5	6	7	8
1.	Andhra Pradesh	1380	1558	1545	1578	1501	1549
2.	Arunachal Pradesh	1571	1747	1744	1804	1908	2074
3.	Assam	1317	1447	1521	1534	1628	1659
4.	Bihar	917	947	935	1003	1074	1074
5.	Goa	3145	2863	3221	3173	3213	3000
6.	Gujarat	1948	2104	2017	2352	2319	2204
7.	Haryana	2370	2399	2487	2479	2513	2893
8.	Himachal Pradesh	1704	1773	1678	1726	1599	1780
9.	Jammu & Kashmir	1776	1772	1782	1794	1837	1832
10.	Karnataka	1527	1594	1596	1673	1761	1659
11.	Kerala	1508	1469	1485	1406	1473	1507
12.	Madhya Pradesh	1358	1364	1388	1425	1323	1408
13.	Maharashtra	2435	2441	2480	2579	2558	2705
14.	Manipur	1429	1472	1457	1547	1571	1623
15.	Meghalaya	1361	1379	1361	1354	1385	1412
16.	Nagaland	1448	1578	1720	1695	1681	1654
17.	Orissa	1231	1227	1133	1341	1210	1390
18.	Punjab	2674	2875	2906	2904	3073	3249
19.	Rajasthan	1222	1285	1276	1525	1379	1338
20.	Sikkim	1571	1611	1750	1758	1919	2017
21.	Tamil Nadu	1498	1640	1527	1582	1758	1798
22.	Tripura	1297	1249	1331	1255	1258	1254
23.	Uttar Pradesh	1278	1276	1344	1364	1354	1375
24.	West Bengal	1612	1644	1560	1680	1885	1692
25.	A & N Islands	2613	2604	2414	2630	2445	2639
26.	Delhi	3759	4004	4130	3771	3727	4335
27.	Pondicherry	3032	2995	3138	3097	3180	3239
	All India						
	Per Capita NNP at factor cost	1630	1693	1691	1790	1811	1841
	Per Capita NDP at factor cost	1625	1692	1699	1804	1827	1857

ANNEX - 9.2 Contd.

PER CAPITA NET STATE DOMESTIC PRODUCT AT CONSTANT (1980-81) PRICES
(1980-81 TO 1993-94) AS ON 21.4.95)

Sl. No.	State/U.T.	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93 (P)	1993-94 (Q)
1	2	9	10	11	12	13	14	15	16
1.	Andhra Pradesh	1461	1576	1789	1841	1779	1788	1717	1775
2.	Arunachal Pradesh	2133	2182	2360	2441	2725	3012	2992	3149
3.	Assam	1652	1706	1702	1772	1805	1887	1945	NA
4.	Bihar	1135	1050	1158	1116	1185	1091	1091	NA
5.	Goa	3076	3340	3972	4066	4604	4800	4969	4980
6.	Gujarat	2274	1943	2715	2576	2559	2412	2719	NA
7.	Haryana	2825	2709	3289	3254	3467	3455	3411	3479
8.	Himachal Pradesh	1877	1850	1974	2175	2151	2074	NA	NA
9.	Jammu & Kashmir	1809	1571	1729	1662	1669	1687	1717	NA
10.	Karnataka	1778	1868	1984	2079	2049	2255	2315	2375
11.	Kerala	1453	1482	1614	1705	1815	1826	1908	1968
12.	Madhya Pradesh	1314	1458	1518	1517	1708	1621	1668	1744
13.	Maharashtra	2666	2781	2966	3340	3438	3381	3696	3901
14.	Manipur	1618	1675	1723	1761	1850	2002	NA	NA
15.	Meghalaya	1397	1485	1471	1610	1764	1906	1995	2136
16.	Nagaland	1768	1907	1975	1980	1891	1900	NA	NA
17.	Orissa	1365	1320	1493	1579	1383	1512	1442	NA
18.	Punjab	3302	3410	3526	3754	3754	3869	3952	4055
19.	Rajasthan	1428	1295	1791	1716	1943	1733	1897	1728
20.	Sikkim	2297	2678	2924	3118	3369	NA	NA	NA
21.	Tamil Nadu	1755	1837	1987	2094	2219	2322	2349	NA
22.	Tripura	1284	1388	1531	1597	1667	1689	NA	NA
23.	Uttar Pradesh	1402	1433	1551	1558	1613	1589	1587	1605
24.	West Bengal	1730	1835	1882	1922	1946	2015	2056	NA
25.	A & N Islands	2644	2695	2817	2708	2629	2313	2550	NA
26.	Delhi	4278	4349	4560	4780	4838	5000	NA	NA
27.	Pondicherry	3326	3268	3321	3384	3403	3448	3447	NA
	All India								
	Per Capita NNP at factor cost	1871	1901	2059	2157	2223	2178	2226	2282
	Per Capita NDP at factor cost	1893	1929	2099	2198	2267	2229	2280	2332

Q : Quick Estimates   P : Provisional

NA : Not made available by the concerned State Governments

Source : Directorates of Economics & Statistics of respective State Government and C.S.O. for All India Per Capita NNP and NDP. The figures of Per Capita NDP are not published in NAS.

Note 1 : Owing to diffrences in source material used the figures for different states /UTs are not strictly comparable.

Note 2 : The state of Mizoram prepares these estimates at curent prices only.

Note 3 : The UTs of Chandigarh, Dadra & Nagar Haveli, Daman & Diu and Lakshadweep do not prepare these estimates.

STATEWISE PER CAPITA EXPENDITURE/ GROSS CENTRAL ASSISTANCE - STATES FROM 1990-91 TO 1994-95 (AT CURRENT PRICES)

ANNEX 9.2 (A)

(In Rs.)

Sl. No.	States/UTs	ANNUAL PLAN - 1980-81 PER CAPITA		ANNUAL PLAN - 1981-82 PER CAPITA		ANNUAL PLAN - 1982-83 PER CAPITA	
		ACTUAL EXPENDITURE	GROSS CENTRAL ASSISTANCE	ACTUAL EXPENDITURE	GROSS CENTRAL ASSISTANCE	ACTUAL EXPENDITURE	GROSS CENTRAL ASSISTANCE
1.	2.	3.	4.	5.	6.	7.	8.
1.	Andhra Pradesh	89	31	98	30	103	31
2.	Arunachal Pradesh	436	#	597	#	699	#
3.	Assam	104	70	105	79	110	110
4.	Bihar	68	35	82	35	83	37
5.	Goa	305 $	#	347 $	#	423 $	#
6.	Gujarat	180	23	199	27	218	24
7.	Haryana	195	31	223	26	248	30
8.	Himachal Pradesh	230	181	277	185	296	197
9.	Jammu & Kashmir	253	262	277	298	291	318
10.	Karnataka	108	24	123	23	135	23
11.	Kerala	124	30	127	41	108	33
12.	Madhya Pradesh	114	34	116	36	141	33
13.	Maharashtra	147	22	177	19	212	21
14.	Manipur	291	265	305	304	321	414
15.	Meghalaya	327	266	332	281	371	346
16.	Mizoram	440	#	476	#	605	#
17.	Nagaland	475	505	489	518	551	704
18.	Orissa	95	52	106	46	112	49
19.	Punjab	183	30	206	30	225	28
20.	Rajasthan	102	39	127	32	125	40
21.	Sikkim	883	666	885	701	830	754
22.	Tamil Nadu	95	27	139	23	152	26
23.	Tripura	200	163	221	187	271	248
24.	Uttar Pradesh	92	31	100	34	110	36
25.	West Bengal	79	22	83	21	90	49
	Total - States	112	37	129	37	139	42

STATEWISE PER CAPITA EXPENDITURE/ GROSS CENTRAL ASSISTANCE – STATES FROM 1990-91 TO 1994-95 (AT CURRENT PRICES)

ANNEX 9.2 (A) Contd.

(In Rs.)

Sl. No.	States/UTs	ANNUAL PLAN – 1983-84		ANNUAL PLAN – 1984-85		ANNUAL PLAN – 1985-86		ANNUAL PLAN – 1986-87	
		PER CAPITA		PER CAPITA		PER CAPITA		PER CAPITA	
		ACTUAL EXPENDITURE	GROSS CENTRAL ASSISTANCE	ACTUAL EXPENDITURE	GROSS CENTRAL ASSISTANCE	ACTUAL EXPENDITURE	GROSS CENTRAL ASSISTANCE	ACTUAL EXPENDITURE	GROSS CENTRAL ASSISTANCE
1.	2.	9.	10.	11.	12.	13.	14.	15.	16.
1.	Andhra Pradesh	136	35	160	39	163	53	205	53
2.	Arunachal Pradesh	730	#	932	#	1023	#	1204	#
3.	Assam	139	154	167	173	184	184	223	209
4.	Bihar	83	41	95	47	122	54	165	57
5.	Goa	431 $	#	506 $	#	541 $	#	600 $	#
6.	Gujarat	248	27	265	29	223	38	256	39
7.	Haryana	244	34	265	38	293	49	325	46
8.	Himachal Pradesh	320	224	401	240	416	367	508	352
9.	Jammu & Kashmir	313	374	365	404	419	495	504	530
10.	Karnataka	161	25	172	29	157	38	168	40
11.	Kerala	124	32	150	32	134	58	154	69
12.	Madhya Pradesh	161	37	178	41	177	48	201	50
13.	Maharashtra	229	26	245	29	255	36	282	35
14.	Manipur	345	463	399	501	443	629	522	661
15.	Meghalaya	417	476	434	413	493	431	580	597
16.	Mizoram	645	#	719	#	824	#	1025	#
17.	Nagaland	621	891	682	956	696	1352	779	1430
18.	Orissa	120	51	146	51	157	56	199	66
19.	Punjab	245	33	241	38	257	46	366	44
20.	Rajasthan	127	34	117	41	112	47	135	59
21.	Sikkim	849	940	1032	875	1148	1246	1387	1405
22.	Tamil Nadu	158	27	180	32	193	41	219	49
23.	Tripura	332	281	343	372	412	389	495	468
24.	Uttar Pradesh	117	39	154	53	142	51	163	50
25.	West Bengal	89	25	95	3	119	31	119	35
	Total – States	153	45	173	50	177	61	207	66

STATEWISE PER CAPITA EXPENDITURE/ GROSS CENTRAL ASSISTANCE - STATES FROM 1990-91 TO 1994-95 (AT CURRENT PRICES)

ANNEX 9.2 (A) Contd.

(In Rs.)

Sl. No.	States/UTs	ANNUAL PLAN - 1987-88 PER CAPITA ACTUAL EXPENDITURE	ANNUAL PLAN - 1987-88 PER CAPITA GROSS CENTRAL ASSISTANCE	ANNUAL PLAN - 1988-89 PER CAPITA ACTUAL EXPENDITURE	ANNUAL PLAN - 1988-89 PER CAPITA GROSS CENTRAL ASSISTANCE	ANNUAL PLAN - 1989-90 PER CAPITA ACTUAL EXPENDITURE	ANNUAL PLAN - 1989-90 PER CAPITA GROSS CENTRAL ASSISTANCE	ANNUAL PLAN - 1990-91 PER CAPITA ACTUAL EXPENDITURE	ANNUAL PLAN - 1990-91 PER CAPITA GROSS CENTRAL ASSISTANCE
1.	2.	17.	18.	19.	20.	21.	22.	23.	24.
1.	Andhra Pradesh	187	58	220	64	218	69	227	68
2.	Arunachal Pradesh	1496	1784	1653	2093	1958	1795	1961	1946
3.	Assam	251	231	180	230	262	260	271	285
4.	Bihar	150	64	156	71	165	74	148	75
5.	Goa	761	686	830	724	932	825	1166	293
6.	Gujarat	287	43	276	48	340	49	383	49
7.	Haryana	306	40	362	54	367	49	380	64
8.	Himachal Pradesh	579	473	592	452	648	386	738	439
9.	Jammu & Kashmir	592	609	637	741	761	768	734	757
10.	Karnataka	167	42	196	47	219	51	283	53
11.	Kerala	138	80	163	90	180	86	206	91
12.	Madhya Pradesh	238	56	248	62	272	67	282	66
13.	Maharashtra	309	38	337	43	335	46	326	45
14.	Manipur	639	729	686	910	782	781	911	863
15.	Meghalaya	701	659	783	841	848	785	954	851
16.	Mizoram	1168	1024	1312	2152	1544	1259	1840	1545
17.	Nagaland	968	1621	1103	1798	1135	992	1211	1066
18.	Orissa	239	76	251	85	261	89	347	91
19.	Punjab	420	46	374	52	450	42	494	58
20.	Rajasthan	160	68	170	75	188	78	224	79
21.	Sikkim	1470	1519	1625	1661	1682	1434	1966	1686
22.	Tamil Nadu	239	57	236	64	252	66	270	73
23.	Tripura	581	530	689	662	697	581	745	607
24.	Uttar Pradesh	176	54	197	61	211	65	221	65
25.	West Bengal	128	40	157	44	181	47	172	47
	Total - States	222	78	237	86	258	88	285	90

STATEWISE PER CAPITA EXPENDITURE/ GROSS CENTRAL ASSISTANCE – STATES FROM 1990-91 TO 1994-95 (AT CURRENT PRICES)

ANNEX 9.2 (A) Concld.

(In Rs.)

Sl. No.	States/UTs	ANNUAL PLAN – 1991-92 PER CAPITA ACTUAL EXPENDITURE	ANNUAL PLAN – 1991-92 PER CAPITA GROSS CENTRAL ASSISTANCE	ANNUAL PLAN – 1992-93 PER CAPITA ACTUAL EXPENDITURE	ANNUAL PLAN – 1992-93 PER CAPITA GROSS CENTRAL ASSISTANCE	ANNUAL PLAN – 1993-94 PER CAPITA ACTUAL EXPENDITURE	ANNUAL PLAN – 1993-94 PER CAPITA GROSS CENTRAL ASSISTANCE	ANNUAL PLAN – 1994-95 PER CAPITA ANTI. EXPENDITURE	ANNUAL PLAN – 1994-95 PER CAPITA GROSS CENTRAL ASSISTANCE
1.	2.	25.	26.	27.	28.	29.	30.	31.	32.
1.	Andhra Pradesh	250	80	347	81	313	88	238	106
2.	Arunachal Pradesh	2372	2638	2616	2773	2884 *	3033	2743	3272
3.	Assam	308	331	284	328	365	359	338	373
4.	Bihar	119	89	129	87	82 *	96	75	103
5.	Goa	1350	357	1183	350	1209	351	1012	403
6.	Gujarat	486	55	458	58	441 *	59	395	64
7.	Haryana	411	68	441	72	465	91	471	112
8.	Himachal Pradesh	783	491	926	524	1056	616	927	702
9.	Jammu & Kashmir	835	916	780	919	804	972	883	1010
10.	Karnataka	353	59	429	58	647	60	563	65
11.	Kerala	230	101	278	109	337	123	351	126
12.	Madhya Pradesh	273	74	293	73	322	77	278	80
13.	Maharashtra	374	47	416	54	464 *	83	436	55
14.	Manipur	997	1027	902	1022	902 *	1071	836	1252
15.	Meghalaya	1047	968	1087	945	1047	980	889	1236
16.	Mizoram	2176	2181	2297	2246	2349	2392	2045	2832
17.	Nagaland	1308	1336	877	1304	1258	1437	773	1883
18.	Orissa	323	107	325	105	331 *	103	336	113
19.	Punjab	524	81	428	79	544	78	526	79
20.	Rajasthan	267	87	310	85	377	86	401	93
21.	Sikkim	2369	2127	2418	2321	2777	2465	2326	2986
22.	Tamil Nadu	295	82	342	91	391	96	374	113
23.	Tripura	823	697	767	742	771	772	650	844
24.	Uttar Pradesh	251	77	243	80	224	82	203	88
25.	West Bengal	132	55	127	61	172	65	159	73
	Total – States	297	105	316	108	352	115	316	126

Note:

$: Includes provision for Daman & Diu also.

: Was a Union Territory then.

* : Actual Expenditure not available, Revised Approved Outlay taken.

ANNEX - 9.3

CENTRAL ASSISTANCE RELEASED TO THE STATES FOR EXTERNALLY AIDED PROJECTS (1992-93 to 1994-95)

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(Rs. in Crore)

Sl. No.	States	1992-93	1993-94	1994-95	TOTAL
A.	SPECIAL CATEGORY				
1.	Arunachal Pradesh	--	--	--	--
2.	Assam	5.00	3.64	6.67	15.31
3.	Himachal Pradesh	47.96	38.61	38.20	124.77
4.	Jammu & Kashmir	7.16	7.87	11.10	26.13
5.	Manipur	--	--	--	--
6.	Meghalaya	--	--	--	--
7.	Mizoram	--	--	--	--
8.	Nagaland	--	--	--	--
9.	Sikkim	--	--	--	--
10.	Tripura	--	--	--	--
B.	NON-SPECIAL CATEGORY				
1.	Andhra Pradesh	625.90	893.65	570.38	2089.93
2.	Bihar	34.00	24.89	72.01	130.90
3.	Goa	--	--	0.73	0.73
4.	Gujarat	329.68	147.45	141.05	618.18
5.	Haryana	64.24	79.56	74.92	218.72
6.	Karnataka	297.84	349.40	373.91	1021.15
7.	Kerala	78.76	118.43	126.82	324.01
8.	Madhya Pradesh	81.27	78.38	94.31	253.96
9.	Maharashtra	310.34	927.56	562.58	1800.48
10.	Orissa	127.56	128.72	201.72	458.00
11.	Punjab	71.65	54.15	99.39	225.19
12.	Rajasthan	67.04	151.94	197.77	416.75
13.	Tamil Nadu	289.05	502.35	671.69	1463.09
14.	Uttar Pradesh	780.53	316.09	497.80	1594.42
15.	West Bengal	118.48	88.24	163.20	369.92
	TOTAL (A + B) * :-	3336.43	3910.90	3904.25	11151.58

* Totals do not tally due to rounding off.

ANNEX-9.4

SECTORWISE OUTLAY/EXPENDITURE OF STATES AND UTs DURING 1992-95 (AT 1991-92 PRICES)

(Rs. Lakh)

MAJOR HEADS OF DEVELOPMENT	EIGHTH PLAN (1992-97)	ANNUAL PLAN 1992-93		ANNUAL PLAN 1993-94		ANNUAL PLAN 1994-95	
	AGREED OUTLAY	APPROVED OUTLAY	ACTUAL EXPENDITURE	APPROVED OUTLAY	ACTUAL EXPENDITURE	APPROVED OUTLAY	ANTI. EXPENDITURE
1.	2.	3.	4.	5.	6.	7.	8.
I. AGRI. & ALLIED ACTIVITIES	1490608.39 (8.20)	258539.43 (8.99)	209386.39 (8.09)	249568.96 (8.40)	217212.82 (8.05)	243435.11 (7.83)	225499.61 (7.74)
II. RURAL DEVELOPMENT	1033718.61 (5.69)	175910.84 (6.11)	180960.90 (6.99)	164514.11 (5.53)	196552.16 (7.29)	196612.19 (6.32)	219344.95 (7.53)
III. SPECIAL AREA PROGRAMMES	225016.00 (1.24)	29482.19 (1.02)	41844.75 (1.62)	34233.36 (1.15)	27132.35 (1.01)	35321.70 (1.14)	27775.42 (0.95)
IV. IRRI. & FLOOD CONTROL	3102529.00 (17.07)	429573.52 (14.93)	412415.80 (15.94)	470754.09 (15.84)	439864.99 (16.30)	472955.76 (15.21)	413977.91 (14.22)
V. ENERGY	4868426.00 (26.79)	783217.58 (27.22)	703427.15 (27.19)	768609.07 (25.86)	686222.30 (25.43)	763173.52 (24.55)	692792.71 (23.79)
VI. INDUSTRY & MINERALS	938274.72 (5.16)	153950.07 (5.35)	123673.68 (4.78)	144596.54 (4.86)	134480.87 (4.98)	164796.62 (5.30)	153545.20 (5.27)
VII. TRANSPORT	1494856.92 (8.23)	239930.89 (8.34)	227485.14 (8.79)	257198.54 (8.65)	255266.53 (9.46)	270514.74 (8.70)	265069.80 (9.10)
VIII. COMMUNICATIONS	1297.50 (0.01)	0.00	189.78 (0.01)	231.68 (0.01)	359.87 (0.01)	219.65 (0.01)	219.65 (0.01)
IX. SC., TECH. & ENVIRONMENT	34581.61 (0.19)	5185.41 (0.18)	3689.24 (0.14)	5422.45 (0.18)	4018.74 (0.15)	5547.00 (0.18)	5107.78 (0.18)
X. GENERAL ECONOMIC SERVICES	358151.61 (1.97)	65757.53 (2.29)	40271.88 (1.56)	89188.74 (3.00)	41354.73 (1.53)	112205.09 (3.61)	54984.02 (1.89)
XI. SOCIAL SERVICES	4456645.80 (24.52)	704894.83 (24.50)	621308.97 (24.01)	754812.47 (25.39)	665985.33 (24.68)	809375.30 (26.03)	820463.68 (28.18)
XII. GENERAL SERVICES	169393.84 (0.93)	30989.67 (1.08)	22835.93 (0.88)	33405.80 (1.12)	29558.05 (1.10)	34656.65 (1.11)	33088.58 (1.14)
GRAND TOTAL	18173500.00 @	2877431.96	2587489.61	2972535.81	2698008.74	3108813.35	2911869.29
	(100)	(100)	(100)	(100)	(100)	(100)	(100)

ANNEX-9.4

SECTORWISE OUTLAY/EXPENDITURE OF STATES AND UTs DURING 1992-95 (AT 1991-92 PRICES)

(Rs. Lakh)

MAJOR HEADS OF DEVELOPMENT	TOTAL (1992-95) APPROVED OUTLAY (i.e. col. 3+5+7)	TOTAL (1992-95) EXPENDITURE (i.e. col. 4+6+8)	% age of Col. 9 over Col. 2	% age of Col. 10 over Col. 2
1.	9.	10.	11.	12.
I. AGRI. & ALLIED ACTIVITIES	751543.50 (8.39)	652098.82 (7.95)	50.42	43.75
II. RURAL DEVELOPMENT	537037.14 (5.99)	596858.01 (7.28)	51.95	57.74
III. SPECIAL AREA PROGRAMMES	99037.25 (1.11)	96752.52 (1.18)	44.01	43.00
IV. IRRI. & FLOOD CONTROL	1373283.37 (15.33)	1266258.70 (15.45)	44.26	40.81
V. ENERGY	2315000.17 (25.84)	2082442.16 (25.40)	47.55	42.77
VI. INDUSTRY & MINERALS	463343.23 (5.17)	411699.75 (5.02)	49.38	43.88
VII. TRANSPORT	767644.17 (8.57)	747821.47 (9.12)	51.35	50.03
VIII. COMMUNICATIONS	451.33 (0.01)	769.30 (0.01)	34.78	59.29
IX. SC., TECH. & ENVIRONMENT	16154.86 (0.18)	12815.76 (0.16)	46.72	37.06
X. GENERAL ECONOMIC SERVICES	267151.36 (2.98)	136610.63 (1.67)	74.59	38.14
XI. SOCIAL SERVICES	2269082.60 (25.33)	2107757.98 (25.71)	50.91	47.29
XII. GENERAL SERVICES	99052.12 (1.11)	85482.56 (1.04)	58.47	50.46
GRAND TOTAL	8958781.12 (100)	8197367.64 (100)	49.30	45.11

Figures in bracket are inter-se percentages.

@ : Excludes Rs.4500.00 crore for Special Area Programmes as under :

		Amount (Crore)		
i)	N.E.C.	1160.00	iv) B.A.D.P.	640.00
ii)	T.S.P.	1250.00		
iii)	H.A.D.P.	1450.00	Total	4500.00

The total state sector VIII th plan outlay thus becomes Rs. 186235.00 crore.

ANNEX - 9.5

FINANCIAL PERFORMANCE OF STATES/UTs FROM 1992-93 TO 1994-95

(AT CURRENT PRICES)

Sl. No.	States/UTs	Eighth Plan (1992-97)	Annual Plan (1992-93)		Annual Plan (1993-94)	
		Agreed Outlay	Originally Approved Outlay	Actual Expenditure	Originally Approved Outlay	Actual Expenditure
1.	2.	3.	4.	5.	6.	7.
1.	Andhra Pradesh	10500.00	1660.00	2364.04	1851.00	2867.46
2.	Arunachal Pradesh	1155.00	245.00	233.61	290.00	263.91 *
3.	Assam	4662.00	960.00	655.44	1027.00	862.19
4.	Bihar	13000.00	2202.73	1149.18	2300.00	750.00 *
5.	Goa	761.00	152.50	141.96	170.00	147.94
6.	Gujarat	11500.00	1875.00	1939.75	2137.00	1900.00 *
7.	Haryana	5700.00	830.00	748.36	920.00	806.82
8.	Himachal Pradesh	2502.00	486.00	490.98	560.00	570.73
9.	Jammu & Kashmir	4000.00	820.00	620.00	880.00	653.74
10.	Karnataka	12300.00	1915.00	1971.41	3025.00	3019.16
11.	Kerala	5460.00	913.00	825.32	1000.00	1013.06
12.	Madhya Pradesh	11100.00	2400.00	1992.03	2400.00	2235.88
13.	Maharashtra	18520.00	3160.00	3372.80	3804.00	3832.80 *
14.	Manipur	979.00	210.00	170.95	230.00	174.84 *
15.	Meghalaya	1029.00	241.00	198.98	281.00	195.99
16.	Mizoram	763.00	160.00	165.17	185.00	174.31
17.	Nagaland	844.00	185.00	110.55	203.50	163.84 *
18.	Orissa	10000.00	1405.00	1054.33	1450.00	1095.19 *
19.	Punjab	6570.00	1500.00	885.30	1250.00	1142.68
20.	Rajasthan	11500.00	1400.00	1406.67	1700.00	1743.32
21.	Sikkim	550.00	110.00	102.53	120.00	121.62
22.	Tamil Nadu	10200.00	1751.00	1934.59	2101.00	2234.45
23.	Tripura	1130.00	282.00	217.94	310.00	224.16
24.	Uttar Pradesh	21000.00	3853.00	3457.61	4050.00	3249.58
25.	West Bengal	9760.00	1501.00	881.59	1550.00	1217.00
	Total - States	175485.00	30217.23	27091.09	33794.50	30660.67
	U.Ts.					
26.	A & N Islands	685.00	155.00	125.83	156.50	154.13
27.	Chandigarh	400.00	68.00	65.31	80.00	79.83
28.	D. & N. Haveli	80.00	18.15	18.16	22.00	23.96
29.	Daman & Diu	65.00	14.50	14.45	16.00	15.64
30.	Delhi	4500.00	920.00	911.07	1075.00	959.83
31.	Lakshadweep	120.00	25.00	19.32	32.00	23.30
32.	Pondicherry	400.00	90.00	87.77	108.00	108.00 *
	Total - UTs	6250.00	1290.65	1241.91	1489.50	1364.69
	Total - States &	# 181735.00	31507.88	28333.00	35284.00	32025.36

ANNEX - 9.5 (Contd.)

FINANCIAL PERFORMANCE OF STATES/UTs FROM 1992-93 TO 1994-95

(AT CURRENT PRICES)

Sl. No.	States/UTs	Annual Plan (1994-95) Originally Approved Outlay	Annual Plan (1994-95) Anti. Expenditure	Total (1992-95) Outlay (i.e.col.4 6 + 8)	Total (1992-95) Expenditure (i.e.col.5 7 + 9)	Variation (i.e.col.11 - col.10)	% age Variation (i.e.col.11 over col.10)
1.	Andhra Pradesh	2130.00	2170.00	5641.00	7401.50	1760.50	31.21
2.	Arunachal Pradesh	335.00	332.97*	870.00	830.49	-39.51	-4.54
3.	Assam	1051.00	1052.98	3038.00	2570.61	-467.39	-15.38
4.	Bihar	2400.00	900.00*	6902.73	2799.18	-4103.55	-59.45
5.	Goa	182.00	163.38	504.50	453.28	-51.22	-10.15
6.	Gujarat	2240.00	2240.83*	6252.00	6080.58	-171.42	-2.74
7.	Haryana	1025.00	1079.90	2775.00	2635.08	-139.92	-5.04
8.	Himachal Pradesh	650.00	660.32	1696.00	1722.03	26.03	1.53
9.	Jammu & Kashmir	950.00	950.00	2650.00	2223.74	-426.26	-16.09
10.	Karnataka	3275.00	3396.94	8215.00	8387.51	172.51	2.10
11.	Kerala	1260.00	1386.10	3173.00	3224.48	51.48	1.62
12.	Madhya Pradesh	2750.00	2549.59	7550.00	6777.50	-772.50	-10.23
13.	Maharashtra	4400.00	4758.00*	11364.00	11963.60	599.60	5.28
14.	Manipur	240.00	214.50*	680.00	560.29	-119.71	-17.60
15.	Meghalaya	281.00	220.35	803.00	615.32	-187.68	-23.37
16.	Mizoram	207.66	202.43	552.66	541.91	-10.75	-1.95
17.	Nagaland	220.00	134.36	608.50	408.75	-199.75	-32.83
18.	Orissa	1951.00	1464.18*	4806.00	3613.70	-1192.30	-24.81
19.	Punjab	1450.00	1450.00	4200.00	3477.98	-722.02	-17.19
20.	Rajasthan	2450.00	2450.00	5550.00	5599.99	49.99	0.90
21.	Sikkim	135.00	136.05	365.00	360.20	-4.80	-1.32
22.	Tamil Nadu	2750.00	2795.26	6602.00	6964.30	362.30	5.49
23.	Tripura	310.00	250.30	902.00	692.40	-209.60	-23.24
24.	Uttar Pradesh	4562.00	3870.31	12465.00	10577.50	-1887.50	-15.14
25.	West Bengal	1706.00	1483.31	4757.00	3581.90	-1175.10	-24.70
	Total - States	38910.66	36312.06	102922.39	94063.82	-8858.57	-8.61
	U.Ts.						
26.	A & N Islands	205.00	199.49	516.50	479.45	-37.05	-7.17
27.	Chandigarh	88.00	88.00	236.00	233.14	-2.86	-1.21
28.	D. & N. Haveli	25.00	25.99	65.15	68.11	2.96	4.54
29.	Daman & Diu	18.50	25.22	49.00	55.31	6.31	12.88
30.	Delhi	1560.00	1560.00$	3555.00	3430.90	-124.10	-3.49
31.	Lakshadweep	32.00	32.67	89.00	75.29	-13.71	-15.40
32.	Pondicherry	135.00	135.00	333.00	330.77	-2.23	-0.67
	Total - UTs	2063.50	2066.37	4843.65	4672.97	-170.68	-3.52
	Total - States &	40974.16	38378.43	107766.04	98736.79	-9029.25	-8.38

Note:- * : Expenditure details not yet intimated; approved revised outlay used.

$: Expenditure details not yet intimated; approved outlay used.

: This excludes Special Area Programmes of Rs. 4500 crore as under :

(i) N.E.C. = Rs. 1160.00, (ii) T.S.P. = 1250.00, (iii) H.A.D.P.= 1450.00 and (iv) B.A.D.P.= Rs. 640.00 crores. Total Rs. 4500.00 crores

The total State sector VIIIth Plan outlay thus becomes Rs. 186235.00 crore.

ANNEX - 9.6

FINANCIAL PERFORMANCE OF STATES/UTs FROM 1992-93 TO 1994-95
(AT 1991-92 PRICES)

(Rs. crore)

Sl. No.	States/UTs	Eighth Plan (1992-97)	Annual Plan (1992-93)		Annual Plan (1993-94)	
		Agreed Outlay	Originally Approved Outlay	Actual Expenditure	Originally Approved Outlay	Actual Expenditure
1.	2.	3.	4.	5.	6.	7.
1.	Andhra Pradesh	10500.00	1515.98	2158.94	1559.39	2415.72
2.	Arunachal Pradesh	1155.00	223.74	213.34	244.31	222.33
3.	Assam	4662.00	876.71	598.58	865.21	726.36
4.	Bihar	13000.00	2011.63	1049.48	1937.66	631.84
5.	Goa	761.00	139.27	129.64	143.22	124.63
6.	Gujarat	11500.00	1712.33	1771.46	1800.34	1600.67
7.	Haryana	5700.00	757.99	683.43	775.06	679.71
8.	Himachal Pradesh	2502.00	443.84	448.38	471.78	480.82
9.	Jammu & Kashmir	4000.00	748.86	566.21	741.36	550.75
10.	Karnataka	12300.00	1748.86	1800.37	2548.44	2543.52
11.	Kerala	5460.00	833.79	753.72	842.46	853.46
12.	Madhya Pradesh	11100.00	2191.78	1819.21	2021.90	1883.64
13.	Maharashtra	18520.00	2885.84	3080.18	3204.72	3228.98
14.	Manipur	979.00	191.78	156.12	193.77	147.30
15.	Meghalaya	1029.00	220.09	181.72	236.73	165.11
16.	Mizoram	763.00	146.12	150.84	155.86	146.85
17.	Nagaland	844.00	168.95	100.96	171.44	138.03
18.	Orissa	10000.00	1283.11	962.86	1221.57	922.65
19.	Punjab	6570.00	1369.86	808.49	1053.07	962.66
20.	Rajasthan	11500.00	1278.54	1284.63	1432.18	1468.68
21.	Sikkim	550.00	100.46	93.63	101.10	102.46
22.	Tamil Nadu	10200.00	1599.09	1766.75	1770.01	1882.43
23.	Tripura	1130.00	257.53	199.03	261.16	188.85
24.	Uttar Pradesh	21000.00	3518.72	3157.63	3411.96	2737.64
25.	West Bengal	9760.00	1370.78	805.11	1305.81	1025.27
	Total - States	175485.00	27595.64	24740.72	28470.51	25830.39
	Union Territories					
26.	A & N Islands	685.00	141.55	114.91	131.84	129.85
27.	Chandigarh	400.00	62.10	59.64	67.40	67.25
28.	Dadra & Nagar Haveli	80.00	16.58	16.58	18.53	20.19
29.	Daman & Diu	65.00	13.24	13.20	13.48	13.18
30.	Delhi	4500.00	840.18	832.03	905.64	808.62
31.	Lakshadweep	120.00	22.83	17.64	26.96	19.63
32.	Pondicherry	400.00	82.19	80.16	90.99	90.99
	Total - UTs	6250.00	1178.68	1134.16	1254.84	1149.70
	Total - States & UTs	# 181735.00	28774.32	25874.89	29725.36	26980.08

ANNEX - 9.6 Contd.

FINANCIAL PERFORMANCE OF STATES/UTs FROM 1992-93 TO 1994-95

(AT 1991-92 PRICES)

(Rs. crore)

Sl. No.	States/UTs	Annual Plan (1994-95) Originally Approved Outlay	Annual Plan (1994-95) Anti. Expenditure	Total (1992-95) Outlay (i.e. col.4 6 + 8)	Total (1992-95) Expenditure (i.e. col.5 7 + 9)	Variation (i.e.col.11 - col.10)	% age Variation (i.e. col. 11 over col.10)	% age expend. in first 3 yrs at constant prices compared to 8th plan outlay (col. 11 over col.3)
1.	2.	8.	9.	10.	11.	12.	13.	14.
1.	Andhra Pradesh	1616.08	1646.43	4691.46	6221.09	1529.63	32.60	59.25
2.	Arunachal Pradesh	254.17	252.63	722.23	688.31	-33.92	-4.70	59.59
3.	Assam	797.42	798.92	2539.34	2123.86	-415.48	-16.36	45.56
4.	Bihar	1820.94	682.85	5770.22	2364.18	-3406.05	-59.03	18.19
5.	Goa	138.09	123.96	420.58	378.24	-42.34	-10.07	49.70
6.	Gujarat	1699.54	1700.17	5212.21	5072.31	-139.90	-2.68	44.11
7.	Haryana	777.69	819.35	2310.75	2182.49	-128.25	-5.55	38.29
8.	Himachal Pradesh	493.17	501.00	1408.78	1430.20	21.42	1.52	57.16
9.	Jammu & Kashmir	720.79	720.79	2211.01	1837.75	-373.26	-16.88	45.94
10.	Karnataka	2484.83	2577.34	6782.13	6921.24	139.11	2.05	56.27
11.	Kerala	955.99	1051.67	2632.24	2658.85	26.60	1.01	48.70
12.	Madhya Pradesh	2086.49	1934.44	6300.18	5637.28	-662.90	-10.52	50.79
13.	Maharashtra	3338.39	3610.02	9428.95	9919.18	490.22	5.20	53.56
14.	Manipur	182.09	162.75	567.64	466.16	-101.48	-17.88	47.62
15.	Meghalaya	213.20	167.19	670.02	514.02	-156.01	-23.28	49.95
16.	Mizoram	157.56	153.59	459.53	451.28	-8.25	-1.80	59.15
17.	Nagaland	166.92	101.94	507.31	340.93	-166.38	-32.80	40.39
18.	Orissa	1480.27	1110.91	3984.95	2996.42	-988.52	-24.81	29.96
19.	Punjab	1100.15	1100.15	3523.09	2871.31	-651.78	-18.50	43.70
20.	Rajasthan	1858.88	1858.88	4569.60	4612.18	42.59	0.93	40.11
21.	Sikkim	102.43	103.22	303.98	299.32	-4.66	-1.53	54.42
22.	Tamil Nadu	2086.49	2120.83	5455.59	5770.02	314.43	5.76	56.57
23.	Tripura	235.20	189.91	753.90	577.79	-176.11	-23.36	51.13
24.	Uttar Pradesh	3461.31	2936.50	10391.99	8831.78	-1560.21	-15.01	42.06
25.	West Bengal	1294.39	1125.42	3970.97	2955.80	-1015.17	-25.56	30.28
	Total - States	29522.50	27550.88	85588.66	78121.99	-7466.67	-8.72	44.52

ANNEX – 9.6 Concld.

FINANCIAL PERFORMANCE OF STATES/UTs FROM 1992-93 TO 1994-95

(AT 1991-92 PRICES)

(Rs. crore)

Sl. No.	States/UTs	Annual Plan (1994-95) Originally Approved Outlay	Annual Plan (1994-95) Anti. Expenditure	Total (1992-95) Outlay (i.e. col.4 6 + 8)	Total (1992-95) Expenditure (i.e. col.5 7 + 9)	Variation (i.e.col.11 – col.10)	% age Variation (i.e. col. 11 over col.10)	% age expend. in first 3 yrs at constant prices compared to 8th plan outlay (col. 11 over col.3)
1.	2.	8.	9.	10.	11.	12.	13.	14.
	Union Territiories							
26.	A & N Islands	155.54	151.36	428.94	396.12	-32.82	-7.65	57.83
27.	Chandigarh	66.77	66.77	196.27	193.67	-2.60	-1.32	48.42
28.	Dadra & Nagar Haveli	18.97	19.72	54.08	56.49	2.41	4.46	70.61
29.	Daman & Diu	14.04	19.14	40.76	45.51	4.75	11.65	70.01
30.	Delhi	1183.61	1183.61	2929.44	2824.26	-105.18	-3.59	62.76
31.	Lakshadweep	24.28	24.79	74.07	62.06	-12.01	-16.21	51.72
32.	Pondicherry	102.43	102.43	275.61	273.57	-2.04	-0.74	68.39
	Total – UTs	1565.63	1567.81	3999.15	3851.67	-147.48	-3.69	61.63
	Total – States & UTs	31088.13	29118.69	89587.81	81973.66	-7614.15	-8.50	45.11

Note :

: This excludes Special Area Programmes of Rs. 4500 crore as under :

		Amount (crore)
(i)	N.E.C.	1160.00
(ii)	T.S.P.	1250.00
(iii)	H.A.D.P.	1450.00
(iv)	B.A.D.P.	640.00
	Total	4500.00

The total State sector VIIIth Plan outlay thus becomes Rs. 186235.00 crore.

ANNEX - 9.7

Progress of Plan Expenditure (1992-95)

(At Constant Prices)

		States	Achievement %
I.		**45 % to 60 %**	
	1.	Arunachal Pradesh	59.59
	2.	Andhra Pradesh	59.25
	3.	Mizoram	59.15
	4.	Himachal Pradesh	57.16
	5.	Tamil Nadu	56.57
	6.	Karnataka	56.27
	7.	Sikkim	54.42
	8.	Maharashtra	53.56
	9.	Tripura	51.13
	10.	Madhya Pradesh	50.79
	11.	Meghalaya	49.95
	12.	Goa	49.70
	13.	Kerala	48.70
	14.	Manipur	47.62
	15.	Jammu & Kashmir	45.94
	16.	Assam	45.56
II.		**30 % to 45 %**	
	17.	Gujarat	44.11
	18.	Punjab	43.70
	19.	Uttar Pradesh	42.06
	20.	Nagaland	40.39
	21.	Rajasthan	40.11
	22.	Haryana	38.29
	23.	West Bengal	30.28
III.		**Less than 30 %**	
	24.	Orissa	29.96
	25.	Bihar	18.19
		Average All States	44.52

ANNEX - 9.8

ANNUAL PLAN - 1995-96 - OUTLAYS (MAJOR HEAD-WISE) - STATES/UTs

(AT 1991-92 PRICES)

(Rs. Lakh)

SL. NO.	STATES/UTs		AGRICULTURE AND ALLIED ACTIVITIES	RURAL DEVELOPMENT	SPECIAL AREA PROGRAMMES	IRRIGATION AND FLOOD CONTROL	ENERGY	INDUSTRY AND MINERALS	TRANSPORT
1.	2.		3.	4.	5.	6.	7.	8.	9.
1.	Andhra Pradesh	$	5106 (2.28)	10142 (4.53)	528 (0.24)	87943 (39.25)	49645 (22.16)	4092 (1.83)	18085 (8.07)
2.	Arunachal Pradesh	*							
3.	Assam		11773 (11.71)	6809 (6.77)	253 (0.25)	6811 (6.77)	14445 (14.36)	5708 (5.68)	8730 (8.68)
4.	Bihar	*							
5.	Goa		794 (5.33)	223 (1.50)	0	2516 (16.90)	1262 (8.48)	502 (3.37)	2301 (15.45)
6.	Gujarat	$	12729 (6.88)	11857 (6.41)	0	42328 (22.87)	36092 (19.50)	9220 (4.98)	7884 (4.26)
7.	Haryana		6357 (7.17)	2430 (2.74)	540 (0.61)	17614 (19.87)	18571 (20.95)	3984 (4.49)	4748 (5.36)
8.	Himachal Pradesh		7638 (14.36)	1796 (3.38)	0	2252 (4.23)	9990 (18.78)	1429 (2.69)	5387 (10.13)
9.	Jammu & Kashmir	*							
10.	Karnataka		16833 (6.64)	13514 (5.33)	7092 (2.80)	62597 (24.69)	48870 (19.27)	15103 (5.96)	12925 (5.10)
11.	Kerala	$	14699 (13.37)	5390 (4.90)	106 (0.10)	12553 (11.42)	32553 (29.61)	13837 (12.59)	7897 (7.18)
12.	Madhya Pradesh	$	15165 (7.37)	22272 (10.83)	0	31435 (15.28)	57101 (27.76)	5961 (2.90)	5711 (2.78)
13.	Maharashtra	*							
14.	Manipur	$	1889 (8.88)	920 (4.32)	0	3725 (17.51)	3546 (16.67)	667 (3.14)	3070 (14.43)
15.	Meghalaya		2704 (12.44)	1298 (5.97)	233 (1.07)	1328 (6.11)	2599 (11.96)	992 (4.56)	5138 (23.64)

ANNEX - 9.8 Contd.

ANNUAL PLAN - 1995-96 - OUTLAYS (MAJOR HEAD-WISE) - STATES/UTs
(AT 1991-92 PRICES)

(Rs. Lakh)

SL. NO.	STATES/UTs	AGRICULTURE AND ALLIED ACTIVITIES	RURAL DEVELOPMENT	SPECIAL AREA PROGRAMMES	IRRIGATION AND FLOOD CONTROL	ENERGY	INDUSTRY AND MINERALS	TRANSPORT
1.	2.	3.	4.	5.	6.	7.	8.	9.
16.	Mizoram	1553 (9.65)	2649 (16.45)	87 (0.54)	179 (1.11)	2128 (13.22)	703 (4.37)	2374 (14.74)
17.	Nagaland	1496 (8.79)	2421 (14.23)	126 (0.74)	262 (1.54)	1535 (9.02)	643 (3.78)	2162 (12.70)
18.	Orissa *							
19.	Punjab	7652 (6.44)	3296 (2.77)	976 (0.82)	10740 (9.04)	49902 (42.01)	4656 (3.92)	4332 (3.65)
20.	Rajasthan	22511 (9.92)	13953 (6.15)	533 (0.24)	34001 (14.98)	57817 (25.48)	9588 (4.22)	17807 (7.85)
21.	Sikkim	1377 (10.11)	692 (5.08)	0	189 (1.39)	1870 (13.73)	1202 (8.83)	1321 (9.70)
22.	Tamil Nadu	18840 (8.30)	13837 (6.10)	0	9768 (4.30)	54663 (24.09)	24823 (10.94)	21811 (9.61)
23.	Tripura	3374 (13.59)	2521 (10.16)	1560 (6.29)	887 (3.57)	3460 (13.94)	1223 (4.93)	2475 (9.97)
24.	Uttar Pradesh $	28357 (7.30)	31768 (8.18)	5674 (1.46)	30519 (7.86)	130243 (33.53)	7894 (2.03)	37355 (9.62)
25.	West Bengal	7289 (4.98)	10988 (7.50)	1543 (1.05)	12128 (8.28)	43626 (29.79)	14580 (9.96)	10695 (7.30)
	TOTAL (STATES)							
	UNION TERRITORIES							
26.	A & N Islands	1116 (7.32)	226 (1.48)	0	150 (0.99)	1199 (7.86)	711 (4.67)	6451 (42.31)
27.	Chandiarh	184 (2.60)	128 (1.80)	0	14 (0.20)	716 (10.10)	104 (1.47)	252 (3.55)
28.	D & N Haveli	370 (18.00)	40 (1.97)	0	111 (5.38)	347 (16.86)	63 (3.07)	270 (13.14)
29.	Daman & Diu	113 (6.96)	14 (0.87)	0	72 (4.43)	244 (14.96)	35 (2.17)	213 (13.04)

ANNEX - 9.8 Contd.

ANNUAL PLAN - 1995-96 - OUTLAYS (MAJOR HEAD-WISE) - STATES/UTs

(AT 1991-92 PRICES)

(Rs. Lakh)

SL. NO.	STATES/UTs	AGRICULTURE AND ALLIED ACTIVITIES	RURAL DEVELOPMENT	SPECIAL AREA PROGRAMMES	IRRIGATION AND FLOOD CONTROL	ENERGY	INDUSTRY AND MINERALS	TRANSPORT
1.	2.	3.	4.	5.	6.	7.	8.	9.
30.	Delhi	965	4202	0	1182	31206	496	12866
		(0.79)	(3.44)		(0.97)	(25.58)	(0.41)	(10.55)
31.	Lakshadweep	484	77	0	131	287	128	926
		(17.69)	(2.82)		(4.79)	(10.47)	(4.66)	(33.83)
32.	Pondicherry	1589	350	0	449	2867	1484	896
		(12.76)	(2.81)		(3.61)	(23.03)	(11.92)	(7.20)
	TOTAL (UTs)	4821	5038	0	2110	36865	3022	21874
		(2.95)	(3.09)		(1.29)	(22.59)	(1.85)	(13.40)
	TOTAL (STATES & UTs)							

ANNEX - 9.8 (Contd.)

ANNUAL PLAN - 1995-96 - OUTLAYS (MAJOR HEAD-WISE) - STATES/UTs

(AT 1991-92 PRICES)

(Rs. Lakh)

SL. NO.	STATES/UTs		COMMUNI-CATIONS	SCIENCE, TECHNOLOGY AND ENVIRONEMENT	GENERAL ECONOMIC SERVICES	SOCIAL SERVICES	GENERAL SERVICES	TOTAL
1.	2.		10.	11.	12.	13.	14.	15.
1.	Andhra Pradesh	$	0	142	666	46252	1440	224043
				(0.06)	(0.30)	(20.64)	(0.64)	(100.00)
2.	Arunachal Pradesh	*						
3.	Assam		0	336	3152	41255	1295	100567
				(0.33)	(3.13)	(41.02)	(1.29)	(100.00)
4.	Bihar	*						
5.	Goa		0	57	221	6078	938	14894
				(0.38)	(1.49)	(40.81)	(6.30)	(100.00)
6.	Gujarat	$	117	116	3121	61594	48	185106
			(0.06)	(0.06)	(1.69)	(33.27)	(0.03)	(100.00)
7.	Haryana		0	171	1377	32296	562	88652
				(0.19)	(1.55)	(36.43)	(0.63)	(100.00)
8.	Himachal Pradesh		71	87	4874	18598	1070	53191
			(0.13)	(0.16)	(9.16)	(34.96)	(2.01)	(100.00)
9.	Jammu & Kashmir	*						
10.	Karnataka		0	425	894	72740	2553	253546
				(0.17)	(0.35)	(28.69)	(1.01)	(100.00)
11.	Kerala	$	0	816	1232	19174	1672	109929
				(0.74)	(1.12)	(17.44)	(1.52)	(100.00)
12.	Madhya Pradesh	$	0	3330	7769	56701	228	205674
				(1.62)	(3.78)	(27.57)	(0.11)	(100.00)
13.	Maharashtra	*						
14.	Manipur	$	0	85	1052	5728	595	21277
				(0.40)	(4.94)	(26.92)	(2.80)	(100.00)
15.	Meghalaya		0	85	694	5923	745	21739
				(0.39)	(3.19)	(27.24)	(3.43)	(100.00)
16.	Mizoram		0	28	996	4024	1378	16099
				(0.18)	(6.19)	(25.00)	(8.56)	(100.00)

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ANNEX - 9.8 Contd.

ANNUAL PLAN - 1995-96 - OUTLAYS (MAJOR HEAD-WISE) - STATES/UTs

(AT 1991-92 PRICES)

SL. NO.	STATES/UTs		COMMUNI-CATIONS	SCIENCE, TECHNOLOGY AND ENVIRONEMENT	GENERAL ECONOMIC SERVICES	SOCIAL SERVICES	GENERAL SERVICES	TOTAL
1.	2.		10.	11.	12.	13.	14.	15.
17.	Nagaland		0	23	2460	5219	672	17021
				(0.13)	(14.45)	(30.66)	(3.95)	(100.00)
18.	Orissa	*						
19.	Punjab		0	391	2928	31496	2426	118794
				(0.33)	(2.46)	(26.51)	(2.04)	(100.00)
20.	Rajasthan		0	369	5750	62060	2562	226950
				(0.16)	(2.53)	(27.35)	(1.13)	(100.00)
21.	Sikkim		0	74	189	3574	3127	13617
				(0.54)	(1.39)	(26.25)	(22.96)	(100.00)
22.	Tamil Nadu		0	430	545	81145	1089	226950
				(0.19)	(0.24)	(35.75)	(0.48)	(100.00)
23.	Tripura		26	75	753	8183	284	24823
			(0.11)	(0.30)	(3.03)	(32.97)	(1.14)	(100.00)
24.	Uttar Pradesh	$	0	587	37168	77739	1170	388475
				(0.15)	(9.57)	(20.01)	(0.30)	(100.00)
25.	West Bengal		0	155	1518	41015	2917	146454
				(0.11)	(1.04)	(28.01)	(1.99)	(100.00)
	TOTAL (STATES)							
	UNION TERRITORIES							
26.	A & N Islands		0	38	570	4479	308	15248
				(0.25)	(3.73)	(29.38)	(2.02)	(100.00)
27.	Chandiarh		0	31	195	5433	34	7092
				(0.44)	(2.75)	(76.61)	(0.48)	(100.00)
28.	D & N Haveli		0	4	72	754	26	2057
				(0.17)	(3.52)	(36.66)	(1.24)	(100.00)
29.	Daman & Diu		0	9	163	632	135	1631
				(0.57)	(10.00)	(38.74)	(8.26)	(100.00)

2383 PC/96—27B

ANNEX - 9.8 Concld.

ANNUAL PLAN - 1995-96 - OUTLAYS (MAJOR HEAD-WISE) - STATES/UTs

(AT 1991-92 PRICES)

(Rs. Lakh)

SL. NO.	STATES/UTs	COMMUNI-CATIONS	SCIENCE, TECHNOLOGY AND ENVIRONEMENT	GENERAL ECONOMIC SERVICES	SOCIAL SERVICES	GENERAL SERVICES	TOTAL
1.	2.	10.	11.	12.	13.	14.	15.
30.	Delhi	0	61	867	65357	4783	121986
			(0.05)	(0.71)	(53.58)	(3.92)	(100.00)
31.	Lakshadweep	11	35	97	487	75	2738
		(0.39)	(1.27)	(3.55)	(17.77)	(2.75)	(100.00)
32.	Pondicherry	0	46	173	4340	255	12448
			(0.37)	(1.39)	(34.86)	(2.05)	(100.00)
	TOTAL (UTs)	11	224	2138	81482	5615	163200
		(0.01)	(0.14)	(1.31)	(49.93)	(3.44)	(100.00)
	TOTAL (STATES & UTs)						

$: Sector-wise details of Annual Plan 1995-96 not yet finalised, hence the proposed sector-wise break-up of the total approved outlay given.
* : Sector-wise details of Annual Plan 1995-96 not yet finalised.

Annex - 9.9

Hill Area Development Programme : Statewise
Eighth Plan Outlay, Expenditure 1992-95 and Outlay 1995-96

(at constant prices)

(Rs. Crore)

States	Eighth Plan Outlay	Expenditure				% age 1992-95 to 8th Plan outlay.	Outlay 1995-96
		1992-93	1993-94	1994-95	1992-95		
A. Designated Hill Areas Under HADP							
Assam	194.34	35.50	35.43	31.90	102.83	52.91	32.85
Tamil Nadu	55.49	10.13	15.00	13.51	38.64	69.63	13.91
Uttar Pradesh	910.04	166.22	166.02	149.51	481.75	52.94	153.95
West Bengal	96.60	17.64	17.36	15.64	50.64	52.42	15.77
B. Designated Talukas under Western Ghats							
Maharashtra	62.69	13.26	11.56	10.48	35.30	56.31	10.76
Karnataka	46.35	8.65	8.05	7.75	24.45	52.75	7.96
Kerala	39.09	5.61	7.19	6.53	19.33	49.45	6.71
Tamil Nadu	32.72	6.63	6.12	5.46	18.21	55.65	5.61
Goa	9.55	1.42	2.01	1.61	5.04	52.77	1.65
Total HADP * :	1450.00	265.09	268.86	247.70	776.65	53.56	249.65

* Includes funds for surveys and studies and Western Ghats Secretariat.

Annex - 9.10

BORDER AREA DEVELOPMENT PROGRAMME - OUTLAYS & EXPENDITURE
(at constant prices)

(Rs. Lakh)

States	Eighth Plan Outlay	Expenditure 1992-93	Expenditure 1993-94	Expenditure 1994-95	Expenditure 1992-95	% age 1992-95 to 8th Plan outlay.	Outlay 1995-96
Assam			329.88	331.81	661.69		272.34
Gujarat			588.16	601.92	1190.08		566.67
J&K			1179.44	1327.77	2507.21		1365.25
Meghalaya			327.95	321.20	649.15		260.99
Mizoram			238.90	246.84	485.74		180.14
Punjab			543.07	598.13	1141.20		563.83
Rajasthan *			5986.51	6103.19	12089.70		5947.52
Tripura			677.22	744.56	1421.78		723.40
West Bengal			1839.28	1864.19	3703.47		2034.75
Total	64000.00	7755.00	11710.41	12139.61	23850.02	37.27	** 12482.27

Note : BADP was revamped from 1993-94. Prior to this BADP extended only to bordering Pakistan and releases were made on schematic basis.

* Includes outlay / expenditure for Indira Gandhi Nahar Project

* * Includes Rs. 800 lakh for Photo Identity Cards.

Annex - 9.11

North Eastern Council - Eighth Plan Outlay, Expenditure 1992-95 and Outlay 1995-96 (at constant prices).

(Rs. in crore)

Eighth Plan Outlay	Expenditure				% Exp. 1992-95 to Eighth Plan outlay.	Outlay 1995-96
	1992-93	1993-94	1994-95	1992-95		
1160.00	* 211.51	223.18 *	270.86 **	705.55 **	60.82	296.45* *

* Includes LIC Loan.

* * Includes LIC Loan, SLR Borrowings and Market Borrowings.

CHAPTER - 10
DECENTRALISED PLANNING

Overview

Decentralisation of socio-economic planning process and plan implementation to the grass root levels has been a matter of continuing concern. Another facet of this endeavour is to involve the people in plan formulation and implementation, taking this to the lowest area levels. Empowerment of Panchayats, as effective local self-governing institutions is enshrined as a Directive Principle of the State Policy in the Constitution. Over years the different States have enacted legislations setting up Panchayats at the village, block or District level with varying modes of composition - directly elected peoples' representatives, nominated persons or a combination of the two, at different levels. Nevertheless, given the experience in efficacious achievements of objectives, a substantial degree of experimentation by different States from time to time, has been an important feature. The 73rd and 74th Amendments to the Constitution of India mark a watershed in these developments. The Amendment would form the basis of amended state legislations on Panchayati Raj Institution (PRI) to put the Panchayats on a strong foundation and virtually forming a third tier of governance, after the Union and State Governments. The NDC Committee on Micro-level Planning and Involvement of People at Grass Root Level supplements this process by addressing itself to question of decentralisation of planning process. Several important issues arise in terms of institutional matters, allocation of sectoral and sub-sectoral functions to the Panchayats and methodological aspects of plan formulation and implementation.

The Eighth Plan Objectives

10.2 The Eighth Plan recognises the essential need to involve people in the process of development and remove the all pervasive attitude of passive observance and total dependence on the Government for development activities. The Plan aims to formulate institutional strategies which would create and strengthen various peoples' institutions at the District, Block and village levels. Elected Panchayats and Nagarpalikas are envisaged to play a larger role in formulating and implementing the development projects in their areas. They are to be vested with adequate financial resources, technical/managerial inputs and decision making authority.

10.3 The Plan document elaborates these ideas and refers extensively to the need for bringing about systematic involvement and active participation of the people in developmental activities. Two principal grounds which provide the rationale for formulations are: (a) decentralised institutions have the capacity to diagnose the needs of the areas, interact with the governmental agencies in order to draw need based local plans and to implement those plans in close cooperation with the administration; and (b) being accountable to the community, these institutions are better placed to improve the delivery systems in administering schemes and programmes drawn up responding to the felt needs of the people, to optimise the benefits reaching those and to whom they are meant.

Community Development Blocks

10.4 The early steps can be traced to the Balwant Rai Mehta Committee which reviewed the working of the Community Development Blocks and plan projects and suggested Panchayati Raj institutions having a three tier integrated organic structure. State legislations creating institutions, with suitable modifications allowing for regional variations, followed. Panchayati Raj Institutions got off to a good start in the sixties. In course of time, however,except for a few states like Maharashtra, Gujarat, Karnataka and West Bengal, others either superceded the institutions or allowed them little freedom to operate.

Decentralisation of Planning - District Planning

10.5 The Administrative Reforms Commission highlighted the need for District Planning and to relate it to those areas where local variations in the pattern and process of development were likely to yield quick results in term's of growth. In 1969, guidelines were communicated to the States for formulating district plans. These detailed the concept of district plan and methodology of drawing up such a plan in the framework of annual, medium term and perspective plans. The Commission also agreed to assist the States in the setting up of planning machinery at the district and sub district level over the years. The scheme for Strengthening of Planning Machinery at State Level was started in 1972-73. This was extended to the District level in 1982-83.

Block Planning

10.6 A Working Group on Block level Planning headed by Prof. M.L. Dantwala submitted a report in 1978. It identified the remoteness of planning agencies at the District Level from the actual scene of action as the cause of mismatch of actual financial allocations with location specific needs. A forceful plea was made that Block level planning, (the same area which was covered by Community Development Blocks) should be the appropriate sub-state planning level for proper appreciation of the felt needs of the people. Thereafter, guidelines were issued formulation of Block level plans.

10.7 At about the same time, another Committee headed by Shri Asoka Mehta had been appointed to go into the working of Panchayat Raj Institutions. It advocated that developmental efforts had to be in tune with the needs of the poor and marked by a high degree of co-ordination which was not possible to achieve at the State level. While recommending Block level planning, the Committee stressed that the District officials should be properly qualified and placed under the control of the Zilla Parishad (Z.P.). It also suggested that the Panchayat Raj Institutions should be made to develop into agencies for planning schemes which were of immediate necessity.

State Legislation on Panchayati Raj Institutions

10.8 Legislations were passed by different States constituting institutions at the Block and District level. There is considerable variation from State to State in the constitution and composition of Panchayats at various levels starting from the village upto the district in different states, as also the manner of election of the office-bearers. Even in terms of functions entrusted to the PRIs at different levels, the position varies considerably. One important feature to be noted was the association of MPs and MLAs with these institutions. Again the pattern was quite varied. Some did not include MLAs or MPs. In others, they were members of the District or Block Panchayats with or without voting rights.

10.9 Powers and functions entrusted to the PRIs, particularly those at the Block and District level, broadly follow two types of pattern namely, the legislation itself conferring functions to District Panchayats as is the case in Maharashtra, Gujarat or Karnataka, or the legislation only making enabling provisions for certain functions to be entrusted to Zilla Parishads by a general or special order of the State Government.

10.10 The various Acts dealing with Panchayat Institutions did provide for income flow to these institutions at different levels but again the pattern was different from State to State. In this connection, it should be noted that where certain schemes were transferred to the Zilla Parishads corresponding outlay for implementation were also made over to Zilla Parishads. Broadly, three categories of activities of the Zilla Parishads emerge from the point of funding the programmes :- (i) schemes undertaken from funds raised by Z.P.s or devolving to them under the Statute (ii) schemes transferred by State Government and (iii) schemes implemented based on specific orders of the Government. In the last category of cases, the degree of freedom exercised in the execution of the scheme/programme was limited. Unless the statute itself provided for certain types of activities/schemes to be transferred, the extent of activitites entrusted would depend on special/general orders of the State Governments.

73rd Amendment

10.11 The 73rd Amendment to the Constitution is almost the culminating point of the evolutionary process in regard to decentralisation of democratic power. It confers constitutional status to the Panchayats at District and sub-District levels and envisages setting up of Panchayats at village, intermediate and District levels in every State. One major element is giving representation to the MPs and MLAs in the Block and District Panchayats. The Amendment has provisions which are of great significance in so far as they relate to socio-economic planning. These concern preparation of development plans, implementation of development schemes, power to levy and collect taxes, constitution of State Finance Commissions to review financial position of Panchayats, delineation of subjects which can be assigned to the Panchayats and invalidating any law in force which is inconsistent with the Amendment. The State Governments are expected to amend their laws to make them conform to the Constitutional Amendment. A target date was fixed for completion of this process.

74th Amendment

10.12 The 74th Amendment to the Constitution has provided the legal basis for local self government in Urban Areas for the first time. It provides the municipalities with powers and authority, as may be necessary, to carry out the responsibilities conferred upon them including those related to matters listed in the Twelfth Schedule. It empowers the State Finance Commission to review the financial position of the Municipalities and recommend the pattern of sharing of taxes, duties, tolls, etc. as also grants-in-aid from the Consolidated Fund of the state. According to this Amendment a District Planning Committee is to be constituted in every state which will consolidate the plans prepared by the Panchayats and the Municipalities in the district so that a draft development plan may be prepared for the district as a whole.

Block or District Level Planning

10.13 The principal issues relating to the question of decentralisation of planning and implementation of schemes could be broadly classified under three heads namely:

i) Institutional aspects;

ii) Allocations of sectoral and sub-sectoral functions falling exclusively in the mandate of PRIs; and

iii) Planning and implementation aspects.

Many of these aspects would have substantial overlaps and a policy in regard to one would have bearing on other aspects.

10.14 The amendments being carried out in the State legislations dealing with constitution of Panchayati Raj Institutions, following the 73rd Amendment, would require preparation of perspective, 5 years or annual plans to be carried out at the Block or District levels. Preparation of the Plan at the District level would imply that while the lower tier i.e., the Village or Block panchayat would initially prepare draft plans for their areas, the aggregation and integration of the plans would be carried out at the District level and would have to be approved/sanctioned by the Zilla Parishads. The implementation of such plans would be the primary responsibility of the Block or Village Panchayats. On the other hand, if the preparation of the area plans are to be approved at the Block levels, at the District level only an exercise in consolidation could be expected.

10.15 In 1985 a Committee was constituted by the Planning Commission under the Chairmanship of Dr. G.V.K. Rao to review the existing administrative arrangements for Rural Development and Poverty Alleviation Programme (CAARD), and to recommend appropriate structural mechanism for ensuring that they are planned in an integrated manner and effectively implemented. In the Committee's view, the District should be the basic unit for policy planning and programme implementation and the Zilla Parishad could, therefore, become the principal body for the management of all development programmes which can be handled at that level. It was recognised that the major operational machinery for implementation of the District Rural Development Plan will be that of the Block set up.

10.16 The State Finance Commissions are to be constituted in the wake of the 73rd and 74th Amendment. The task of the Commission is really challenging as they are to deal with urban localbodies and over 500 Zilla Parishads, 5000 Panchayat Samitis and nearly 2.5 lakh Gram Panchayats.

Non-Government Organisations

10.17 Another issue of importance is the modalities adopted by the Central Government in the implementation of schemes. In many schemes, the various Ministries/departments have been seeking to provide funds to NGOs for undertaking developmental activities as in the case of many facets of rural development - drinking water, rural health and sanitation, wastelands development, family welfare etc. If these functions are to lie in the province of Panchayats, the question is whether parallel implementation of schemes through NGOs by the Centre is at all advisable or whether association of the NGOs working in the local area be left to the judgement of the local Panchayats.

Special Central Assistance for Sub-Plans

10.18 Another aspect of critical significance is the sub- plan approach adopted by the Central Government in ameliorating the socio-economic lot of under-privileged sections of society such as the members of the Scheduled Tribes under Tribal Sub Plan and Scheduled Castes through Sub Component Plans. The Central Government provides assistance to the

States for improving the efficacy of the ongoing programmes taken up by the State Governments to improve the lot of these under-privileged sections.

10.19 As brought out in the 73rd Amendment, the implementation for economic development and social justice are to be entrusted to the Panchayats including those in relation to matters included in the Eleventh Schedule. A view will have to be taken as to whether the present administrative arrangements made for implementation of the Tribal Sub Plans through the concept of Integrated Tribal Development Blocks and the SCPs as a State administered function should continue or these be brought under the aegis of the ZPs.

Agro-Climatic Zonal Planning

10.20 In 1988, the Planning Commission had undertaken an exercise on the desirability of bringing in agricultural planning based on natural resources endowment and available technologies. The country was divided into 15 broad Agro Climatic Regions and later into about 80 sub zones on the basis of homogenous agro climatic and soil parameters. Zonal Plan Teams(ZPTs) were constituted and zonal strategies were first worked for rapid agricultural development taking into account the natural resources as well as available technology.

10.21 Thereafter, it was decided to work out district strategies considering that this is commonly accepted as the operational administrative area. The Agro-Climatic Regional Planning (ARCP) unit in the Planning Commission has been seeking to put in place agricultural planning based upon this approach rather than the traditional agricultural planning which essentially had agricultural commodity production orientation. In the Eighth Plan a beginning is being made to operationalise agricultural planning on agro climatic zonal basis and to develop the institutional framework for the preparation of district agriculture plans in different agro-climatic regions. In subsequent Plans the State agriculural plan would be but an aggregation of district plans and the national plan an aggregation of State agricultural plans.

10.22 Currently attempts are being made to institutionalise the ACRP exercise in Tamil Nadu, West Bengal, Assam and Orissa and to internalise the experiences in terms of approach and its application pertaining to land and water related activities in the existing/emerging planning and development system in the country. The general model followed for institutionalisation is that of state level orientation with detailed district level orientation of functionaries through both normal training programmes and planning assignments. The planning assignment in the district starts with strategy formulation and then moves to formulation of schemes. This exercise is led either by the District Collector or the Chief Executive Officer of Zilla Parishad. All related departmental functionaries, financial institutions, state agricultural universities etc. are involved. In case of West Bengal, there is a very close involvement of Panchayat Samitis.

10.23 In essence, the formulation of a district plan based upon the strategies advocated by the ZPTs would have looked at afresh. The Schemes/programmes to be taken up in a district would have to be guided by these considerations and one could expect considerable variation in the components of different schemes/projects so that local problems would be addressed. To some extent, the Small Farmers Agri Business Consortium also seek the same goal though this has a much larger technology orientation as well as emphasis on processing of agricultural commodities.

10.24 An issue is whether these alternative approaches to agricultural planning should be merged with the functioning of Zilla Parishads, or be allowed to be operated as separate concurrent function by the State since it is presently being attempted on a pilot project basis. One significant matter that needs a clear view is whether the ZPs can bring about necessary linkages between research, extension, input delivery agencies, financial institutions and markets, inherent in the agricultural planning on ACR considerations. A similar view also needs to be taken in respect of wastelands development programmes.

10.25 Merely allocation of some sectoral or sub-sectoral functions to the PRIs may not be sufficient for an orderly and systematic growth in the concerned sector. The latter may call for linkages to be established between programmes being implemented with markets on the one hand and others providing services. Even with State intervention at the highest levels, it may not have been easily possible to ensure that effective linkages are brought about. Often it is the administrative machinery at the higher levels who are concerned such as the heads of Technical Departments or State Secretariat Departments. There has to be clear recognition that despite the decentralised process the State's role under several heads of development will need to continued to and make the programmes undertaken by the PRIs implemented efficaciously.

10.26 For decentralised planning to be truly reflective of the felt needs of the people, it is essential that the plan formulation exercise should be initiated at the lower areal levels. Undoubtedly, such an exercise would require a greal deal of data base, information and the use of statistics, studies etc. One may have to examine whether such information will be available and at what levels such information support system will be created. This has been considered in the NDC Committee on Micro Level Planning which has recommended re-examination ofthe existing data base with a view to making it more usable.

10.27 There will have to be a clear understanding that programmes/projects will be formulated to meet the requirements in the local area and will be financed out of block grants. Perhaps, it is in this light that the Amendment Act includes provision of grant-in-aid. If the State Govt. were to design the schemes/projects and expect them to be implemented, it may still not adequately answer the question of these programmes meeting the needs of the local people.

10.28 If the schemes are to be formulated at the district and sub-district levels it would, ipso facto, mean that the PRIs will have necessary expertise to formulate schemes. Presently different functionaries of State Govts. have powers as per well established regulations dealing with delegation of financial and technical powers. If it is contemplated that the technical approvals for projects and finacial approvals be accorded at the district level, one may have to look at the existing delegation orders. Specific orders need also to be issued on the extent of supervision and responsibility of officers of various departments at the State headquarters.

Scheme for Strengthening of Planning Machinery

10.29 In order to buttress the efforts of the States towards decentralisation of the planning process, a Centrally sponsored scheme for Strengthening of Planning Machinery at State level was started in 1972-73. Under this scheme two-thirds of the expenditure incurred on posts which are in accordance with the guidelines and have the prior aproval of the Planning Commission, is reimbursed. With the increased emphasis on decentralised planning, this scheme was extended to the district level in 1982- 83. A number of States have taken advantage of this scheme to set up nucleus planning cells at district level. Expenditure at the district level is shared on 50:50 basis between the Centre and the States.

10.30 The Eighth Plan Allocation for this scheme is Rs. 10 Crore. The actual expenditure incurred has been as follows:

	(Rs. in lakh)
1992-93	66.00
1993-94	28.02
1994-95	20.00

10.31 There have been consistent shortfalls between the budget estimates for this scheme and the actual expenditure incurred as valid demands from State Governments have not been forthcoming. State Governments which have been availing of the benefits of this scheme during the Eighth Plan are Arunachal Pradesh, Haryana, Madhya Pradesh, Maharashtra, Orissa, Rajasthan and Tripura.

NDC Committee on Micro-Level Planning

10.32 The 43rd meeting of the National Development Council, decided to set up a Committee on Micro-Level Planning and Involvement of People at Grass Root Level. The terms of reference of the Committee were:

i) to define the scope and content on Micro-Level or Sub-State Level in the context of State Planning;

ii) to delineate the procedure and to device steps to make Micro Level Planning operationally effective and viable; and

iii) to suggest rational and pragmatic ways for involvement of people at Grass Root Level.

10.33 The Committee submitted its report in April, 1993. The Committee's recommendations include (i) adoption of the Block or the Taluka or even a group or a cluster of villages such as what is called the Mandal as the smallest unit of planning; (ii) Monitoring and Evaluation of the Schemes in the sphere of micro level planning by the Micro Level Planning Body itself; (iii)Revision of the Centrally sponsored schemes on Strengthening of Planning Machinery so that agreed expenditure on the cost of technical staff, at least upto the block or taluka level, is appropriately shared between the Central and State Governments; (iv) Appropriate training of personnel; examination of the adequacy of the DISNIC - Plan Programme; (v) Implementation of employment related programmes and schemes such as JRY, IRDP, DDP, MNP, and Local Development Works to be the exclusive preserve of Micro-Level Planning bodies; (vi) Merger of institutions such as DRDA, DPB, etc. with the PRIs wherever feasible ; (vii) Introduction of concept of Incentive Outlay to foster people's involvement; (viii) Allocation of "Untied Funds" amounting to at least 5% of State's Annual Plan Outlay to District and lower levels; (ix) Contribution of 5% of total Plan Outlay of the State to Micro-Level Planning towards Minimum Needs Programme; (x) Reservation of at least 1% of State's Annual Outlay for schemes like poverty alleviation and employment generation which need to be planned and funded at village level; (xi) transfer of at least 30% of the State's Plan Outlay to sub State level bodies in addition to the flow of funds already enumerated; and (xii) separate budget head for identifying flow of funds to State level bodies.

10.34 The recommendations of the NDC committee on Micro-Level Planning were endorsed at the 46th meeting of the NDC held on 18th September, 1993. As most of these recommendations are to be implemented by the State Governments, their response was sought. Most of the State Governments have responded but replies have still to be received from a few. A summary of the response is appended. (see Annex 10.1)

10.35 The NDC Committee has recommended that the Blocks or the Talukas or even a group or a cluster of villages be focussedupon as the smallest unit of planning. Not all States have agreed with this. At present, most of the State Governments have adopted the District as the unit of planning. Some states such as Andhra Pradesh, Haryana, Kerala, etc. have shown their willingness to extend Micro-Level Planning to the sub-district level but other States such as Madhya Pradesh, Rajasthan and Manipur have stated that it is not feasible to adopt sub District level planning.

10.36 Regarding the recommendation on proper training for decentralised planning, all States are unanimous in their opinion that training should be provided. However, while some of the States such as Haryana and Andhra Pradesh feel that the institutions in their States are well equipped to provide the necessary training, other States such as Goa and Tripura would like the Central Government to contribute towards training responsibilities.

10.37 Regarding the Centrally sponsored schemes of Strengthening of Planning Machinery, almost all the States have commented that appropriate input would be required from the Centre to suitably strengthen technical capabililties of the Planning Departments and regarding devolution of responsibililties to sub-state level planning. Most of the States agreed with the NDC's recommendation that powers have to be confered on Micro-Level Planning Bodies.

10.38 The recommendation of the NDC Committee regarding financial devolution has , however, evoked mixed reponses from the State Governments and some State Governments such as Andhra Pradesh, Punjab, Goa, etc. have stated that it would not be possible to devolve the quantum of funds recommended by the Committee as sectors such as irrigation and power, account for a large percentage of plan outlay. Most States are of the opinion that the proportion of funds have to be given to sub - state level bodies should be left to the discretion of the State Governments.

10.39 While most of the State Governments support the recommendation that NGOs, local people and local youth should be involved in the planning process, the actual modalities of the involvement of NGOs etc. have still to be worked out by most of the States. A few States such as Haryana, Karnataka, etc. feel that NGOs can be involved in a limited way only in the planning process.

10.40 Thus, the State Governments have reacted in mixed fashion to the various recommendations of the report of the NDC Committee on Micro-Level Planning. As far as the three most important elements of the recommendations are concerned namely unit of planning, devolution of authority and devolution of funds, there is to be no universal agreement. Regarding the decision on the unit of planning, currently very few States have been able to decentralise the planning process below the district level. In fact, even at this level, the process is weak and a district plan is often an amalgamation development schemes and programmes for the districts. It may, therefore be concluded that at least for the present, the States may not be ready to extend planning machinery below the district level. Sub District Level Planning, at this stage, would also mean spreading scarce resources too thinly to have the desired impact on the technical capabilities of the districts. As far as devolution of authority and funds to micro level bodies is concerned, these would be determined to a large extent by the powers conferred on the local bodies by the Panchayati Raj Legislations of the State Governments and the funds devolved to them by the State Planning Commissions.

10.41 Pending the recommendations of the State Finance Commissions, the Tenth Finance Commission has made ad-hoc provision of specific grants to the States. This has been estimated on the basis of rural population as given by the 1971 census. As most of the funding requirements of Panchayats are to be met by transfer along with functions from the States and their own resources, the Tenth Finance Commission has recommended an adhoc allocation of Rs. 100 per capita of rural population.

10.42 The amount recommended by Tenth Finance Commission is to be distributed amongst the Panchayati Raj Institutions over and above their dues by way of their share of assigned taxes, duties, tolls, funds, transfer activity related budgets and grants. According to the Tenth Finance Commission, this additional amount will be required even in those States which are not required to have Panchayats. The additional amounts would be required to be given to supplement the resources of similar Local Representative Bodies. So far as Municipal bodies are concerned, the Tenth Finance Commission has made a provision of Rs. 1000 crores for the 5 year period covered by their recommendations.

10.43 The Inter-State distribution is based on the Inter-State ratio of the slum population derived from the urban population figures as per 1971 census. Report of Tenth Finance Commission also brings out the need for measures to augment State Consolidated Funds in order to supplement resources of Panchayats, but this requirement would not arise until 1996-97 since in majority of cases, Panchayats are yet to become functional.

ANNEX 10.1

RECOMMENDATION	ACCEPTABLE			NOT	NOT
	BLOCK	DISTRICT	PANCHAYAT/ VILLAGE	FEASIBLE	RELEVANT
1. Participation of people at grass root level can be ensured through viable Gram Panchayats.	Haryana	Goa	Karnataka	-	Chandigarh
	Orissa	Rajasthan	Kerala	-	Sikkim
Whatever be the unit of planning, the Gram Panchayat has to be accorded its due	Punjab	Tamilnadu	Himachal	-	Arunachal Pradesh
role for securing the participatory aspect of	J&K	Manipur	Bihar	-	Lakshadweep
planning and implemenation. The Committee considers that the Block or the Taluka or even a group of cluster of villages such as what is	Andhra Pradesh (group of Mandals)	Maharashtra	Assam Tripura	-	
called the Mandal (in States like Karnataka and Andhra Pradesh) be focussed upon as	Delhi		Mizoram Daman & Diu		
the smallest unit of planning and recommends the same for adoption. The Committee would like to leave final choice in this matter to the State Governments.	Gujarat - Agrees				

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT
2. Monitoring and evaluation of the schemes which are in the sphere of the micro level planning body, as also the district level body, have to be left to them. There should not be any interrvention of the State government in deciding what scheme should be continued or left out.	Andhra Pradesh Assam Goa Gujarat Himachal Pradesh J&K Sikkim	Govt. of Bihar feels that there should be no interference if schemes are implemented according to guidelines. Haryana M.P. & Assam are of the opinion that monitoring should be done by body other than the implementing agency. Karnataka is of the opinion that monitoring/evaluation is feasible only at district level. The Governments of Kerala, Maharashtra, Rajasthan, Punjab, Tamilnadu and Tripura are of the opinion that the State has to exercise control to ensure adherence to State policies and to prevent mis-utilisation. Daman & Diu - owing to lack of manpower. Delhi.	Arunachal Pradesh Manipur Mizoram Chandigarh Lakshadweep

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN.
3. The Centrally Sponsored Scheme on Strengthening of the Planning machinery may be suitably revised so that agreed expenditure on the cost of technical staff at least upto the Block or the Taluka level is appropriately shared between the Central and the State Governments. The Committee recommends sharing of expenditure on technical staff by the Central Government to the extent of two-thirds at all levels of State and sub-state. Some States may prefer to entrust the task of formulating microlevel plans to non-governmental organisations instead of recruiting and employing on a permanent basis technical staff, thus avoiding a recurrent liability. The Centrally Sponsored Schemes should be made sufficiently flexible to cater for such contigencies.	A.P. Assam Goa Gujarat Haryana/ Rajasthan/ Sikkim/ Tripura - financing on 100% basis Himachal Pradesh Karnataka Kerala M.P. - Central Assistance should continue until bodies become viable. Maharashtra, Orissa, Tamil Nadu, Lakshadweep, Delhi.	Punjab - Non-commital Block Development Officers are used for planning work & no separate technical staff exists. Daman & Diu - Proposal for Strengthening of Planning Machinery not accorded approval by MHA. In addition, there are no NGOs in Daman & Diu.	Arunachal Pradesh J&K Manipur Mizoram Chandigarh

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
4. In the filed of Training, which will be a substantial requirement, the resources of all institutions, nation-wide, should be pooled. This is an urgent necessity and work should be initiated expeditously.	Andhra Pradesh Assam Bihar Goa Gujarat Haryana Karnataka Kerala Madhya Pradesh Maharashtra Orissa Punjab Rajasthan Sikkim Tamil Nadu Tripura Lakshadweep		Arunachal Pradesh J&K Mizoram Chandigarh Daman & Diu-action required by GOI.

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NA
5. For Decentralised Planning to succeed, decentralisation of authority and funds are not enough by themselves. There has to be consensus to that end and a will to carry it through. The Committee recomends that all reservations of line departments or higher level bodies in conferring authority and powers to the micro planning body have to be given up. Today, there is general reluctance to relinquish power and activity. Even when given up, often something is held back for paralled implementation through competing agencies, creating situations of potential conflict.	Andhra Pradesh Assam Bihar Goa Gujarat Haryana Karnataka Kerala Maharashtra Orissa Punjab - certain powers have been delegated e.g. works upto Rs.10 lakh. Tamil Nadu Tripura Lakshadweep	Himachal Pradesh - Sub-Committee has been set up for finalisation of decentralisation of authority. M.P. - Bill for decentralisation is yet to be approved by State Legislature.	Arunachal Pradesh J&K Mizoram Sikkim Chandigarh

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN.
6. In 1989 the States were requested to collect data on pre-coded schedules covering a very wide range of information. This was called the DISNIC - PLAN Programme. The Committee recommends that the Planning Commission has a fresh look at the adequacy of the recommendations of this programme in the context of the recommendations now made. Also its efficiency needs to be evaluated. There is a feeling among the States that a more lucid, transparent and methodical system needs to be adopted.	Andhra Pradesh Bihar Gujarat M.P. Kerala Karnataka Orissa Punjab Rajasthan Sikkim Tamil Nadu Tripura. Haryana - date should be according to local requirement. Himachal Pradesh - schedules amended to suit local conditions. J&K - action initiated. Maharashtra - data already computerised, support required for updating.	Assam - No comment. Goa - no comment. Daman & Diu- programme not received by UT.	Arunachal Pradesh Manipur Mizoram

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
7. The **integration of** inter-dependant acitivities within the same sector and of use of resources to support an activity, in the domain of micro level planning has to be the responsibility of the micro planning body.	Andhra Pradesh Assam Bihar Goa Gujarat Haryana Himachal Pradesh Karnataka. Kerala - however village level plans may be prepared by block - level body. Madhya Pradesh. Maharashtra - however full powers not possible as state and local schemes would have to be integrated Orissa Punjab Rajasthan Sikkim. Tamil Nadu - Integration difficult but important. Tripura/Lakshadweep/Delhi Daman & Diu-only if micro		Arunachal Pradesh J&K Manipur Mizoram Chandigarh

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
8. For the large mass of underemployed and unemployed, particularily women, marginal farmers, agricultural labourers and those engaged in seasonal activities, work opportunities have to be created locally. The Committee, therefore, suggests that such programmes and schemes be in the exclusive preserve of micro-level planning.	Andhra Pradesh Assam Bihar Goa Haryana Himachal Pradesh Karnataka Kerala Madhya Pradesh Maharashtra Orissa Punjab Rajasthan Sikkim Tripura Lakshadweep	Gujarat - under consideration. Tamil Nadu - Horizontal integration difficult. DRDA should be retained for integration.	Arunachal Pradesh J&K Manipur Mizoram Chandigarh.

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
9. All programmes and activities, such as JRY, IRDP, DDP, MNP & local development works be entrusted to micro level planning for exclusive and integrative implementation subject to their following the guidelines which may be issued either by the Central or the State Governments.	Andhra Pradesh Assam Bihar Goa Haryana Himachal Pradesh Karnataka. Kerala - with broad guidelines from the State. Madhya Pradesh Maharashtra Orissa Punjab Rajasthan. Sikkim - after creating general awareness. Tripura/Daman&Diu Delhi/Lakshadweep	Gujarat - under consideration. Tamil Nadu - DRDA should be retained for integration.	Arunachal Pradesh J&K Manipur Chandigarh.

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
10. In keeping with the spirit behind the Constitution (Seventy-Third Amendment) Act, 1992, all the subjects enumerated in the Eleventh Schedule (Annexure.IV) be brought withing the scope of micro level planning. These salutary provisions have given an ideal framework for effective operationalistion of micro level planning. It is thus necessary that legal formalities be completed by the State expeditiously.	Andhra Pradesh Assam Bihar Goa Himachal Pradesh Karnataka Kerala Orissa. Punjab -at disrict level. Rajasthan Sikkim Tripura/Delhi Lakshadweep.	Gujarat, Haryana - Under consideration. M.P. - As per recommendation 19, i.e. choice of subjects to be left to the States. Maharashtra - transfer of schemes should be considered on merit. Daman & Diu- Decision after 73rd Amendment	Arunachal Pradesh J&K Manipur Mizoram Chandigarh Tamil Nadu under pro-cess.

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN.
11. Satisfactory planning machinery is yet to emerge in many States. Even though State level planning machinery was not withing the terms of reference of this Committee, in view of the apparent correlation that the success of the apex body has with effective decentralisation of planning,the States have been urged to accord due importance to the body, where not already done.	Andhra Pradesh Assam Bihar. Goa - at present only state level, district level after Panchayati Raj Bill is passed. Gujarat Haryana Himachal Pradesh Karnataka Kerala M.P. Maharashtra Orissa Punjab Rajasthan Sikkim Tripura/Daman&Diu Delhi/Lakshadweep States have mainly described their Planning set up. Most are satisfied with the present arrangement, a few would prefer technical strengthening.	Tamil Nadu : At present, State Planning Board main coordinating agency	Arunachal Pradesh Manipur Mizoram Chandigarh

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN.
12. Since the Committee has suggested that the Panchayat institutions be adopted for micro level planning framework, bodies like the DRDA, DPB should be merged with the corresponding Panchayat institution at the district level. An alternative suggested is that wherever this is not possible, the DRDA and DPB should be merged into one body as a planning and Development Board at the district and the Zila Panchayat could exist as the second agency. In that case all district level officers would be made ex-officio members of the merged District Development and Planning Board. States may opt for either, depending upon the situation best suited to their respective set ups.	Andhra Pradesh Haryana Karnataka. Himachal Pradesh - however appropriate view after passing of State PR Act. Madhya Pradesh Orissa Tamil Nadu Lakshdweep. Daman & Diu - Feasible only 73rd Amendment Act is introduced.	Assam, Gujarat, Rajasthan - under consideration. Bihar - According to State PR Act 1993). Goa - No comments as no DRDA's/DPB's in the State. Kerala - All existing officers & agencies should continue. Maharashtra - under consideration. Punjab - no rigid framework desirable. Tripura - will be considered at a later date. Merger of Zila Parishad with DPC not feasible.	Arunachal Pradesh J&K Manipur Mizoram Sikkim Chandigarh. Delhi-No DPB or DRDA is in existance.Govt. of NCT plans to set up District Planning Units.

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN.
13. A concept of incentive outlay or matching contribution is prevalent in Gujarat as an integral part of decentralised planning. This deserves serious consideration. There is a somewhat similar scheme also in Himachal Pradesh. The Committee has recommended this for adoption in other States. This can foster people's involvement in the planning process and make micro-level planning more viable.	Andhra Pradesh Assam Gujarat Haryana Himachal Pradesh Karnataka. M.P. - in the past scheme not successful & in future NGOs will be involved. Orissa Goa - incentive outlay will depend on type of schemes that will be transferred Punjab Rajasthan Tamil Nadu Tripura Lakshadweep	Kerala Maharashtra Sikkim - under consideration. Daman & Diu	Arunachal Pradesh J&K Manipur Mizoram Chandigarh.

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN.
14. At least 5 % of State Annual Plan outlay should be given as untied funds' to district and lower levels to be utilised at their sole discretion.	Bihar Haryana - Centre should share expenditure as state not in a position to do so. Himachal Pradesh J&K - at present Rs.50 lakh/per district are being distributed. Kerala Maharashtra - At present funds limited to about 3% of State outlay. Rajasthan Sikkim Tamil Nadu - 1% allocated based on needs & resources. Daman & Diu	Andhra Pradesh Assam - Infrastructure at disrict level has to reach a stage at which it can handle allocations transferred as untied fund. Goa - would depend on Govt. policy as plan funds are for fixed programmes. Gujarat - under consideration. Karnataka - current financial situation does not permit (at present Rs.1 lakh will be provided to each gram panchayat). Madhya Pradesh - need will not arise at at district level. However small provision will be made to provide for contingencies. Orissa -decision should be left to State Govt. Punjab - percentage of funds should be deter-mind after excluding sectors such as power etc. Lakshadweep - untied funds are to be allocated by Planning Commission. Tripura - will depend on State Finance Commission.	Arunachal Pradesh Manipur Mizoram Chandigarh. Delhi

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN.
15. A minimum of 5% of the total plan outlay of the State be contributed as share of the State to micro-level planning body towards Minimum Needs Programme. This share should be supplemented by a matching contribution to encourage public participation. The Committee feels that the States' share and matching contribution can be in the ratio of 75:25 and going down to 90:10 in the case of backward areas.	Haryana Himachal Pradesh Karnataka Kerala - however, no matching contribution. Madhya Pradesh Maharashtra Rajasthan Tamil Nadu - 1% given at present, will be increased if Govt. of India increases provision. Lakshadweep Daman & Diu-After micro-level plg. introduced. Delhi-no backward area in NCT.	Andhra Pradesh Assam Bihar -decision should be left to State Finance Commission. Goa Gujarat - under consideration. Orissa - may be tried on pilot basis. Punjab - allocation for sectors such as power, irrigation etc. should be excluded before allocating funds for decentralised planing Sikkim - Central Govt. should contribute 100%. Tripura - decision should be left to State Finance Commission.	Arunachal Pradesh J&K Manipur Mizoram Chandigarh.

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN.
16. At least one percent of State's Annual Plan outlay should be kept for some schemes like poverty alleviation and employment generation, which need to be planned and funded at the village level. The funds need to be placed at the disposal of the village Panchayat.	Haryana Karnataka Kerala - fund at disposal of district Panchayats/ Nagarpalikas. Madhya Pradesh Rajasthan Sikkim Lakshadweep Daman & Diu. Delhi-however percentage should be increased.	Andhra Pradesh Bihar -decision should be left to State Finance Commission. Goa Gujarat - under consideration. Himachal Pradesh - would depend on PR Act. Maharashtra Orissa Punjab -allocations for power, irrigation etc. should be excluded before giving allocations for micro-level bodies. Tamil Nadu Tripura -decision should be left to State Finance Commission.	Arunachal Pradesh J&K Manipur Mizoram Chandigarh.

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
17. In addition to flow of funds covered under recommendation Nos. 14 to 16, at least 30 percent of the State's Plan outlay should be transferred to sub-State level planning bodies through lump sum grants for expenditure in areas assigned to them.	Haryana Himachal Pradesh - modalities after PR Act amendments. J&K Kerala Madhya Pradesh Rajasthan Sikkim. Lakshadweep Daman & Diu- for small UTs various aspects have to be considered.	Andhra Pradesh Bihar -decision should be left to State Finance Commission. Goa Gujarat - under consideration. Karnataka - ideal situation, however sectors such as irrigation, energy etc. have to be provided for. Maharashta - will be considered after State Finance Commission's recommendations are available. Orissa Punjab - allocations for sectors such as irrigation, power etc. will have to be excluded. Tamil Nadu Tripura - will depend on recommendation of State Finance Commission.	Arunachal Pradesh Manipur Mizoram Chandigarh. Delhi

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
18. A separate budget accounting head be provided for identifying flow of funds to sub-State level bodies.	Andhra Pradesh Karnataka Kerala Madhya Pradesh Orissa Rajasthan Sikkim Tamil Nadu & Punjab -only upto district level. Tripura Lakshadweep	Assam -separate budget heads of accounts are being maintained for identified sectors. Bihar - no comments. Goa - will be examined after PR bill is approved. Gujarat - under consideration. Haryana -decentraised component plan better alternative. Himachal Pradesh - appropriate legislation after PR Act. Maharashtra - would depend on recommendation of State Finance Commission. Punjab - separate budget head at district level; however as no DDO powers are given at Panchayat level, separate head not required. Daman & Diu - Action only if sub-State bodies set up.	Arunachal Pradesh J&K Manipur Mizoram Chandigarh Delhi

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
19. The Eleventh Schedule of the 73rd Amendment to Constitution lists 29 items which maybe entrusted to Panchayats. The Committee recommends that the choice of items on the extent to which an item should be entrusted to the micro-level planning machinery in a particular State, should be left to the discretion of the concerned State Government.	Andhra Pradesh Goa Haryana Himachal Pradesh Karnataka Kerala Madhya Pradesh Maharashtra Orissa Punjab Rajasthan Sikkim Tamil Nadu Daman & Diu Delhi Lakshadweep	Assam, Bihar - no comments. Gujarat - under consideration.	Arunachal Pradesh J&K Manipur Mizoram Chandigarh

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
20. Peoples' participation in micro - level planning (MLP) can be made effective if MLP institutions are assigned their due role by the Staes. A Task Force on self-managed Institutions for Intergraed Development was appointed by the Planning Commission and a report submitted by it in December, 1991. Based on the Task Force's recommendation, reputed non-government organisations with proven track record are expected to be called upon to replicate their activity and carry out institution building among the people on a pilot basis in selected blocks. The Committee is of the opinion that this would indeed be a very good method of ensuring people's participation in micro level planning and hence recommends that the programme be given a sharper focus in the light of the recommendations made. In particular, the Committee would like to see the non-government organisations providing technical expertise to the micro-level planning body in areas such as public health, literacy campaign, enrironmental issues, alternative and renewable sources of energy etc.	Andhra Pradesh Assam Gujarat Haryana Himachal Pradesh Karnataka - NGOs are being utilised, but they have limitations of scale and reach. Madhya Pradesh Maharashtra Orissa Punjab Rajasthan Tamil Nadu Tripura - NGOs have very limited technical expertise. Delhi Lakshadweep	Bihar - no comment. Goa -will be considered after micro level plann-ing is introduced. Kerala - technical expertise of NGOs for plans not required. Sikkim - in small states such NGOs do not exist & state has to take the responsibility. Daman & Diu - major NGOs - GOI should extend such services.	Arunachal Pradesh J&K Manipur Mizoram

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
21. The entire exercise of decentralised planning including planning at its lowest level be really broadbased by seeking participation of knowledgeable people like school teachers, college teachers, progressive farmers, social workers, professional people, etc. whose suggestions should be actively sought and considered.	Andhra Pradesh Assam Gujarat Haryana Himachal Pradesh J&K Kerala Madhya Pradesh Orissa Punjab Rajasthan Sikkim Tamil Nadu. Tripura - State Panchayat Act, 1994 does not provide for such an arrangement, however can be considered. Daman & Diu Delhi Lakshadweep	Bihar - comments not given. Goa -will be considered after micro level planning is introduced. Karnataka Maharashtra	Arunachal Pradesh Manipur Mizoram Chandigarh

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
22. There is a need for the formation of village Deveopment Committees for overseeing implementation of schemes at the village level.	Andhra Pradesh Haryana Himachal Pradesh J&K Karnataka Kerala Madhya Pradesh Maharashta -such committees would have to be formed by Village Panchayats/Zila Parishads. Orissa Punjab Rajasthan Tamil Nadu -only where elected Panchayats are not in position. Tripura Daman & Diu Delhi Lakshadweep	Assam - only at district level, otherwise huge expenses will be incurred; also duplication with Gaon Sabha. Bihar -as per PR Act, Gram Sabha will be strengthened. Goa -will be considered only after micro level planning is introduced. Gujarat - under consideration Sikkim - due to small size of village, not feasible.	Arunachal Pradesh Manipur Mizoram Chandigarh

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
23. Youth be involved through "Shram-Dan" for the creation of community assets. This would need revitalisation of existing schemes such as National Service Scheme (NSS) and wider involvement of voluntary organisations.	Andhra Pradesh Assam Bihar Gujarat Haryana Himachal Pradesh Karnataka Kerala Madhya Pradesh Maharashtra Orissa Punjab Rajasthan Sikkim Tamil Nadu Tripura Daman & Diu Delhi Lakshadweep	Goa -will be considered only after micro level planning is introduced	Arunachal Pradesh Manipur Mizoram Chandigarh.

ANNEX 10.1 (Cont'd)

RECOMMENDATION	ACCEPTABLE	NOT FEASIBLE	NOT RELEVANT Pt-WISE COMMENTS NOT GIVEN
24. The States may give a fair trial to the Gujarat Govenment concept of 'Sarvodya Yojana'.	Andhra Pradesh Gujarat Himachal Pradesh Kerala Madhya Pradesh. Orissa - can be started on pilot basis. Sikkim Tamil Nadu Daman & Diu Delhi	Assam, Rajasthan - no comments Bihar, Karnataka - view will be taken after obtaining further information on the scheme. Goa -will be considered after micro level plan-ing is introduced. Haryana - will be considered. Maharashtra Punjab Tripura - difficult to implement due to absence of Voluntary Organisat-ions.	Arunachal Pradesh J&K Manipur Mizoram Chandigarh

RECOMMENDATION	
25. In keeping with the provisions of the appropriate Articles in the Constitution (Seventythird Amendment) Act, 1992 on Panchayati Raj, the Committee has recommended that the hill States in the North Eastern region may work out their own arrangement for operationalising the concept of micro-level planning.	This recommendation is relevant only for the Hill States in the North Eastern Region. However, Union Territory of Lakshadweep has commented that taking into account the geographical situation of these islands and peculiar conditions existing there, the Union Territory Administration may be allowed to work out their own arrangements for operationalising the concept of Micro Level Planning.

APPENDIX

Revised Chapters 1 and 2 , November 1995

CHAPTER 1

STATE OF THE ECONOMY AND ECONOMIC REFORMS

(REVISED FINAL DRAFT)

1. THE BACKGROUND

1.1 The Father of the Nation, Mahatma Gandhi, laid down the basic principle which was to guide and shape India's development strategy and economic policy for the more than four decades that have passed since Independence :

"I will give you a Talisman. Whenever you are in doubt or the self becomes too much with you, apply the following test : Recall the face of the poorest and weakest man you have seen and ask yourself if the step you contemplate is going to be of any use to him; will he gain anything by it? Will it restore him to control over his own life and destiny? In other words, will it lead to Swaraj for the hungry and spiritually starving millions?"

This talisman is at the heart of the twin concerns of attaining rapid growth of output and employment and of ensuring equity and social justice which have influenced economic policy-making in the country. This was also the basis of "human development" being recognised as the broad objective of the Eighth Five Year Plan.

1.2 The emphasis on distributive justice, regional balance and alleviation of poverty leading towards empowering the people to achieve their "Swaraj" has been the corner-stone of our national policy. However, the instruments of our policy, in the absence of adequate flows of domestic and international resources, were characterised by attempts to allocate the scarce resources to priority uses, through : regulation of markets, trade and exchange controls, licensing of investment, regulation of the financial sector and selective access to foreign investment and technology. It was increasingly realised since the late 1970s that many of these controls and regulations had outlived their utility and were in fact hampering, rather than helping, growth and development.

1.3 In response the Government has been attempting to reform many of these policies, especially those related to inward- oriented trade and investment policies since the early 1980s. Although these policy changes did not constitute a package of reforms comprehensive enough to fully reverse the protectionist bias of the trade regime and correct all the distortions created by the regulatory policies followed over the years, they started yielding results fairly early, and the Indian economy moved on to a higher growth path in the 1980s as compared to the previous three decades. The average annual growth rate of GDP climbed steeply to 5.3 per cent (5.8 per cent compound) during the Sixth Plan period (1980-85) and 5.8 per cent (6.0 per cent compound) during the Seventh Plan (1985-90) as compared to the 3.4 per cent that had been maintained during the 1950 to 1980 period. The total factor productivity in manufacturing production, indicating efficiency in the use of resources, increased, according to an IMF study, by 2.7 per cent a year during 1981-89 as compared to (-)0.5 per cent in the preceding period of 1960 to 1980. The decade of the 1980s also witnessed a significant reduction in the incidence of poverty in the country from above 40 per cent of the population by one measure to less than 20 per cent.

1.4 This higher growth performance was, however, accompanied by certain inter-related adverse developments. First, the Government's savings deteriorated substantially since the mid- 1980s. The savings of the Government (Centre, States and UTs) constituted about 2 per cent of GDP between the mid-1970s and early 1980s, but the Government started dis-saving since 1984- 85. By 1990-91 these dis-savings constituted 2.8 per cent of GDP. Reflecting this trend in Government savings, the fiscal deficit of the Central and State Governments, which was about 8 per cent of GDP on the average during the Sixth Plan (1980/81 - 1984/85), shot up to 10 per cent during the Seventh Plan (1985/86 - 1989/90) and further to about 12 per cent in 1990-91. The bulk of this deterioration of the fiscal deficit was accounted for by the Centre's fiscal deficit which worsened from 6.1 per cent of GDP in 1980-81 to 7.8 per cent in 1989-90 and further to 8.3 per cent in 1990-91. Only a fraction of this increase was due to increases in capital expenditures, which for the Centre was about 5.6 per cent of GDP in 1980-81 and 5.9 per cent in 1990-91. The revenue deficit, denoting the difference between revenue receipts and revenue expenditures, on the other hand, increased sharply from 1.1 per cent average for the Sixth Plan to 2.6 per cent for the Seventh Plan and to 3.5 per cent in 1990-91. Financing capital expenditure through borrowings may not be unviable if the returns on that expenditure are higher than the interest rates. But financing revenue deficits through borrowing is fraught with grave risks as there would hardly be any prospective returns. A steady increase in the revenue deficits in the late-1980s therefore exposed the economy increasingly to unviability.

1.5 Second, the country's balance of payments deteriorated more or less continuously through the 1980s, and most particularly since the mid-1980s. The salient features of the balance of payments developments over this period are presented in Table-1 below :

TABLE 1

BALANCE OF PAYMENTS 1980 - 1991

(US$ billions)

	1980-81	1985-86	1989-90	1990-91
1. Trade balance	-7.55	-7.83	-7.46	-9.44
2. Net Invisibles excluding interest	+5.81	+4.08	+3.68	+2.52
3. Interest payments	-0.36	-1.12	-3.06	-2.76
4. Current Account balance	-2.10	-4.87	-6.84	-9.68
Capital Account Transactions				
5. (a) Private receipts	0.21	2.10	6.83	8.40
(b) Private payments	0.08	0.17	3.72	5.97
6. (a) Government receipts	1.28	1.85	7.22	10.36
(b) Government payments	1.58	0.73	3.70	4.11
7. Change in FE Reserves	-2.27	-1.82	-0.21	-1.00
8. Foreign exchange reserves	5.85	5.97	3.37	2.23

the result of the sharp rise in private capital receipts, particularly external commercial borrowings and deposits by non-resident Indians (NRIs), which not only had higher interest liabilities, but also shorter maturities. As a consequence, the government also had to step up its borrowings and reduce its foreign exchange reserves in order to bridge the difference. Thus the proportion of the current account deficit financed by external assistance declined substantially from about 75 per cent in the early 1980s to about 22 per cent in 1990-91. All these factors culminated in the country's external debt liabilities rising sharply from about $23 billion in 1980-81 (12 per cent of GDP) to $83.8 billion in 1990-91 (30.4 per cent of GDP). The debt service ratio (debt service payments to current account receipts on balance of payments) correspondingly also increased from 10 per cent in 1980-81 to 35.3 per cent in 1990-91.

1.7 Matters came to a head in 1990-91, when international oil prices rose sharply as a result of the Gulf War. The trade balance deteriorated sharply by $2 billion, and remittances from Indian workers in the Gulf also went down. The net result was an almost $3 billion decline in the current account balance, and a sharp reduction in the foreign exchange reserves, which declined to only about $1.1 billion by June 1991. These adverse developments led to a crisis of confidence about the Indian economy among the international

1.6 As may be seen, the trade balance had remained more or less constant at around - $7.5 billion for the entire period 1980-90. However, the current account balance steadily deteriorated from an average of 1.3 per cent of GDP during the Sixth Plan to 2.2 per cent during te Seventh Plan and 3.3 per cent in 1990-91. This deterioration was primarily due to the rapid increase in interest payments. Much of the increase in interest payments was lenders. By April 1991, not only was there a significant withdrawal of non-resident Indian (NRI) deposits from India, but more importantly a number of international banks stopped honouring Indian letters of credit (LC) for import transactions. The economy also suffered from serious inflationary pressures, scarcity of essential commodities and deterioration of fiscal discipline. By June 1991 the annual inflation rate was running at about 16 per cent, and the economy was on the verge of a major crisis.

1.8 In response to the emerging crisis, in July 1991 the Government initiated a series of stabilisation measures to bring the situation under control. The first step was a substantial devaluation of the rupee while retaining the import controls that had been imposed by the RBI. In addition, the fiscal deficit of the Central Government was sharply curtailed from 8.3 per cent in 1990-91 to 5.9 per cent in 1991-92. Subsequently an arrangement was entered into with the International Monetary Fund (IMF) to provide balance of payments support, which helped to ease the situation considerably. The Government also initiated a process of structural reforms in trade and industrial policies aimed at correcting the macroeconomic imbalances and other distortions that had developed during the previous years. However, the dominant influences on the economy in 1991-92 were those of the stabilisation measures, which led to severe import compression and recessionary conditions, and it took some time for the economy to get back onto the trajectory of recovery and growth consistent with the economic reforms.

1.9 The economic reform measures which were introduced in 1991- 92 and the subsequent period, by deregulating the markets, removing much of the controls on foreign trade, dismantling the licensing of domestic investment, reforming the financial sector and the tax system and reducing the prohibitive rates of tariffs and taxes, radically changed the economic set-up of the country, and placed it in a position to fully utilise the opportunities created and potentials established for a rapid growth of output, investment and employment, based on increased efficiency of resource allocation. These measures were much more comprehensive than the earlier liberalisation measures and policy changes introduced in the 1980s and would therefore be expected to accelerate the growth process and expand the scope for structural changes which had already been initiated in the Sixth and the Seventh Plan periods. However, as has been noted above, the earlier policy changes were becoming increasingly unviable because of the mounting fiscal and current account deficits and rising domestic and external debt burdens, and the more recent economic reforms were expected to ensure the sustainability of these policy changes by correcting the fiscal and external payments imbalances. The following sections would analyse the significant and often very impressive performance of the economy in all the sectors in terms of growth of output and efficiency, clearly demonstrating the positive outcome of the policy changes in the post-reform period. But the record on budgetary deficits and current account imbalances as well as the debt burdens in recent years show that we have still not been able to solve all the problems. The over-all fiscal deficit of the government, taking into account the Centre, States and public sector undertakings together (known as the Public Sector Borrowing Requirement (PSBR)), was 12.2 per cent of GDP in 1990-91 and declined to 11.1 per cent in 1994-95. More importantly, however, the revenue deficit of the Government, Centre and States, has actually increased from 4.5 per cent of GDP in 1990-91 to 4.6 per cent in 1994-95(RE). Although the current account imbalance has come down from 3.3 per cent of GDP in 1990-91 to 0.7 per cent in 1994-95, but it is expected to go up. Similarly, while the external debt service ratio has declined from 35 per cent in 1990-91 to 27 per cent in 1994-95, the total external debt to GDP ratio has increased from 30.4 per cent to 32.9 per cent over the same period.

1.10 At the time the Eighth Plan was formulated, the set- backs suffered by the economy in 1990-91 and 1991-92 had to be taken into account. The broad contours of the programme for structural reform of the Indian economy which were begun in July 1991 were also known by that time. Much of these developments were taken on board during the formulation of the Plan. It was, therefore, observed that : "...in view of the impact of structural adjustment programme, the resource crunch which the public sector is facing, and the need for correcting the fiscal imbalances, it would be prudent to plan more or less for the growth rate achieved during the decade and lay down foundations for higher growth in the future." Thus the growth target, and the macroeconomic parameters supporting it, were set at relatively conservative levels compared to what may have been possible on the basis of the performance of the economy during the Seventh Plan period. The relevant figures from the Eighth Plan document are presented in Table-2 below :

Table 2

Macro- Parameters For The Eighth Plan (1992-97)

	VIIth Plan	VIIIth Plan
1. Growth rate of GDP p.a.	5.8%	5.6%
2. Domestic Savings (% of GDP)	20.3%	21.6%
3. Current Account Deficit (% of GDP)	2.4%	1.6%
4. Investment (% of GDP)	22.7%	23.2%
5. ICOR	3.9	4.1
6. Growth rates (in volume terms) of :		
(a) Exports	8.1%	13.6%
(b) Imports	10.0%	8.4%

Source : Eighth Five Year Plan, vol. I,P.44

1.11 As can be seen from the table, the Eighth Plan envisaged a somewhat lower rate of growth than achieved in the Seventh, but with much greater reliance on domestic investible resources. It was also recognised that the earlier trend of imports growing faster than exports would have to be reversed in order to avoid serious balance of payments and external debt difficulties. The increase in the incremental capital-output ratio (ICOR) was assumed due to three principal reasons : (a) gains in output from better utilisation of existing capacities may not be available in the Eighth Plan to the same extent as during the Seventh; (b) the stock of investments in the pipe-line was less than what it was at the commencement of the Seventh Plan; and (c) increased investment in human capital, which would show up only with a time lag.

1.12 The Plan envisaged that even with the conservative targets laid down, the objectives of reducing unemployment to zero by the year 2002 and attaining significant reduction in the incidence of poverty could be realised. Although some set-back was expected in the short-run from the structural adjustment programme, it was at least partially captured in the parameters of the Plan. In particular, the higher incremental capital-output ratio (ICOR) assumed in the Plan was primarily to take account of the adverse developments during 1990-91 and 1991-92. The need to step up the investment rate in order to compensate for the likely lower utilisation of existing capacities was the corner-stone on which the Plan was built whereby the objective of attaining full-employment by 2002 could still be attained.

1.13 There is a general acceptance of the need to pursue the structural reform programme for the long run viability and sustainability of the growth process in India across a wide cross-section of Indian public opinion. However, it is important to work out mechanisms of its implementation which can withstand the short- to medium-run effects of the reforms, particularly during the transition phase, on the more vulnerable sections of society and on the economic and social infrastructure of the country. Economic reforms and market liberalisation are not ends in themselves but are means to achieve the goals of development, consisting not only of increasing the per-capita GDP with efficient use of resources, but also of equity and and reduction of poverty. If the latter cannot be achieved by market reforms, supplementary positive action must be adopted, and their financing must be provided for in any plan allocation of investible resources.

1.14 The following paragraphs describe the current status of the various critical variables and parameters of the Indian economy and take stock of the developments in our economy since the inception of the economic reforms in 1991 and during the Eighth Plan period. They also indicate the areas of success as well as areas of concern, and evaluate the role that Plan expenditures and public investments will have to play at this juncture, making the most effective use of our resources. Since the programme of policies that was implemented in 1991-92, supported by the IMF, was the basis of the economic reforms of the subsequent years, it is not possible to ignore the performance of the economy in that year in a review of the post- reform performance of the Indian economy. Although the Eighth Plan started in 1992-93, all its policy assumptions and initial conditions were based on the programme of reforms. An appraisal of the Eighth Plan therefore cannot be separated from a review of the performance of the entire post-reform period. However, to follow the usual chronology, we shall present the data in all the Tables separately for 1991-92 and 1992-95 in order to distinguish between the performance in the respective periods. Finally, it needs to be noted that much of the data for the recent years are of a provisional nature and are subject to change as more complete information becomes available. Therefore, reliance has been placed on such data as are available from the most recent official publications, such as the National Accounts Statistics (NAS) 1995.

2. Growth Performance

1.15 The response of the economy in terms of growth performance since the initiation of the reforms in 1991 appears somewhat less than expected when compared to the past trends or to the trajectories embodied in the Eighth Plan targets. The average rate of growth of the GDP during the period 1980-1991 was 5.63 per cent per annum. The growth rate came down to 0.9 per cent in 1991-92, and rose to 4.3 per cent in 1992-93. If the advance estimates of growth made by the C.S.O. of 4.3 per cent in 1993-94 and 5.3 per cent in 1994-95 materialise, the average growth during the first three years of the Eighth Plan (1992-95) would average to 4.6 per cent - almost one percentage point lower than the Eighth Plan target. However, the economic performance of 1991-92 could not be taken as entirely the outcome of the "crisis", with the policies implemented having had no role to play, although the decomposition of the changes in the major economic variables during 1991-92 into "crisis-induced" and "policy-induced" is not easy to do. At the time that the reforms were being designed, in the **"Memorandum on Economic Policies for 1991/92-1992/93"** submitted along with the Letter of Intent by the Finance Minister to the IMF on August 27, 1991 it was stated that the growth rate of GDP in 1991-92 was likely to be in the range of 3 to 3.5 per cent. The estimate of GDP growth was reduced by January 1992 to 2.5 per cent for the year in the **"Economic Survey 1991-92"**. In the event, the actual growth rate turned out to be 0.9 per cent. If the initial exercises were done properly, the difference between the estimated and the actual growth of 1.6 percentage points can be regarded as due to policy failure, which could be taken as the expected outcome of the policies introduced that year, with the shortfall from the trend of 3 percentage points being attributable to the crisis.

1.16 The Eighth Plan used the latter estimate of 2.5 per cent GDP growth in 1991-92 as the base for working out the macro parameters of the Plan. If the trajectory of the real GDP derived from the Eighth Plan targets is taken into account, the expected level of real GDP in 1994-95, even with the CSOs advance estimates of growth, would be 3.9 per cent below the level that had been targeted in the Eighth Plan. More importantly, a sharp acceleration in the growth rate to 7.65 per cent per annum will be required in each of the last two years of the Plan if the planned terminal year value of real GDP is to be attained.

1.17 In order to understand the principal causes behind the sharper deceleration of the Indian economy in 1991-92 as compared to the expectations, it is instructive to compare the behaviour of some key macroeconomic variables against the targets that were set in the "Memorandum on Economic Policies for 1991/92-1992/93" submitted to the IMF. The comparative statement is placed in Table 3:

As may be seen, the most striking variation between the expected and the actual was in the behaviour of imports, which declined much more sharply than expected. This, on one hand, resulted in a better than expected improvement in both the current account deficit and the level of foreign exchange reserves. On the other hand, the excessive import compression appears to have reduced the growth rate of the economy much more than expected. The higher than targetted growth of money supply, partly as a result of a higher than targetted growth of foreign exchange reserves, was associated with a much higher than targetted rate of inflation although the fiscal deficit of the Central Government was below its target value.

1.18 A comparison of the sectoral growth rates over the two periods, ie. 1980-1991 and 1991-1994 [Table 4], shows that the performance of

Table 3

Key Economic Variables In 1991-92

	Memorandum	Actual
1. Real GDP growth	3-3.5%	0.9%
2. Inflation rate	9.0%	13.6%
3. Fiscal Deficit/GDP	6.5%	5.9%
4. Growth rate of Money Supply (M3)	13.0%	19.3%
5. Current Account Deficit/GDP	2.7%	0.4%
6. Foreign exchange reserves	$2.2 bill	$5.8 bill
(in months of imports)	1.3 mos	5.3 mos
7. Growth rate of imports	-5.0%	-24.5%

the manufacturing sector has suffered severely. Manufacturing had been a leading sector during the eighties and, after a relatively low growth performance during the first three decades of planning, it had achieved a growth rate of 7.6 per cent on average for a whole decade. Even with an estimated revival in growth of 3.6 per cent in 1993-94 and 8.7 per cent in 1994-95, the average growth rate for the Plan period 1992-95 will be 5.1 per cent, considerably lower than the Plan target of 7.3 per cent. Much of this adverse development in the manufacturing sector can be attributed to the excessive import compression in 1991-92, which carried on to a lesser extent in 1992-93. The retardation in manufacturing growth in the early years of the reforms has made the subsequent adjustment more difficult for commodity balance and export prospects as well as fiscal revenues.

1.19 Infrastructural sectors had done well during the eighties and their performance has been somewhat lower during the 1991-94 period. Although agriculture and allied activities recorded negative growth in 1991-92, insofar as the Plan is concerned, agricultural growth has been more than satisfactory at an expected average of about 3.5 per cent for the three years 1992-95, as compared to the targetted 3.1 per cent. Investments made in the past in electricity, gas and water and transport sectors have sustained their growth, although at a somewhat lower rate than during the eighties.

1.20 The sectors which have clearly performed better in the post-reform period are the Communications and Financial sectors. The growth in the communications sector was facilitated by a large back-log of unfulfilled demand and the ability of the Government to raise resources by raising the tariffs. Cost reductions arising from induction of new technologies also contributed significantly. Insofar as the financial sector is concerned, much of the boom is attributable to an active stock market, supported to an extent by excess liquidity in the system during this period and the recessionary conditions prevailing in the real sectors of the economy.

1.21 In order to appreciate the divergence between the Plan targets and the actuals, and the extent of shortfalls in the broad sectors, a summary picture can be provided by indicating, after taking into account the first three years performance, the required growth rates in the different sectors in the next two years to achieve the terminal year target-values of production of the Eighth Plan. The agricultural sector is well ahead of the Plan targets, and needs to achieve only 2.6 per cent growth in each of the last two years of the Plan in order to achieve the terminal year target. The manufacturing sector, on the other hand, has fallen behind substantially, and would have to average 10.7 per cent growth for the next two years in order to attain the target level. The other sectors collectively have performed moderately, and would need to grow at 7.6 per cent per year to achieve the Plan targets.

1.22 The relatively poor growth performance during the first three years of the current plan need not in itself be a source of concern. Indeed, if this is seen in the context of international experiences in stabilisation and structural adjustment, the Indian experience of low growth has been both brief and mild. At no stage has the Indian economy had to suffer a negative growth rate of GDP, and in the year 1994-95 the growth rate has picked up almost to the Seventh Plan level. In contrast most other countries have had to suffer extended

TABLE 4

SEctoral Growth Rates

S.No.	Sectors	Eighth Plan Target	81-82 to 90-91	91-92	92-93	93-94
1.	2	3	4	5	6	7
1.	Agriculture		3.85	-2.74	5.3	3.0
2.	Forestry & Logging	3.1	-0.44	-1.29	0.4	0.5
3.	Fishing		5.56	5.65	6.4	6.1
4.	Mining & Quarrying	8.0	8.46	3.66	1.5	4.8
5.	Manufacturing	7.3	7.59	-3.23	3.1	3.6
6.	Electricity,Gas & Water Supply	7.8	8.82	7.52	7.5	5.9
7.	Construction	4.7	4.44	4.60	0.5	1.2
8.	Trade	6.0	6.12	0.32	6.5	4.4
9.	Hotels & Restaurants	6.0	6.42	0.06	6.0	5.8
10.	Railways		4.15	6.02	-1.1	-0.7
		6.7				
11.	Transport by other means		7.92	6.91	6.1	6.5
12.	Storage	6.0	4.09	-1.66	-0.6	-1.7
13.	Communication	6.1	6.22	6.86	10.8	11.0
14.	Banking & Insurance	6.0	11.99	21.68	2.8	12.9
15.	Real Estate, ownership of dwelling & business services	6.0	3.57	3.81	3.3	3.3
16.	Public administration and Defence	6.0	6.99	2.21	5.1	4.4
17.	Other services	6.0	5.60	5.81	3.7	5.2
18.	Gross Domestic Product	5.6	5.63	1.10	4.3	4.3

periods of negative growth and it has taken even longer for them to regain their historical growth rates. The 1991-94 recessionary episode in India was no doubt the outcome of the stabilisation efforts, particularly the strong import compression, and the effects of the structural adjustment programme are expected to be felt on output and employment growth in the next few years. The success or failure of this programme will however depend critically on the Government's ability to identify the areas of vulnerability and to take appropriate action for addressing them.

3. The External Sector

1.23 Since the stabilisation efforts were initiated, the country has been able to tide over in a most impressive manner the balance of payments crisis that erupted in early 1991. Both the balance of payments situation and the foreign exchange reserves position have improved considerably in the last three years [Annexure II]. The current account deficit, which was about $10 billion in 1990-91, has come down to less than a billion dollars in 1993-94 and increased only mildly 1994-95. As a percentage of GDP it has declined from 3.2 per cent to about 0.7 per cent over the period. This sharp reduction in the current account deficit has obviated the need for exceptional external financing within a short period of three years.

1.24 The improvement in the current account balance has also been accompanied by a major

TABLE 5
External Capital Account

(US$ billion)

	Annual Average 1985-91	91-92	92-93	93-94	94-95 (Est)
Capital Account	7.35	3.97	2.97	8.99	7.99
Direct and Portfolio investment	0.21	0.15	0.59	4.11	4.90
Net Aid	2.53	2.49	1.45	1.34	1.53
Net Commercial Borrowing	1.95	1.46	-0.36	1.14	0.43
NRI Deposits	1.92	0.29	2.00	0.94	0.85
Other	0.74	-0.42	-0.71	1.46	0.28
Memorandum Items					
Current Account	-7.47	-1.18	-3.53	-0.32	-2.08
Overall Balance	-0.12	2.78	-0.56	8.68	5.90
Change in FE Reserves	-0.61	3.58	0.73	8.87	4.76

turn-around in the capital account [Table 5]. Not only has the capital flight that had started in 1990-91 been arrested, there has also been a surge in capital inflows, especially in the form of foreign portfolio investments, in recent years. Total foreign investment, which was about $165 million in 1990-91 has gone up to about $4.1 billion by 1993-94 and to $4.9 billion in 1994-95. Most of the surge in foreign investments is accounted for by portfolio investments, which increased from only $65 million in 1990-91 to about $3.5 billion by 1993-94 and $3.6 billion in 1994-95. Thus the decline in both net aid and net commercial borrowings has been more than offset by this factor.

1.25 The surge in capital inflows coupled with a sharp decline in the current account deficit has led to a substantial build-up of foreign exchange reserves (excluding gold and SDRs), which increased from $2.2 billion at the end 1990-91 (equivalent to about one month of imports) to over $15 billion by the end of 1993-94 and stands at about $19.4 billion at present. This is certainly a positive response of the economy to the stabilisation and adjustment efforts. However, it has also brought with it certain problems in managing monetary and exchange rate policies, and has some adverse long-run implications which will be discussed further in later sections.

1.26 Imports declined in absolute terms in 1991-92, and although they have picked up since 1992-93, their annual growth rate has been lower on the average in comparison to 1990-91 [Table 6]. While the decline in imports consequent to the devaluation of the rupee was to be expected, other factors some of which are exogenous to the reform process have also influenced the behaviour of imports. Imports of POL measured in dollars have declined in absolute terms in the post-reforms period, even though the domestic output of petroleum was falling. This decline has largely occurred due to the fall in the international prices of crude oil since 1991 associated with the general recovery of world oil output after the dislocations caused by the Gulf War. Non-POL non-food imports in 1993-94 had not crossed the pre-reform level primarily due to the recessionary conditions in the manufacturing sector. The indications, however, are that with industrial revival in 1994-95, imports have grown at a rate above 28 per cent. Thus during the three years of the Plan period import growth will have averaged about 13.4 per cent per annum as compared to the Plan target of 12.5 per cent in value terms.

TABLE 6

GROWTH OF IMPORTS

(Percentage)

Items	90-91	91-92	92-93	93-94	94-95
(1)	(2)	(3)	(4)	(5)	(6)
1. Total Imports	14.4	-24.5	10.3	3.2	28.0
2. DGCIS Imports	13.2	-19.4	12.7	6.5	21.2
3. Non-DGCIS Imports	22.4	-57.0	-18.0	-49.9	262.0
4. POL Imports	60.0	-11.0	13.7	- 5.7	2.2
5. DGCIS Non-POL Imports	3.1	-22.2	12.4	11.2	27.4
6. Food Imports*	1.5	-50.8	85.0	-37.3	244.7
7. Non-Pol Non-Food Imports	3.1	-21.2	10.9	12.8	23.4
8. Memo Items:					
(a) Non-DGCIS Imports ($Millon)	3842.0	1653.0	1355.0	679.0	2458.0
(b) Non-DGCIS (% of Imports)	13.8	7.8	5.8	2.8	8.0
9. Capital Goods	10.0	-27.5	7.0	37.8	18.2

* Cereals + Edible Oils + Fruits & Nuts + Pulses + Sugar.

1.27 The growth in exports in the four years following the reform of trade and exchange rate policies, ie. the period 1991-92 to 1994-95, has been slower than in the six year period preceding the reforms, ie. 1985-86 to 1990-91, [Table 7]. However, seen in relation to GDP, the buoyancy of exports has improved. More importantly, in the last two years (1993-94 and 1994-95) the growth rate of exports has picked up remarkably to about 20 per cent and 18 per cent respectively. Such rates of growth will have to be sustained for the next few years, since it has been estimated that with a growth rate of imports of about 13.5 per cent, a growth rate of exports of about 18 per cent will have to be maintained over the next decade or so if the external debt burden is to be gradually reduced to manageable proportions while maintaining a reasonable rate of growth of the economy. Some slackening in the export growth target can be accomodated if foreign investments continue to expand, but it may not be prudent to rely on this possibility alone in the intial years of the reform process. It is therefore necessary to examine the nature of the export performance and to assess the likelihood of maintaining such high growth rates.

TABLE 7

Performance of External Trade

	Unit	1985-86 to 1990-91	1991-92 to 1994-95
1. Export Growth rate	% p.a.	10.7	9.7
2. Import Growth rate	% p.a.	10.1	2.4
3. Trade Deficit	% of GDP	3.0	1.2
4. Current Account Deficit	% of GDP	2.5	0.7
5. GDP Growth Rate	% p.a.	5.8	3.7

1.28 The main strength of India's exports continues to be in the traditional items - Agriculture & allied products, textiles & garments, handicrafts and gems & jewellery. There has not been as yet a marked change in the composition of commodities or of markets which would indicate a structural change in our export sector. There is, however, a significant increase in the buoyancy of exports in the traditional sectors, with new items entering the market and a steady, though slow, increase in the export of machinery and engineering goods sector, all of which would be favourable for the maintenance of high growth of exports in the future [Table 8]. The sharp increase in export growth in the last two years has come after the low level reached in 1991-92 due to the collapse of the rupee payment area (RPA) exports and a partial reemergence of the past rupee markets. To some extent this revival is due to the greater utilisation of India's debt repayment obligations by Russia, which cannot be expected to grow in any significant manner. The remainder, which is dollar denominated trade with the past RPA countries, holds out better prospects for the future.

1.29 In so far as exports to the "general currency area" (GCA) are concerned, it may be argued that the major impetus to growth arose initially from two sources : (a) the recession in the Indian economy during the period 1991-94; and (b) the substantial depreciation of the exchange rate of the rupee since 1991. However, on the one hand, the economy appears to

TABLE 8

Composition of exports

(percentage)

S.No.	Commmodity	89-90	90-91	91-92	92-93	93-94	94-95
1.	Agricultural & allied Product	16.5	18.5	17.9	16.9	18.1	16.0
2.	Ores & minerals (Excl coal)	5.0	5.3	5.2	4.0	4.0	3.8
3.	Manufactured goods,	73.4	71.6	73.6	75.7	74.9	77.3
(i)	Cotton yarn, fabrics, made ups etc.	5.3	6.5	7.3	7.3	6.9	8.4
(ii)	Readymade garments	11.6	12.3	12.3	12.9	11.6	12.4
(iii)	Leather & leather manufactures including footwear of leather	7.0	8.0	7.1	6.9	5.8	5.9
(iv)	Handicrafts other than gems and jewellery (including handmade carpets)	3.0	2.8	3.7	3.8	3.5	3.1
(v)	Gems & jewellery	19.1	16.1	15.3	16.6	18.0	17.2
(vi)	Machinery, transport equip., engg.goods, metal product, iron and steel	12.0	12.4	12.6	13.4	13.7	13.3
(vii)	Chemical & allied product	7.2	7.2	8.3	6.6	6.6	7.4
4.	Mineral fuels & lubricants	2.5	2.9	2.3	2.6	1.8	1.6
5.	Others	2.6	1.7	1.0	0.8	1.2	1.3
	Total	100.0	100.0	100.0	100.0	100.0	100.0

have pulled out of the recession, and, on the other hand, the 24 per cent depreciation of the real effective exchange rate (REER) of the rupee applicable to exports between 1989 and 1993 has now started to get reversed, with the REER appreciating by 8.8 percent in the 1993-95 period [Table 9]. Thus the increased "pull" of the domestic market and the reduced level of export profitability arising out of a real appreciation of the rupee may tend to lead to a slowing down of export growth unless new capacities with export capability are created rapidly. There is, therefore, need to ensure that the investment pattern is reoriented towards the exportables sectors, which is the basic objective of the reforms in any case, and to step up the rate of investments sharply in order to increase the supply of exportables and to expand the infrastructural facilities for the exporters.

1.30 In order to attain rapid growth in export capability, export profitability must be greater than the return on domestic activity. The large gap that has existed between profits on domestic sales and on exports needs to be reduced substantially in order to attract investments in the exportables sectors. The steady reduction in the customs duty levels and in non-tariff protection of import substitutes that has occurred since 1991 will certainly have a desirable effect, which should be examined in a somewhat longer time perspective.

TABLE 9

Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Rupee (Base: 1985=100) (36-Country Export-based weights)

Year	REER	% Variation	NEER	% Variation
(1)	(2)	(3)	(4)	(5)
1985	100.00	-1.6	100.00	-2.7
1986	92.01	-8.0	88.53	-11.5
1987	85.46	-7.1	81.83	-7.6
1988	82.09	-3.8	76.85	-6.1
1989	77.66	-5.4	72.06	-6.2
1990	74.54	-4.0	68.32	-5.2
1991	64.55	-13.4	55.08	-19.4
1992				
Official	60.53	-6.2	47.20	-14.3
Market	54.38	-15.8	42.72	-22.4
Export	56.84	-11.9	44.51	-19.2
1993				
Official	57.86	-4.4	43.30	-8.3
Market	57.86	6.4	43.30	1.4
Export	57.86	1.8	43.30	-2.7
1994	61.84	6.9	42.88	-1.0
1995 (Jan-Apr)	62.13	0.5	40.99	-4.4

NOTE : The REER and NEER for Exports in 1992 is the weighted average of the Official and Market rates in a 40:60 ratio as per the policy under the Liberalised Exchange Rate Management Scheme (LERMS).

1.31 An analysis of the level of export incentives, degree of import protection and the relative position of exports and import substitutes since 1966-67 is presented in Table 10. As may be seen, the export incentive index, defined as the ratio between the export earnings index and the domestic price index, which was steadily eroded through the late 1960s and the 1970s, recovered during the 1980s, though not fully to the 1966-67 level. Post-1991, however, it continued to improve and peaked in 1993-94 at 13 per cent above its level in 1966-67 and almost double its level in 1980-81. Since then it has reduced sharply because of differential domestic and world inflation rates and, if present trends continue, by 1995-96 it will be back more or less to the 1966-67 level and not very much higher than its level in 1990-91. The situation will of course significantly improve if there is even a small depreciation of the exchange rate.

TABLE 10

BEHAVIOUR OF IMPORT PROTECTION AND EXPORT INCENTIVES

	1966-67	1980-81	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
World Price Index (Pf)	1.00	1.51	2.03	2.10	2.18	2.25	2.33	2.41
Domestic Price Index (Pd)	1.00	2.72	5.41	6.14	6.77	7.36	8.19	8.93
Exchange rate for Imports (Rs/$)	7.50	7.89	17.95	24.52	30.65	31.36	31.38	32.00
Average import tariff (%)	45%	110%	125%	105%	95%	70%	55%	40%
Landed Price Index	1.00	2.30	7.55	9.72	11.97	11.05	10.43	9.95
Import Protection Index	1.00	0.85	1.40	1.58	1.77	1.50	1.27	1.11
Exchange Rate for Exports (Rs/$)	7.50	7.89	17.95	24.52	28.95	31.36	31.38	32.00
CCS Rate	10%	10%	10%					
REP/EXIM scrip entitlement	15%	15%	15%	30%				
REP/EXIM scrip premium	25%	25%	25%	30%				
Export Earning Index	1.00	1.59	4.87	6.59	7.39	8.28	8.58	9.06
Export Incentive Index	1.00	0.59	0.90	1.07	1.09	1.13	1.05	1.01
Exp. Incentive/Imp.Protection	1.00	0.69	0.64	0.68	0.62	0.75	0.82	0.91

NOTES : World Price Index = Weighted average of GDP deflators of 10 major trading partner countries

Domestic Price Index=GDP deflator for India

Landed Price Index = Index of (1+t).em.Pf

Import Protection Index = LPI/Pd

Export Earning Index = Index of ex.(1+CCS)(1+REP*premium).Pf

Export Incentive Index = EEI/Pd

1.32 Similarly, although the relative position of exports vis-a-vis import substitutes, as given by the ratio between the export incentive index and the import protection index, has improved substantially in 1993-94 and 1994-95, it continues to be 18 per cent below the level that prevailed in 1966-67. If present trends continue, by 1995-96 this ratio would still be less than the level that prevailed in 1966-67, when India was nowhere near to being an export-oriented economy. The average tariff rate would have to come below 30 per cent before the 1966- 67 configuration is attained.

1.33 It is necessary to realise that the policy options available to the Government today for raising or even maintaining the absolute level of profitability of exports beyond what is determined by market forces are much more limited now than was the case earlier. As a part of the reform process, the Government has given up almost all discretionary export incentive devices such as the cash compensatory support (CCS) and the import replenishment licence (REP). The only discretionary instrument left, other than the general waiver of income tax on export profits [sections 80-HHC/HHE of the IT Act], is the special import licence (SIL), which too will rapidly lose its incentive value as import liberalisation progresses further in the coming years. The possibility of reintroducing these devices is also limited since they may be barred by the latest GATT convention, and also because they run contrary to the spirit of our economic reforms.

1.34 India's export growth in the long run will therefore necessarily have to be based on achieving competitive advantages through improved productivity and quality and on product and market diversification. Simultaneously active export promotion measures will have to be continued for the immediate future if undue risks are to be avoided, and for which export infrastructure will have to be created and strengthened. Export infrastructure is already becoming a constraint. Waiting time in ports, for example, have increased significantly over the past two years. Problems are also apparent in the infrastructure necessary for specific export products such as high-speed data communication links for software exports and cold chains for the export of horticultural products. Although eventually these may all be self-financing, initially there may have to be substantial public investment in these areas. Besides these measures the only direct instrument presently available for active export promotion is the exchange rate, and therefore an active exchange rate policy may be inescapable in the short run.

1.35 In addition, steps will have to be taken to ensure that the export regime is made considerably more "user friendly", which will necessitate substantial changes in a number of areas, such as customs procedures and attitudes, warehouse and port/airport management methods, export promotion schemes like export processing zone and export-oriented unit (EPZ/EOU) and advance licences (AL/VABAL). Some progress has been made in this front by the Export-Import Policy (1992-97) and the various amendments which have been made to it from time to time. The highlights of the April 1995 Trade Policy announcements are :

i) Export Promotion Capital Goods (EPCG) scheme enlarged.

ii) Advance Licence scheme expanded and liberalised.

iii) Rationalisation of schemes covering export-oriented units and export processing zones, electronic hardware and software technology parks.

iv) Advance Customs Clearance Permit abolished.

v) Components, spares, parts of consumer durables freely importable.

vi) List of freely importable goods (OGL) expanded.

vii) Single window clearance for applications for setting up joint ventures or wholly-owned subsidiaries abroad.

1.36 The relative position of exportables to importables on the other hand appears to be moving in the right direction as the planned reduction in trade barriers progresses. It should be noted that this process of import liberalisation would lead to a high growth of imports, especially if the growth of output and income accelerates. It has been estimated that under normal circumstances a growth rate of GDP of 6 per cent will require import growth of about 11 per cent. If, however, custom duty rates decrease by about 10 per cent per year and there is an appreciation of the real exchange rate of around 5 per cent, the consequent lowering of the relative price of imports may well lead to import growth at rates above 20 per cent if the price elasticity of demand is as low as 0.6. Such behaviour is already in evidence in 1994-95, when imports have been growing at almost 28 per cent. If this process continues for the next two years, India's import bill would be almost $42 billion by 1996-97. Even if exports continue to grow at the target rate of 18 per cent per year, the trade deficit may rise from the current level of about $3 billion to $7 billion in 1996-97. Such an order of increase in the trade deficit need not cause any alarm, now that we have a sufficiently large reserve of foreign exchange. However an appropriate policy response would be to promote further export expansion. Exchange rate management again appears to be a major instrument available to raise exports as well as to neutralise the price effect of earlier exchange rate appreciation on the growth of imports.

1.37 The role of the exchange rate goes beyond just the trade issue. One of the primary reason for the low current account deficits during the past two years has been the spurt in the inward remittances, which have gone up from the $2.5 billion level that had persisted for a long period to over $4 billion in 1994-95. This has been ascribed to a shift in remittances from the havala route to legal channels. The principal reason why this shift has taken place is that the gross overvaluation of the rupee that existed in the past has been corrected thereby leading to a dramatic decline in the havala premium. This process has also been supported by the growing confidence in the strength of the Indian economy. If, however, the exchange rate gets misaligned, the havala premium may go up again and if expectations build up for exchange rate depreciation, the flow of remittances may suffer a serious setback, putting substantial pressure on the current account balance.

1.38 It should thus become clear that the exchange rate has now become much more central to management of the external sector than it has ever been before since the Government is committed to removing or reducing all other forms of trade intervention. The introduction of current account convertibility undoubtedly contributes to imposing a certain degree of discipline in the exchange rate policy of the Government, in addition to being a major support for market-oriented reforms. However, the market exchange rate is determined not only by current account transactions but also by financial flows, and the large inflows of foreign portfolio investments has put a strong upward pressure on the exchange rate, despite a continuing current account deficit. Although the Government has managed to maintain a constant parity between the rupee and the dollar through foreign exchange market intervention, the real exchange rate has in fact appreciated quite significantly in the past two years both for imports (13.7 per cent) and for exports (8.8 per cent)[Table 9]. If this trend of large external capital flows interfering with the market exchange rate in performing the equilibrating function continues, the ability of the Government in managing the exchange rate may come under pressure. Given the level and cost of the Government's domestic debt liabilities, sterilisation operations, which were the mainstay of the policy regime for stabilising the nominal exchange rate during the past two years, may become progressively more difficult.

1.39 The substantial increase in foreign inflows on the capital account is a significant indicator of international confidence in our economic potential and policy management, and as such can be regarded as a major success of our reform measures. But the inflow of foreign funds does not become inflow of foreign savings until it increases the net inflow of goods and services. Otherwise it adds to foreign exchange reserves. This undoubtedly contributes to the confidence in the country's external account viability, but it also creates problems in the management of the interest rate and money supply. As regards servicing of these foreign inflows, the advantages of foreign direct investments (FDI) over foreign borrowings are quite clear, in that the former needs to be serviced only when the investments start to yield returns. As regards foreign portfolio investments (FPI), the relatively high average returns to investment, including capital gains, in India compared to international interest rates can make them a more expensive source of funds for the country than foreign borrowings, without the advantage of the stability of direct investments. Such funds tend to be more volatile and less predictable than borrowings, which have well defined repayment schedules.

1.40 Indeed, the most worrisome feature of foreign portfolio investments, which has been documented in the case of a number of other countries, is that it tends to behave pro-cyclically, ie. it flows in when the economy is performing well and flows out when the economy is in a downturn. Such behaviour makes the task of macro-management that much more difficult. There is no reason to believe that foreign financial investors will behave any differently in India than they have elsewhere. All such investments are made on the basis of expectations regarding the future movement of several critical variables, of which the interest rates and the exchange rate are prominent. The sharp reduction in the net accretion of foreign portfolio funds in the latter half of 1994-95 may reflect such expectational changes. In view of the performance of the Indian stock market in the face of rising interest rates, particularly on public debt, and with the widening the trade deficit setting off expectations of nominal depreciation, the prospects may become increasingly uncertain. Given the smallness of the Indian foreign exchange market relative to the total volume of international financial transactions, even minor movements of portfolio funds can be destabilising. It may therefore be necessary to maintain some amount of control, by using price- related market-based instruments, on the inflows and outflows of these funds at the initial stage of our reform process. Efforts at initiating some measure of control have been made in the last quarter of 1994-95, which may have to be continued for some time.

4. The Fiscal Balance

1.41 The decade of the 1980s was characterised by Government revenue expenditures outstripping revenue receipts consistently on an increasing trend. By 1990-91 the fiscal deficit of the Central Government had risen to the order of 8.4 per cent of GDP. This was financed by increased borrowings both at home and abroad. The external debt problem faced by the country in 1990-91 was largely the outcome of this behaviour. In addition, the domestic debt contracted by the government to bridge the deficit led to a rapid increase of about 20 per cent per annum in the interest payment liabilitites over the 1985-90 period. It was clear that no stabilisation effort could be sustained unless the deficit was brought down to reasonable levels and contained. The strategy for achieving this objective was based on three planks : (a) increasing tax revenues; (b) reducing revenue expenditures, particularly subsidies, both open and hidden; and (c) reducing the need for public investments in infrastructure through encouraging greater private sector participation. In order to impose fiscal discipline on itself, in September 1994 the Government entered into an agreement with the Reserve Bank of India to the effect that money finance of the deficit will be gradually brought down to NIL by 1997-98.

1.42 A comprehensive reform of both the direct and indirect tax systems in India formed the cornerstone of the economic reforms programme. This was based on the Report of the Tax Reforms Committee set up by the Government in 1991. An essential element of the tax reform package was predicated on the desirability and need to bring down the average level of customs duty from above 100 per cent in 1990-91 to about 25 per cent within a reasonable period of time. The fall in revenues, if import volumes did not increase correspondingly and simultaneously, on this account would have to be made up from other sources.

1.43 The main philosophy guiding tax reforms in the sphere of direct taxes was to choose moderate rates on a wider base and to ensure better tax administration. The approach appears to have paid dividends with a substantially higher collection of direct taxes in the last three years. The number of personal income tax assessees has also increased significantly during the past year. However, there continues to be substantial scope for higher revenues via tighter administration. The total number of personal income tax assessees comprises less than one per cent of the population, and the total collection of direct taxes, personal and corporation combined, is only about 2.8 per cent of GDP as against the average of around 5.5 per cent for developing countries. From the distribution of per capita consumption expenditure it would appear that less than 30 per cent of people with per capita consumption expenditure higher than the income tax exemption limit of income actually paid income tax in 1992-93. There also appears to be scope for taxing fringe benefits and further widening the ambit of presumptive taxes, which have so far yielded low revenues. Further, exempting financial assets from the ambit of wealth tax can be questioned since such exemptions militate against the canon of horizontal equity.

1.44 In the sphere of indirect taxes, the complex system of high and multiple rates, with numerous exemptions, and different rates being applicable for the same good for different uses and users had resulted in administrative abuse, mounting litigation and uncertain allocative impact. It had also narrowed the tax base, made the system inelastic, while creating serious economic distortions. The reform proposals in this sphere have aimed at simplifying and rationalising the structure and continuing the process of moving towards moderate rates of taxation. This approach appears to have yielded improved results. Even in the case of customs duties, the efforts at unifying rates on similar products and pruning of notifications, including end-use exemptions, has led to a situation where the reduction in the average customs revenue collection rate has been about 36 per cent as against 40 per cent reduction in the average nominal duty rates between 1990-91 and 1994-95.

1.45 Despite the improved elasticity of tax revenues in the post-reforms period, the absolute growth in revenues has been disappointing. Tax collections had increased at an average rate of 16.5 per cent per annum between 1980-81 and 1990-91. Since then, it has slipped drastically to only 8.2 per cent in the 1991-94 period. In 1994-95, however, it has again picked up sharply by 19.3 per cent. Despite this revival, the tax revenue to GDP ratio will be almost one percentage point below the level obtaining in 1990-91, and about one and a half percentage point below the level of 1987-88.

1.46 This pattern highlights the importance of the manufacturing sector to the Government's fiscal viability, since most of these changes can be ascribed to the growth performance of this sector alone. It needs to be borne in mind that it is the manufacturing sector which contributes almost all of Union Excise and Customs duties, and most of the Corporation tax. Indeed, it is this sector which directly or indirectly contributes almost 70 per cent of the Central Government's tax revenues despite accounting for only about 28 per cent of GDP. The dependence of the state government revenues on the manufacturing sector is only slightly less than that of the Centre. Therefore, in the longer run, the financial health of the government, both Centre and State, is closely linked to the growth performance of the manufacturing sector, unless deliberate efforts are made to reduce the level of fiscal dependence.

1.47 Efforts at containing Government expenditures too have borne fruit, with the total expenditure of the Centre being reduced from 20 per cent of GDP on an average during the 1980s to about 18 per cent in the post-reform period. The bulk of this 2 percentage point reduction is on account of capital expenditures, which has gone down from 6.1 per cent of GDP to 4.4 per cent, ie. by 1.7 percentage points. As a consequence, the share of capital expenditure in the total expenditure has declined sharply from around 30 per cent to 24 per cent. As far as revenue expenditures are concerned, it needs to be noted that the only component that has increased is interest payments, which has gone up from 4 per cent of GDP to 4.6 per cent. Other revenue expenditures have come down from 9.9 per cent of GDP to 8.9 per cent. Thus, the 6 percentage point decline in the share of capital expenditures in the total is matched by an almost corresponding increase in interest payments, with other revenue expenditures remaining more or less constant at 49 per cent of the total expenditure. This behaviour is reflected in the fact that while the fiscal deficit to GDP ratio has declined relative to 1990-91, the revenue deficit has gone up.

1.48 The rapid increase in the interest payments is a matter of serious concern. If it is not brought under control, the Government will have to reduce all other forms of expenditure much more rapidly than may be desirable in order to achieve the target fisca. deficit to GDP ratio. It is therefore important to examine the underlying causes behind the burgeoning interest payments. A spurt in interest liabilities has taken place since 1993-94, which continues a trend that had emerged during the 1980s. The compound annual average rate of growth of interest payments was 23.5 per cent during the decade 1980-91. The first two years after reforms had, however, witnessed a remarkable slowing down of the rate of growth interest payments to about 18.4 per cent per annum, primarily due to the reduction in the fiscal deficit and consequently on the level of government borrowings. Since 1993-94, however, it has almost regained the past trend, partly due to increases in the fiscal deficit and partly from rising interest rates on government debt.

1.49 The average interest rate on public debt has increased sharply from 8.0 per cent in 1990-91 to 9.3 per cent in 1994- 95. The bulk of this increase is on account of the average interest rate on internal liabilities which went up by 0.7 percentage points in 1993-94 alone. The decision to shift from fixed yields on government securities to market determined yields on all new issues in order to reduce the burden on the banking sector, has led to a sharp increase in the interest rate on new government debt, which have risen from 11 per cent in 1989-90 and 1990-91 to 13.2 per cent in 1993-94. This has been further compounded, particularly for state governments, by the reduction in the statutory liquidity ratio (SLR) from 38 per cent to 29.5 per cent by 1994-95. The Public Sector Undertakings also have had to face problems arising out of the increased costs of borrowings in the context of reduced budgetary support.

1.50 The average interest rate is likely to rise further for the next few years as older lower cost debt is retired and replaced by the higher interest bearing new debt and as the SLR is brought down to the target level of 25 per cent by 1996-97. The repayment obligations of the Government, and hence the required level of gross borrowings, are scheduled to increase sharply from 1995-96 onwards. Therefore the pace at which the average interest rate will rise is likely to accelerate even if the interest rates stabilise at the current level. This process is likely to continue until the average interest rate on government debt becomes equal to the market rate, unlike in the past when the government paid substantially lower interest on its debt than the market rate. Therefore, unless the market rate itself comes down by about 4 percentage points, the debt servicing burden will continue to increase on this count alone.

1.51 The second, and perhaps the principal, cause for the rapid increase in interest payments is the substantial increase in net government borrowings in the past two years. This figure has gone up from about Rs.33,000 crores during 1990-91 to above Rs.49,000 crores in 1993-94 and further to Rs.55,000 crores in 1994-95, after having declined mildly in 1991-92 and 1992-93. The main reason for this sharp increase in borrowings is the decision by the Government to reduce the extent of money finance of the fiscal deficit in order to control inflationary pressures. Thus, although the fiscal deficit in nominal terms rose by Rs.20,100 crores in 1993-94 over 1992- 93, government borrowings rose by Rs.21,700 crores. As a result the extent of money finance of the fiscal deficit dropped dropped from about 30 per cent in 1992-93 (which was also roughly the average during the 1980s) to less than 18 per cent in 1993- 94. The figures are even more striking for 1994-95, when the fiscal deficit rose by only Rs.800 crores, but borrowings rose by Rs.5,700 crores, thereby causing the proportion of money finance to drop even further to 9.5 per cent.

1.52 The level of public borrowings would have been even higher but for the receipts from the sale of public sector equity, which has averaged a little above Rs.3500 crores per year in the last two years. There has been some criticism of the use of these receipts to hold down the fiscal deficit rather than utilising them for retiring public debt. However, in view of the fact that new government debt is considerably more expensive than the old, it appears logical to use these funds to reduce current borrowing requirements instead of retiring lower cost prior debt.

1.53 The need to contain money finance of the Government's fiscal deficit has been actuated primarily by the need to contain the increase in reserve money and over-all money supply in the context of a massive increase in the liquidity in the Indian economy arising out of foreign portfolio inflows, as well as the need to prevent a nominal appreciation of the rupee in order to protect the export performance. It appears therefore that the increase in private international liabilities has led to a corresponding increase in public domestic indebtedness, with the positive effect largely being the rapid build-up of foreign exchange reserves. The net outcome, however, is a permanent bulge in the government's interest liabilities which may have adverse repercussions on investments in the future.

5. Prices and Inflation

1.54 One of the main objectives of the stabilisation programme was to control the rate of inflation in the Indian economy, which was running at over 16 per cent at the time the policies were implemented. Although the rise in prices was initially contained, so that the inflation rate steadily came down to 7 per cent by the end of 1992-93, it started to increase again thereafter. Consequently, the average rate of inflation as measured by the wholesale price index of 10.7 per cent per annum in the period (1992-95) continues to be high. This is a matter of some concern, since a stable price scenario is the cornerstone of the reform process.

TABLE 11

BEHAVIOUR OF MONEY SUPPLY

	89-90	90-91	91-92	92-93	93-94	94-95
Growth Rates :						
Narrow Money (M1)	21.5	15.5	20.9	8.6	21.5	27.0
Broad Money (M3)	19.4	16.1	18.1	15.5	18.4	22.2
Contribution to changes in M3						
RBI Credit to Govt.	36.0	39.0	10.3	8.7	1.3	2.3
Change in FE Reserves	--	9.8	21.1	7.3	41.7	24.2

1.55 The behaviour of money supply has shown considerable fluctuations in the past few years [Table 11]. The sharp decline in the rate of growth of money supply in 1992-93 reflects the success achieved in reduction of the fiscal deficit. The most noticeable feature of the table, however, is the extreme sensitivity of money supply growth to the inflow of foreign reserves and the sharp reduction in the contribution of the government's fiscal position. An important point to be noted, however, is that the link between money supply growth in a particular year and the rate of inflation is not straightforward. An RBI study points out that in the short run only 31 per cent of the growth rate in money supply is reflected in the inflation rate, and the full effect takes about 4 years to work itself out. Also, the growth rate of real output has a more marked effect on inflation, in that a one per cent growth in output reduces the inflation rate in the short run by 0.55 per cent. In the long run, the effect is 1.83 per cent.

1.56 An important, and disturbing, characteristic of price behaviour since 1990-91 is that food prices have increased at a much faster pace than prices in general. This may be seen in Table-12 :

TABLE 12

Inflation Rates

(per cent per annum)

Item	Sixth Plan	Seventh Plan	1990-1991	1991-1992	1992-1993	1993-1994
(1)	(2)	(3)	(4)	(5)	(6)	(7)
All commodities	9.58	6.65	10.26	13.74	10.06	8.35
Food Grains	--	7.12	8.48	20.67	12.04	7.85
All Food articles	10.70	6.28	12.29	19.90	12.45	4.00

1.57 One of the principal causes of this pattern of inflation is that the Government effected substantial upward revision in the administered prices of food-grains, especially in the past two years. The increase in the Central Issue Price of rice and wheat of 25 per cent and 22 per cent respectively in 1993-94 was much higher than the corresponding increase

TABLE 13

Increase in Procurement and Central Issue Prices

(Percent)

Item	1990-91	1991-92	1992-93	1993-94	1994-95
1	2	3	4	5	6
		Procurement Price			
1. Wheat	4.7	11.1	22.0	14.8	2.9
2. Paddy (Fine)	10.3	11.6	16.7	17.9	9.1
3. Paddy (Superfine)	9.8	11.1	16.0	20.7	8.6
		Minimum Support Price			
4. Pulses (Gram)	6.9	11.1	20.0	6.7	4.7
5. Oilseeds (G. Nut)	16.0	11.2	16.3	6.7	7.5
6. Cotton	8.8	12.1	15.1	12.5	11.1
7. Jute	8.5	17.2	6.7	12.5	4.4
		Central Issue Price			
8. Wheat	14.7	19.7	17.9	21.8	n.a.
9. Rice (Fine)	14.8	25.2	13.7	24.1	n.a
10. Rice (Super Fine)	13.9	23.8	13.1	25.1	n.a.
11. Sugar	16.2	13.1	20.3	9.0	n.a.

in the previous year [Table-13]. These increases in the Central Issue Prices were necessitated on the one hand by the sharp increase in the Minimum Support Prices (MSP) of agricultural commodities, and by the need to reduce the subsidies in order to contain the fiscal deficit, on the other. The MSPs for agricultural commodities had to be substantially increased following reduction in the subsidies of all fertilizers in August 1991 and thereafter by decontrol of phosphatic and potassic fertilizers, with resultant increase in the prices of these two nutrients. Fertilizers account for a fairly significant component in the costs of cultivation. The average annual increase in the procurement price of wheat in the three years from 1990-91 to 1992-93 was about 11 per cent, but the increase in 1993-94 alone was 22 per cent. Similarly, the average annual increase in the procurement price of rice (Super fine variety) was about 12 per cent during 1990-93, but was about 21 per cent in 1993-94. Coupled with similar large increases in the minimum support price of pulses, these revisions in procurement prices of food-grains have put an upward pressure on the prices of primary articles and on the average inflation rate.

1.58 There is also evidence that commodities in which the Government either exercises control on trade and distribution or which have administered prices have shown sharper price rise during the period 1992-94 [Table-14]. Thus the prices of Sugar, khandsari & gur and of cotton textiles have gone up by 16 per cent and 10.7 per cent respectively . Prices in the Fuel, Power & Light group too have accelerated from 7 per cent in 1985-91 to 14.2 per cent in 1991-94. It appears therefore that much of the inflationary pressures during this period emanated directly or indirectly from the Government's actions, particularly those directed towards reducing the extent of subsidies, both open and hidden, in the Indian economic system. But it should also be recognised that this has enabled the government to reduce and moderate the rate of growth of subsidy payments, which will improve the prospect of inflation control in the future.

1.59 The upsurge of inflation in 1994-95, however, does not appear to fall into this pattern, and is therefore a matter of greater concern since it may be a harbinger of things to come. In particular, the rate of price increase of food-grains has decelerated from 18.7 per cent in 1993-94 to 8.1 per cent in 1994-95, and that of administered items from 15.4 per cent to 2.6 per cent. This decline has been more than made up by sharp increases in non-foodgrain food articles, such as fruits, milk, eggs, meat and fish, which has gone up from -8.8 per cent in 1993-94 to 18.4 per cent, and in non-food

TABLE 14

RISE IN WHOLESALE PRICES

(annual growth)

S.No.	Items	Weight	Sixth Plan	Seventh Plan	1990 -1991	1991 -1992	1992 -1993	1993 -1994
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
I.	All Commodities	100	9.58	6.65	10.26	13.74	10.06	8.35
A.	Primary Articles	32.3	10.04	5.41	12.80	17.84	7.80	6.81
	Food Articles	17.39	10.70	6.28	12.29	19.90	12.45	4.80
	(a) Rice	3.69	-	6.91	5.33	21.91	14.75	6.83
	(b) Wheat	2.25	-	5.92	16.22	18.60	11.27	11.45
B.	Non Food Articles	10.08	9.09	5.84	16.87	18.04	0.00	8.73
C.	Minerals	4.83	-	-2.86	6.86	4.59	1.75	15.52
II	Fuel,Power & Light	10.66	12.06	6.06	12.10	13.07	14.07	15.42
III.	Manufactured Products	57.04	8.16	7.45	8.28	10.93	11.33	7.52
1.	Sugar,Gur and Khandsari	4.06	-	8.73	0.00	5.26	12.50	31.67
2.	Cotton Textiles	9.09	-	7.21	7.93	14.41	8.95	8.92

manufactured products, which has increased from 8.2 per cent to 11.1 per cent. Thus it appears that those products which are more sensitive to aggregate demand and supply factors have experienced higher inflation in 1994-95 than in 1993-94.

1.60 This behaviour of prices needs to be seen in the context of the over-all macro-economic environment. It is well-known that the inflationary impact of excess aggregate demand varies from sector to sector depending upon the degree of supply constraint faced by it. Thus for the tradeable goods sectors, particularly if the domestic prices are at or near the border prices, increased demand will be reflected more in increased imports or decreased export supplies, and therefore worsening balance of trade, than in price increases. Similarly, sectors which have relatively large unutilised capacities will also display higher output response than price rise. It is only sectors which are non-tradeable, either in nature or through policy constraints, and are near full capacity that will tend to show high price response. The substantial liberalisation of imports, particularly as far as quantitative restrictions are concerned, in the past four years and the considerable excess capacities that have existed in the industrial sector due to recessionary conditions had to necessarily increase the supply responsiveness of the Indian economy in 1994-95. This, coupled with a stable nominal exchange rate and lowering of indirect tax rates, should have mitigated the inflationary pressures to a large extent. The rapid rise in imports and the high rate of growth of industrial production in 1994-95 seems to suggest that this mechanism was in operation, but was not sufficient to neutralise the inflationary behaviour of the supply-constrained sectors.

1.61 This particular inflationary episode, although not excessively high at about 10 per cent, is a cause for concern since it implies that the demand pattern existing in India is such that shortages tend to develop in certain major sectors with rapid growth in national income. Unless urgent corrective steps are taken to first identify these sectors and second to enhance production or reduce whatever trade barriers remain in them, sustained growth of the Indian economy will continue to be associated with rising inflation. Merely reducing the fiscal deficit or controlling monetary expansion will not be enough, since rapid growth of the Indian economy may have to be associated with a certain degree of excess real aggregate demand, at least in the near future, unless the domestic savings rate can be increased substantially.

1.62 Finally, there is no doubt that much of the inflationary pressures in 1994-95 have emanated from the sharp rise in the monetary aggregates due to foreign portfolio inflows during 1993-94 and 1994-95 and the inability of the Indian economy to productively utilise them. In the longer run it would be necessary to devise strategies for coping with similar scenarios. One point that needs to be seriously considered is that when some inflation is inevitable for reasons beyond the control of the government, that should not preclude the need to raise such administered prices which are necessary to correct the relative price distortions and reduce the fiscal burden of the government. The experience of 1993-94 suggest that some deliberate and well-deserved price adjustments may hold down price increases in other supply-constrained sectors, and thus for the same over-all level of inflation, the possibility of future inflation control may be improved.

6. Employment Trends

1.63 Data from the National Sample Survey (NSSO) rounds for 1977-78 and 1987-88 show that employment had grown during the 10 year period 1978-88 at an average rate of about 2 per cent per annum. Comprehensive data from the full round of NSSO on employment are not available yet for the subsequent period. Estimates of employment growth have, therefore, been made using GDP growth and an assessment of sectoral employment elasticities based on available data on sub-sectoral composition of growth rates of output in different sectors of the economy.

1.64 On the basis of the estimates for 1992-93, 1993-94 and 1994-95 of the growth rates of GDP made by CSO, it is estimated that employment would have grown by about 18.8 million in the first three years of the Plan period taken together, yielding an average of 2.03 per cent per annum for 1992-95. Thus, employment during 1992-95 is estimated to have grown at about the same rate as in the decade 1978-88.

1.65 Employment growth has certainly been better in the 1992-95 period than during 1985-92, when the average rate of growth was only 1.78 per cent (equivalent to a net annual addition of about 5 million per year). However, it has been substantially lower than the Eighth Plan targets of an average employment growth rate of 2.6 to 2.8 per cent per annum. Consequently the growth in employment opportunities of 6 million in each of the three years 1992-95 have fallen short of the target envisaged in the Plan by about 2.5 million each year. It has also been smaller than the estimated growth of labour force during the period. Therefore, the level of unemployment in the Indian economy, which was estimated at 17 million in 1992, is likely to have increased to 19 million in 1994.

1.66 The non-attainment of the employment targets is primarily an outcome of the slower rate of growth of the economy than had been planned. On the positive side, the pattern of growth witnessed in the first three years of the Plan appears to have been favourable to faster employment growth. There has been a noticeable shift in favour of sectors and sub-sectors which are more employment-intensive in comparison to the growth pattern experienced in the preceding 10 year period. In particular, growth in agriculture, trade, transport and services has buoyed up the employment growth in face of a slippage in the over-all GDP growth performance.

1.67 It should be noted, however, that a substantial share of the growth in estimated employment during this period, amounting to almost 9 million out of the 18.8 million (48 per cent) , is accounted for by the agricultural sector alone, which not only accounts for 63 per cent of employment in India but also, as has been already noted, grew faster than the Plan target. This performance has been permitted by 7 good monsoons in a row. Such a fortunate conjuncture cannot be expected to hold in the longer run. Since agriculture is expected to contribute significantly to employment growth in large parts of the country in the immediate future, measures to ensure the sustainability of agricultural employment need to be implemented. In particular, the steady decline in public investments in agriculture for the past decade, which has increased the vulnerability of agricultural growth, and hence growth in agricultural employment, to vagaries of the weather, needs to be reversed. Public investments in strengthening irrigation and other rural infrastructure in backward areas suitably dovetailed with rural employment programmes should reduce dependence of agriculture on rainfall and ensure reasonable growth for the sector. The proposals for enhancing rural credit in the current year's budget should contribute to this process.

7. The Incidence of Poverty

1.68 Estimates of the incidence of poverty in India are also prepared at intervals of five years when the NSS quinquennial surveys on consumer expenditure become available. The last available estimates pertain to 1987-88. Planning Commission, following the methodology used during the Sixth and Seventh Plans, estimated that 29.9 per cent of the population lived in absolute poverty in 1987-88. The Expert Group on Poverty Estimates, however, suggested a revision in the methodology, and on the basis of the revised methodology estimated that 39.3 per cent of the population, equivalent to 313 million people, were below the poverty line : 39.06 per cent in rural areas and 40.12 per cent in urban areas. The survey results of the 50th Round (1993-94) are under process, and not yet available.

1.69 However, NSS "thin sample" results are available for the period 1988-89 to 1992. These have been used to estimate the incidence of poverty at the national level. These estimates have been made by both the Official and the Expert Group methods. It should be noted, however, that these estimates are only approximates as the sample sizes in the NSS "thin" rounds are relatively small. However, these rounds survey 25 to 30 thousand households, which are selected by the same sampling procedure that is used for the full rounds. Therefore there is no question regarding the reliability of the data insofar as the national-level estimates are concerned. However, these data cannot be used for state-level poverty estimates since there may not be sufficient number of observations for certain states. The poverty estimates are presented in Table-15.

1.70 As may be seen, the poverty estimates from the thin rounds using the official methodology indicate a significant reduction in poverty since 1987-88. Some of this decline may, however, be attributed to the adjustment factor that is used to correct the discrepancy between the total consumption given by the NSS estimates and that of the CSO. This factor increased somewhat between the full NSS round of 1987-88 and the subsequent "thin" rounds. Although the poverty incidence increases somewhat in 1991-92 and 1992-93, it remains lower than in 1987- 88. The Expert

TABLE 15

INCIDENCE OF POVERTY

(per cent)

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
OFFICIAL						
Rural	28.1	24.0	21.7	20.8	22.7	23.8
Urban	16.6	15.1	14.2	11.6	13.9	13.5
Combined	25.2	21.8	19.8	18.5	20.4	21.1
EXPERT GROUP						
Rural	39.1	39.2	33.7	35.0	40.0	41.7
Urban	40.1	38.4	36.0	37.0	37.6	37.8
Combined	39.3	39.0	34.3	35.6	39.4	40.7

Group method, however, while having a similar pattern, indicates that the poverty incidence in 1992-93 is not substantively different from that in 1987-88 despite having declined quite significantly in the intervening years. Much of this behaviour can be explained by the negative growth of agriculture in 1991-92 and the large increases in food prices that had occurred during this period, which affects the poor disproportionately. With the revival of agricultural growth since 1992-93, poverty may be expected to have declined.

1.71 The importance of agriculture to both employment creation and poverty reduction underscores the need to maintain and even accelerate agricultural growth. While targetted anti-poverty programmes certainly ameliorate the condition of the poor, they cannot provide a long-run substitute for growth. Therefore, the need to increase agricultural investments, particularly public investments, and to provide the education and training necessary for the poor to take advantage of the opportunities thus created, cannot be over-emphasised.

8. Regional Balance

1.72 Balanced regional development has been a fundamental objective of India's development strategy since the very beginning. Despite considerable efforts made by the Governmnt over the years in furthering this end through various devices such as devolution of resources, directed location of industries, special incentives for backward area development, etc:, there continues to exist wide disparities between the states. Although the state-wise income data for most of the States is not yet available for 1993-94, the figures for the first two years after reforms (1991-92 and 1992-93) indicate that the disparities may have widened even further [Table-16]. On one hand, despite the general decline in the growth rate of GDP post-1991, Gujarat, Karnataka, Kerala, Meghalaya, Assam and Jammu & Kashmir posted increases in the growth rates of their respective state GDPs. On the other hand, three states - Bihar, Uttar Pradesh and Madhya Pradesh - which were already among the bottom five, experienced an even sharper deceleration in growth than the national average.

1.73 The wide disparity between regions is underscored by the state-wise distribution of investible resources by the organised financial sector [Table-17]. As can be seen, the bottom seven major states, ranked by the per capita state domestic product, which account for about 50 per cent of the population, received only 20 per cent of commercial bank credit and 24 per cent of credit from All India Financial Institutions. It should be further noted that since these figures are cumulative to date (1993-94), they reflect in part the effects of government direction of investment and credit, which had consistently attempted to reduce the disparities. Even within the top eleven states there are significant variations, with one state - Maharashtra - receiving over 20 per cent of all credit, and two states - Punjab and Haryana - receiving less than the per capita average. The situation of the smaller states is particularly serious in that they receive only about 30 per cent of the national average on a per capita basis.

TABLE 16

Growth of Net State Domestic Product

(Percent per annum)

Rank	States Ranked by Per Capita NSDP	Pre-Reform 1985-86 to 1990-91	Post-Reform 1991-92 to 1993-94
0	1	2	3
1.	Bihar	4.4	-2.3
2.	Uttar Pradesh	5.3	1.2
3.	Orissa	4.6	4.3
4.	Jammu & Kashmir	1.2	3.9
5.	Madhya Pradesh	7.5	-2.5
6.	Assam	4.1	6.2
7.	Rajasthan	9.5	1.5
8.	Meghalaya	7.2	9.5
9.	Kerala	5.0	6.9
10.	Tamil Nadu	5.4	4.1
11.	West Bengal	5.4	5.1
12.	Karnataka	4.5	7.2
13.	Andhra Pradesh	5.5	0.2
14.	Gujarat	4.7	5.4
15.	Goa	7.5	1.8
16.	Haryana	8.5	3.4
17.	Maharashtra	7.7	2.7
18.	Punjab	5.3	4.5
	All India	5.9	2.2

TABLE 17

CUMULATIVE STATEWISE DISTRIBUTION OF CREDIT BY ORGANISED FINANCIAL SECTOR

	per capita SDP (Rs.)	Commercial Banks			All India Fin. Inst.		
		Rs. cres	percent	per capita	Rs. cres	percent	per capita
MAJOR STATES							
Bihar	2886	4535	2.9%	525	2245	2.4%	260
Orissa	3816	2436	1.6%	769	2310	2.5%	729
Uttar Pradesh	4001	11033	7.1%	793	8005	8.5%	575
Jammu & Kashmir	4051	1245	0.8%	1617	452	0.5%	587
Madhya Pradesh	4383	6142	4.0%	928	4846	5.2%	732
Rajasthan	4402	4247	2.8%	965	4066	4.3%	924
Assam	4594	1311	0.8%	585	647	0.7%	289
Kerala	4607	6413	4.2%	2204	1967	2.1%	676
West Bengal	5284	12961	8.4%	1903	4664	5.0%	685
Himachal Pradesh	5355	625	0.4%	1201	973	1.0%	1872
Andhra Pradesh	5529	11854	7.7%	1783	7810	8.3%	1174
Tamil Nadu	5817	18393	11.9%	3290	9151	9.7%	1637
Karnataka	5898	10728	7.0%	2384	5720	6.1%	1271
Gujarat	6306	8868	5.7%	2147	12495	13.3%	3025
Maharashtra	7997	43705	28.3%	5539	22296	23.7%	2826
Haryana	8722	2991	1.9%	1813	2526	2.7%	1531
Goa	9667	598	0.4%	4980	756	0.8%	6298
Punjab	9769	6245	4.0%	3076	2978	3.2%	1467
All Major States		154329		1870	93907		1138
OTHER STATES & UTs							
Arunachal Pradesh		30	0.0%	329	18	0.0%	202
Manipur		91	0.1%	506	36	0.0%	201
Mizoram		24	0.0%	344	29	0.0%	419
Tripura		197	0.1%	704	28	0.0%	101
Meghalaya		84	0.1%	467	79	0.1%	438
Nagaland		98	0.1%	813	42	0.0%	348
Sikkim		28	0.0%	700	30	0.0%	753
Union Territories		25137	16.3%	22050	3149	3.4%	2762

1.74 During the period 1989-90 and 1993-94, the share of the bottom seven states in the distribution of credit has declined by about three percentage points, indicating the likelihood of growing inter-regional disparities in the future if this trend continues. The pattern could change in the future only with active government intervention. The nature of intervention will have to be reoriented towards the logic of the economic reforms so that the role of the government in directing the location of industrial investments does not conflict with the activities of the private sector in the interest of efficiency.

1.75 The regional disparities in per capita incomes also finds reflection in the indicators of social development [Table-18]. The poorer states - particularly Bihar, Uttar Pradesh and Madhya Pradesh - have highly adverse indicators of social development and well-being. Life expectancy, female literacy and mean age of females at marriage are low, while fertility rates, infant mortality and incidence of poverty are high in these states. Housing conditions, drinking water, sanitation and household electricity supply are also consistently inferior.

1.76 Although these states need to increase investment for development much more than other states, their Plan investments have fallen sharply in the past five years, thus further jeopardising their prospects for growth and improvement in the human conditions [Table-19]. In the years 1991-92 through 1993-94, the short-fall in achieving Annual Plan Outlays of the low income states has been increasing from year to year. For instance, Bihar's shortfall in Annual Plan Outlay increased from 30 per cent in 1990-91 to 67 per cent in 1993-94; Uttar Pradesh from 5 per cent to 31 per cent and Madhya Pradesh from 11 per cent to 16 per cent during the same period.

TABLE 18

Important Socio-Economic Indicators

	Birth Rate 1993	Death Rate 1993	Infant Mortality 1993	Couple Protection 1993	Life Expectancy 1986-91	Female Literacy 1991	Mean Age at Marriage (F) 1991	Percentage of households (1991) with Pucca houses	Toilet facility	Electricity	Drinking water	%age below poverty 1987-88
1 Andhra Pradesh	24.1	8.4	64.0	45.3	62.2	33.7	17.3	38.4	54.6	46.3	55.1	31.7
2 Bihar	32.1	10.6	70.0	24.7	57.0	23.1	16.6	30.2	56.5	12.6	58.8	40.8
3 Gujarat	28.0	8.1	58.0	57.0	61.5	48.5	19.5	56.9	65.7	65.9	69.8	18.4
4 Harayana	30.6	7.8	65.0	55.9	62.0	40.9	17.8	50.1	64.3	70.4	74.3	11.6
5 Karnataka	25.5	8.0	67.0	48.2	63.3	44.3	19.2	42.6	62.5	52.5	71.7	32.1
6 Kerala	17.3	6.0	13.0	55.4	73.8	86.9	21.8	56.0	72.7	48.4	18.9	17.0
7 Madhya Pradesh	33.4	12.6	106.0	38.8	54.7	28.4	16.6	30.5	53.0	43.3	53.4	36.7
8 Maha.	25.0	7.2	50.0	55.3	64.3	50.5	18.8	52.2	64.5	40.7	68.5	29.2
9 Orissa	27.2	12.2	110.0	40.2	55.2	34.4	19.1	18.7	49.3	17.8	39.1	44.7
10 Punjab	26.3	7.9	55.0	73.6	65.3	49.7	21.1	77.0	73.2	60.9	92.7	7.2
11 Rajasthan	33.6	9.0	82.0	29.5	58.7	20.8	16.1	56.1	62.3	20.5	59.0	24.4
12 Tamil Nadu	19.2	8.0	56.0	57.3	60.8	52.3	20.3	45.5	57.5	37.2	67.4	32.8
13 Uttar Pradesh	36.0	11.4	93.0	33.7	49.6	26.0	16.7	41.0	66.5	12.9	62.2	35.1
14 West Bengal	25.6	7.3	58.0	34.1	59.5	47.1	19.2	32.6	78.8	21.1	82.0	27.6
INDIA	28.5	9.2	74.0	43.5	59.1	39.4	18.3	41.6	63.9	42.4	62.3	29.9

9. INVESTMENTS AND SAVINGS

1.78 It may recalled [Table 2] that the Eighth Plan had visualised a significant step up in the rate of investments in the Indian economy. The data available for the first two years of the Plan, however, indicates that the expectation

TABLE 19

Real State Plan Expenditures - Selected States

(Percent Change)

S. No.	State	88-89	89-90	90-91	91-92	92-93	93-94	94-95
0	1	2	3	4	5	6	7	8
	All States	0.6	2.3	-1.7	-2.7	-0.8	4.4	6.7
1.	Bihar	-1.7	-0.8	-16.9	-28.5	1.7	-39.8	8.1
2.	Madhya Pradesh	-1.5	3.0	-8.6	-7.0	0.1	3.5	2.7
3.	Rajasthan	0.8	4.4	10.3	6.1	8.5	14.3	26.6
4.	Uttar Pradesh	5.4	0.8	-1.0	1.2	-13.3	-13.3	6.7

Note: 1. GDP Deflator has been used to convert plan expenditure from current prices to constant prices

has not been realised. The trends in over-all investments in the country are given in Table 20 below. As may be seen, the investment rate peaked in 1990-91 and has steadily declined thereafter. This trend is particularly of concern since the process of restructuring the Indian economy as visualised in the design of the reform programme is critically dependant upon the level and growth of investments in the economy. One of the basic objectives of reforms was to create conditions such that on one hand there would be a constant pressure on all productive enterprises to become more efficient, and on the other hand to direct investments into areas where the country had competitive advantage. It was expected that in this process some existing capacities would be rendered non-viable, but that rapid growth in other sectors would more than take up the slack. The slow down in investments will tend to retard this process.

TABLE 20

INVESTMENT RATES (percentage of GDP)

S.No.	Items	Sixth Plan	Seventh Plan	1990-1991	1991-1992	1992-1993	1993-1994
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Gross Fixed Capital Formation	19.62	21.65	23.16	22.20	21.51	20.90
	of which : Public Sector	9.72	10.28	9.37	9.53	8.48	8.39
2.	Gross Domestic Capital Formation	20.67	23.41	27.07	23.60	21.98	20.43
	of which : Public Sector	10.29	10.58	9.74	9.17	8.87	8.90

1.79 The decline in the rate of capital formation by the private sector has been particularly sharp, going from 17.3 per cent of GDP in 1990-91 to 11.5 per cent in 1993-94. Most of this decline, however, has been due to the reduction in inventory and stock holdings, which accounts for 4.6 percentage points of the total decline of 5.9 percentage points. Even so, the 1.3 percentage point reduction in the rate of fixed capital formation is a matter of concern.

1.80 Although data on gross domestic investment for 1994-95 are not yet available, there are several indicators which suggest that investment activity, particularly in the industrial sector, has revived during 1994-95. First, production of capital goods has increased by 24 per cent as compared to a decline of 5 per cent in 1993-94. Second, import of capital goods has experienced a growth of 18.2 per cent, continuing the trend that had begun in 1993-94 (37.8 per cent). Third, primary capital issues has exceeded Rs. 40,000 crores as compared to about Rs. 22,000 crores in 1993-94. Finally, disbursement of financial assistance by All India Financial Institutions has grown by over 24 per cent as against 15 per cent growth in 1993-94.

1.81 The inflow of foreign direct investment (FDI) has increased remarkably as a consequence of the reform programme, virtually doubling in each year. Although this performance is highly encouraging by past standards, it has not entirely lived up to the expectations that have been generated by the approvals. Thus, while the total volume of approvals have been very impressive by any standard, the actual inflows have been relatively tardy. The behaviour of FDI is given in the Table 21.

TABLE 21

FOREIGN DIRECT INVESTMENT

	1991	1992	1993	1994	Total
Approvals	0.2	1.3	2.8	2.9	7.2
Actual Inflows	0.2	0.2	0.6	0.9	1.9
Percent Realisation	66%	17%	20%	33%	26%

Source : Economic Survey 1994-95

1.82 The relatively poor performance of private sector investments seems to indicate that there may still be some uncertainty in the minds of potential investors regarding the progress of economic reforms and the behaviour of the Indian economy in the immediate future. It is extremely important that these doubts be resolved in the shortest possible time. As has already been indicated [Table 10], the extent of protection to Indian industry continues to be relatively high, with the import protection index in 1994-95 being 49 per cent higher than in 1980-81 and 27 per cent higher than in 1966-67. Therefore the full effect of foreign competition on Indian industry is yet to be felt. The recent indications of improved productivity in Indian industry is more the result of domestic competition arising from the new Industrial Policy, particularly delicencing, than from foreign competition. By 1996-97, however, if present trends continue, competition from imports is likely to become fairly intense. A certain degree of attrition of existing capacities may well occur, and if the investment rate does not pick up sufficiently to make up for this possibility, the growth rate of the economy may suffer.

1.83 Although the decline in the rate of capital formation by the public sector has been less than that of the private sector at about 1 percentage point between 1990-91 and 1993-94, the decline has been much sharper in government investments which has gone down by 1.7 percentage points. The difference has been made up primarily by investments of the public sector enterprises. The decline in government investments has serious implications for some of the critical infrastructure sectors such as roads, ports, power generation, etc:. Although efforts are underway at attracting greater private sector investments in these key infrastructural areas, the progress on this front has been slow. If in the interim, investments in the pipeline drop, it may prove to be a serious constraint in the medium-run.

1.84 While there is no doubt that greater private sector participation in infrastructural development is the right direction to follow in the long-run, there are two serious problems in the short- and medium-run. First, for most infrastructural sectors major legislative and procedural changes are required in order to bring in the private sector in any meaningful way. Such changes are of necessity time consuming, and it does not appear likely that too much progress can be achieved in the next two to three years. Second, and more importantly, it needs to be recognised that infrastructural projects by their very nature tend to have long pay-back periods. This is particularly true in the Indian context, given the low average ability to pay. This causes a problem regarding the viability of such projects in terms of the expected returns to the private investors. In the immediate future therefore it is unlikely that very much private investments would be forthcoming unless the government devises methods by which the viability of such projects is enhanced. This needs to be done expeditiously.

1.85 However, the problem of regional imbalance is likely to become even more acute as the trend towards greater private sector provision of infrastructure gains momentum. With the dismantling of the licensing regime and of directed investment location, economic forces will naturally play the principal role in determining the future location of industries. While this is undoubtedly desirable for efficiency, it does raise serious equity issues. It is not unreasonable to assume that private infrastructural investments will have a shorter time horizon for pay-back than public investments have had. In such a case, the bulk of such investments may take place in locations which are relatively more developed and therefore hold better promise for high capacity utilisation. This in turn will tend to attract more industrial investments to the same locations simply because of superior infrastructural availability. Thus a virtuous cycle of infrastructural development and industrial growth will be set off in these locations. However, the net result may be a growing disparity between these favoured locations and the rest of the country, which will have arisen not from any intrinsic superiority but due to certain historically determined and government directed investment patterns. This is not merely an inter-state issue, since growing regional disparities even within a state can cause serious problems. In this context, public investments may have to be relied upon to ensure that adequate infrastructure is created in the backward areas in order to provide the pre-conditions for private investments in the future, and to ensure that disparities do not widen too much.

1.86 The other area of concern is investments in agriculture. Gross investments in real terms in this sector has stagnated right through the 1980s and 1990s at about Rs. 4,600 crores per annum in 1980-81 prices. There has been an absolute decline in public investments of about Rs.700 crores between 1980-81 and 1992-93, which has barely been made up by an increase in private investments. The share of this sector in total gross capital formation in the economy, however, has declined sharply from 18 per cent in 1980-81 to only 9 per cent in 1992-93. Whether such rates of capital formation in agriculture can sustain output growth rates of above 3 per cent per annum needs to be considered seriously.

TABLE 22

GROSS DOMESTIC SAVING RATES

(percentage of GDP)

S.No.	Items	Sixth Plan	Seventh Plan	1990-1991	1991-1992	1992-1993	1993-1994
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Household Sector	14.19	16.52	19.96	17.82	15.50	15.95
2.	Private Corporate Sector	1.61	2.12	2.70	3.16	2.96	3.96
3.	Public Sector	3.62	1.79	1.02	2.07	1.55	0.25
	Total	19.42	20.43	23.68	23.05	20.01	20.16

1.87 The Eighth Plan had also visualised a step up in domestic savings for financing the investment needs of the country, and a lesser reliance on foreign savings as reflected in the current account balance. The behaviour of the domestic savings rate is presented in Table 22.

1.88 As may be seen, the domestic savings rate peaked in 1990-91 and has declined sharply thereafter. This decline has been due primarily to a sharp reduction in household savings of about 4 percentage points. Public savings had improved significantly in 1991-92 and 1992-93, but received a serious set-back in 1993 94. Corporate savings, on the other hand, has grown steadily. While the factors leading to a

TABLE 23
INFLOW OF FOREIGN SAVINGS

(percentage of GDP)

	89-90	90-91	91-92	92-93	93-94	94-95
1. Current Account Deficit	2.0	3.2	0.4	1.8	0.1	0.7
2. Net Foreign Financial Savings	2.2	2.2	1.4	1.6	3.0	2.6
3. Exceptional Finance	0.0	0.6	0.5	0.6	0.7	0.0

decline in public savings has been discussed in earlier paragraphs, the decline in household savings is a major cause for concern.

1.89 As far as foreign savings are concerned, the Eighth Plan visualised that these would amount to about 1.6 per cent of GDP. However, foreign savings may be defined in two ways. First, there is the inflow of real resources from the rest of the world, which is captured by the Current Account Deficit (CAD). This is the sense in which the term has been used in the Eighth Plan document. Second, there is the flow of financial savings from abroad, which includes all capital account items excluding exceptional finance. The behaviour of these various measures are presented in Table 23.

1.90 As may be seen, the current account deficit in the first three years of the Plan (1992-95) has been well below the target of 1.6 per cent of GDP. This is primarily a reflection of the inadequacy of investment demand during this period as has been discussed before. The more interesting issue arises with the inflow of net foreign savings, which has surged significantly. The difference between this figure and the current account deficit reflects the existence of excess financial savings in the economic system. If these excess financial savings have to be absorbed, either investments have to be increased or domestic savings reduced through higher consumption. The existence of such a situation of excess foreign financial savings suggests the scope for raising investment given the same rate of domestic savings. Since private investment has a dynamic of its own, and if it does not increase either because of the private assessment of risks and the sustainability of government policy, or because the social rates of return are not fully reflected in private profitability, public investment may have to be raised to fill the gap. Care must of course be taken to ensure that such public investment are fully cost effective and earn adequate rates of return. Designing and implementing such efficient public investment programmes may then become an integral element of public policy.

OUTPUT, TRADE, PRICES AND MONEY SUPPLY

(Annual changes per cent)

Sl. No.	ITEM	Sixth Plan Average	Seventh Plan Average	1990-91	1991-92	1992-93	1993-94	1994-95
1.	GDP	5.30	5.80	5.40	0.90	4.30	4.30	5.30 **
2.	Agriculture	3.90	3.80	3.80	-2.30	5.10	2.90	2.40
3.	Manufacturing	7.70	6.80	6.10	-3.10	3.10	3.60	8.70
4.	Services	5.60	6.90	5.90	5.10	4.80	6.10	6.10
5.	Exports (Volume)	2.67	8.03	10.98	7.47	6.86	15.30	19.07 *
	(Dollars)	5.65	11.44	8.98	-1.14	3.30	20.30	17.90
6.	Imports (Volume)	6.89	8.16	4.35	-4.08	23.68	16.70	32.48 *
	(Dollars)	6.65	9.38	14.35	-24.54	10.32	3.22	28.03
7.	Wholesale prices	9.60	6.70	10.30	13.70	10.10	8.30	10.90
8.	Money Supply (M3)	16.20	18.50	16.10	18.10	15.50	18.40	22.20

* Upto December 1994-95.

** Source: Central Statistical Organisation, National Accounts Statistics (may, 1995)

BALANCE OF PAYMENTS & EXTERNAL DEBT ANNEXURE - II

Sl. No.	ITEM	Sixth Plan Average	Seventh Plan Average	1990-91	1991-92	1992-93	1993-94 (Q.E.)	1994-95 (Q.E.)
1.	Trade Balance							
	1.1 ($ million)	-6336	-7828	-9437	-2798	-4368	-1285	-3946
	1.2 % of GDP	-3.3	-3.1	-3.2	-1.0	-2.0	-0.5	-1.4
2.	Current Account (Net)							
	2.1 ($ million)	-2440	-5819	-9680	-1178	-3526	-315	-2082
	2.2 % of GDP	-1.43	-2.4	-3.2	-0.4	-1.8	-0.1	-0.7
3.	Interest Payments (Net)($	672	2413 @	3642	3656	3718	3748	N.A.
	of which, interest on							
	3.1 External Assistance	(a)	770	1063	1182	1275	1328	1314
	3.2 Commercial Borrowing	(a)	726	1163	1200	1234	1219	N.A.
	3.3 NRI Debt	(a)	671 @@	1282	1036	930	905	N.A.
	3.4 IMF Debt	(a)	247	134	238	279	296	N.A.
4.	Capital Transaction -Selected Items (Net)($ million)							
	4.1 Private Longterm (ne	440	2201	2399	3678	3710	N.A.	N.A.
	4.2 Private Short-term (	-2	-3	27	1022	-993	N.A.	N.A.
	4.3 Banking (net)(Excl.	17	2	-632	-154	928	N.A.	N.A.
	4.4 NRI Net Receipts	N.A.	1465	1536	290	2001	940	N.A.
5.	Interest Payments as % of Current Receipts.	4.1	11.95	14.0	13.2	13.7	11.2	N.A.
	Interest Payments as % of Current Receipts, excld. official	4.2	12.2	14.3	13.4	13.9	11.3	N.A.
6.	Debt Service as % Current receipts excluding official transf	7.7 *	25.7 *	32.3	29.8	30.3	24.8	27.1
7.	Total Long-term debt ($ mill.)	#	68415 **	75420	78261	83646	87097	91057
8.	Total Short-term debt ($	N.A.	7489 **	8539	7073	6340	3626	4264
9.	Gross Total ($ million)	N.A.	75904 **	83959	85334	89986	90723	95321
10.	Total debt as % of GDP	10.3 ##	17.1	30.5	41.1	39.9	36.1	32.9
11.	Total debt as % of Curren	123	266	329	312	336	274	232
12.	Total Foreign Exch.Reserve(end-year)							
12.1	Foreign Currency Assests	4859	5022	2236	5631	6434	15068	20809
12.2	SDR + Gold + Foreign Curr	5542	5617	5834	9220	9832	19254	25186

Note:(a) Data on short term debt are not available prior to 1988-89 and defence debt prior to 1989-90. Accrued interest credited to the FCNR deposits are available only from end March, 1990 onwards. Hence the series from 1989-90 onwards is not comparable with that prior to 1989-90 Data under Sixth and Seventh Five Year Plans are annaul average, unless specified otherwise.

2) Figure in this Table are converted from the Rupee Table based on the respective Rs. - US dollar rates.

@ Excluding defence debt service. @@: Estimates of 1985-86 to 1988-89.

* Ratios are not strictly comparable because of differences in the debt data given in various sources.

** End March, 1990.

US dollar 23500 & 37350 for end March, 1981 & 1986 respectively. ## Pertains to debt under external assistance only.

NA Data not available from the latest Economic Survey, Currency and Finance and Annual Report of RBI.

ANNEXURE - III

GROWTH RATE OF IMPORTS

Sl. No.	ITEM	Percentage change over the previous year in U.S. dollar terms 1990-91	1991-92	1992-93	1993-94 (Prov.)	1994-95 (Q.E.)	Annual Average (92-93) to (94-95)
1.	Total Imports	14.4	-24.5	10.3	3.2	28.0	13.8
2.	DGCIS Imports	13.2	-19.4	12.7	6.5	21.2	13.5
3.	Non-DGCIS Imports	22.4	-57.0	-18.0	-49.9	262.0	64.7
4.	POL Imports	60.0	-11.0	13.7	-5.7	2.2	3.4
5.	DGCIS Non-POL Imports	3.1	-22.2	12.4	11.2	27.4	17.0
6.	Food Imports *	1.5	-50.8	85.0	-37.3	244.7	97.5
7.	Non-POL Non-Food Imports	3.1	-21.2	10.9	12.8	23.4	15.7
8.	Capital Goods	10.0	-27.5	7.0	37.8	18.2	21.0
	MEMO ITEMS:						
	(a) Non-DGCIS Imports ($ Million)	3841.0	1653.0	1355.0	679.0	2458.0	1497.3
	(b) Non-DGCIS Imports (% of Imports0	13.8	7.8	5.8	2.8	8.0	5.5

* Cereals, Edible, Oils, Pulses, Sugar etc.

Q.E. Quick Estimates

ANNEXURE – IV

FISCAL BALANCE

(Percentage of GDP)

Sl. No.	ITEMS	Sixth Plan Average	Seventh Plan Average	1990-91	1991-92	1992-93	1993-94
1.	CENTRAL GOVERNMENT (1)						
	1.1 Revenue:Tax/Non-Tax	(a)	11.1	10.3	10.7	10.5	9.8
	1.2 Current Expenditure	(a)	13.7	13.7	13.4	13.2	14.1
	1.2.1 Defence	(a)	2.9	2.0	1.9	1.7	1.9
	1.2.2 Interest	(a)	3.4	4.0	4.3	4.4	4.8
	1.2.3 Subsidies	(a)	2.0	2.3	2.0	1.7	1.6
	1.2.4 Development Expenditure	(a)	5.0	5.0	4.7	4.6	4.7
	1.2.5 Other non-plan expenditure:	(a)	1.8	2.3	2.0	2.1	2.1
	1.3 Capital Expenditure:	(a)	6.0	5.1	4.2	4.2	4.2
	1.4 Fiscal Deficit	6.3	8.2	8.3	5.9	5.7	7.4
	1.5 Revenue Deficit	1.1	2.6	3.5	2.6	2.6	4.3
	1.6 Primary Deficit	4.1	4.8	4.3	1.6	1.3	2.7
2.	STATE GOVERNMENT (1)						
	2.1 Revenue:Tax/Non-Tax	(a)	12.2	11.7	12.7	12.4	12.8
	2.2 Current Expenditure	(a)	12.4	12.7	13.6	13.1	13.6
	2.2.1 Developmental Expenditure	(a)	7.7	7.5	8.2	7.7	7.8
	2.2.2 Non-Developmental Exp.	(a)	4.5	4.9	5.2	5.2	5.6
	2.3 Capital Expenditure:	(a)	2.9	2.5	2.2	2.3	2.2
	2.4 Fiscal Deficit	2.9	3.2	3.4	3.0	2.8	2.9
	2.5 Revenue Deficit	-0.3	0.3	1.0	0.9	0.7	0.8
	2.6 Primary Deficit			1.8	1.2	1.0	0.8
3.	Combined Deficit Position of Centre and States from Budgetary Document (1)						
	Gross Fiscal Deficit (4)	(a)	9.3(b)	9.9	7.4	7.2	9.0
	Gross Primary Deficit	(a)	5.1(b)	5.2	2.3	2.1	3.4
4.	Public Sector Borrowing From National Accounts (1) & (2)						
	Public Sector of which:	9.6	11.4	12.2	9.7	10.9	N.A
	Government (3)	7.7	9.6	9.8	7.7	8.2	N.A
	Non-Departmental Enterprises	1.9	1.6	2.4	2.0	2.7	N.A

See Explanatory Notes on next page.

EXPLANATORY NOTES TO ANNEXURE - IV

1. Public Sector as defined in National Accounts includes (a) Producers of government services viz., administrative departments, (b) Departmental commercial undertakings and (c) Non-departmental commercial undertakings. Budgetary transactions shown under S.No. (1) of this Annexure pertain to Centre including Union Territories without Legistature and under S.No. (2) these pertain to combined position of all state budgets. Inter-governmental transfers like grants and loans to states from Centre are eliminated in the combined deficit of Centre and States shown at S.No. (3) of this Annexure.

Administrative departments include local authorities, special purpose funds and the activities of Issue Department of RBI. Thus, Central and State Government budgetary transactions are only a sub set of the public sector transactions.

2. Public sector borrowing is estimated from the National Accounts as the combined "net lending", (which is usually a negative number implying the borrowings made) of Railways & Communication, and of the non-departmental enterprises, (both financial and non-financial) and the net borrowings of administrative departments (includings the departmental enterprises other than Railways and Communication). Loans from government to Railways, Communication and to non-departmental enterprises are deducted from their borrowings in consolidating the position of borrowing for the entire public sector.

3. Government comprises administrative departments, departmental enterprises including Railwyas & Communication.

4. The difference between "gross fiscal deficit" estimated from the "budgetary documents" of government and "public sector borrowings" estimated from National Accounts is mainly due to the fact that the coverage of "public sector" in the system of National Accounts is larger than that of the government budgets, as explained in Note (1) here.

(a) Comparable figures are not available.

(b) Average for three years 1987-88 to 1989-90.

ANNEXURE - V

INVESTMENT AND SAVINGS RATES

(Percentage of GDP)

SL. No.		ITEMS	Sixth Plan Average	Seventh Plan Average	1990-91	1991-92	1992-93	1993-94
1.		Gross Fixed Capital Formation of which:	19.88	21.54	23.16	22.20	21.51	20.90
	1.1	Public Sector	9.78	10.00	9.37	9.53	8.48	8.39
2.		Gross Domestic Capital Formation of which:	20.82	23.67	27.07	23.60	21.98	20.43
	2.1	Public Sector	10.83	10.54	9.74	9.17	8.87	8.90
3.		Gross Domestic Savings of which:	19.64	20.64	23.68	23.05	20.01	20.16
	3.1	Household Sector	14.33	16.21	19.96	17.82	15.50	15.95
	3.1.1	Financial	6.73	7.62	8.66	10.06	7.82	7.32
	3.1.2	Physical	7.61	8.59	11.30	7.76	7.68	5.63
	3.2	Private Corporate Sector	1.62	2.07	2.70	3.16	2.96	3.96
	3.4	Public Sector	3.69	2.36	1.02	2.07	1.55	0.25

Chapter 2

PLAN ALLOCATION AND RESOURCE POSITION

(REVISED FINAL DRAFT)

2.1 The Eighth Five Year Plan (1992-97) was launched soon after the process of economic reforms was initiated in July, 1991. The stabilisation and structural adjustment measures that constituted the economic reforms programme marked a significant watershed in the management of the country's economy. By early 1991 a serious fiscal crisis had emerged owing to the growing imbalance between revenue receipts and revenue expenditure especially after the middle of the 1980s, leading the Government to engage in large measures of borrowing even to meet the current expenditure. Side by side, there was also a balance of payments crisis that emerged in early 1991. The immediate stimulus to the process of economic reforms was to simultaneously address both these problems, although it may be noted that the process of economic liberalisation in some measure had already been initiated since the early 1980s, and the results were reflected in the improved factor productivity and increasing growth rates of national and sectoral products.

2.2 In order to redress the imbalance in the fiscal and foreign trade sectors a number of measures were introduced as part of the reform programme. The rupee was devalued to provide a competitive edge to our exports, and foreign trade was liberalised with import duties brought down significantly. In the fiscal sector, while tax revenues were sought to be increased via a comprehensive process of tax reform, the need to compress government expenditure, particularly non - essential revenue expenditure, was thought to be of paramount importance, so as to ensure a lower fiscal deficit which had reached the unacceptably high annual average of 8.2% of GDPduring the Seventh Plan (1985-90) years.

2.3 The resource mobilisation exercises of the Eighth Five Year Plan were carried out keeping in view the broad objective of the Plan which recognised "human development" to be at the core of all development effort. The Plan envisages a higher growth and substantial improvement in the social sectors that have a direct bearing on the standard of living, education and health of the people. In keeping with this objective, more than one fourth (26.1%) of the overall public sector plan outlay approved for the Eighth Plan has been allocated to the social sector (including Rural Development) as against the corresponding share of 22.5% of overall approved outlay in the Seventh and 19.9% in the Sixth Plans. The greater emphasis laid particularly on the social sector in the Eighth Plan is discernible from Table 1.

Table 1

Plan Outlays in Social and Infrastructure Sectors during the Seventh and Eighth Plans

(Rs. crore at 1991-92 prices)

	Seventh Plan (1985-90)	Eighth Plan (1992-97)	%age increase
Social Sector	71547	113437	58.6
Infrastructure Sector	154644	196597	27.1
Total Plan	335142	434100	29.5

Note : Details of outlay and expenditure for different sub-heads in the social and infrastructure sectors in the Eighth Plan may be seen at Annexure 2.2 to 2.5.

Among the other explicit objectives were generating employment and alleviating poverty. Even though the key element of the economic reform process was to allow market forces to generate a higher growth potential one has to recognise that there are large areas such as primary education, rural health, provision of drinking water, child welfare etc. where market signals are unlikely to lead to socially optimal allocation of resources. Therefore the State has to intervene, via the planning process, to channelise reosurces into these vital areas. Nearly 82% of the total budgetary support to the Central Ministries in the Eighth Plan was earmarked for the social, infrastructure and agricultural sectors, as compared to 70% in the Seventh Plan.

Public Sector Outlay

2.4 The public sector outlay for the Eighth Plan (1992-97) has been placed at Rs.434,100 crore at 1991-92 prices, of which the investment component amounts Rs.361,000 crore, with the balance being in the nature of current outlays. The public sector investment of Rs.361,000 crore accounts for 45.2 per cent of the total domestic investment of Rs.7,98,000 crore envisaged in the Eighth Plan, as against the corresponding share of 47.8 per cent targetted in the Seventh Plan. The relatively lower share in the Eighth Plan allows a larger role for the private sector.

2.5 The share of States in the public sector outlay in the Eighth Plan was expected to be 41.5%. During 1992-95 the States' share actually turned out to be lower at 35%. The share of States in public sector Plan outlay has gone down from about 51% during the Fifth Plan to 41% in the Sixth Plan. However, it rose to 48% in the Seventh Plan.

2.6 Of the total Plan Outlay for the Eighth Plan, the budgetary support has been pojected to be about 43.4%. The budget support envisaged for the Central Plan is 41.8% of the outlay while budget support (Central assistance) for States works out to 43.6% of the approved State Plan outlay. However, during the first three years of the Eighth Plan while the budgetary support for the Central Plan was of the order of 40.7%, the Central assistance to State Plans, was as much as 56.1% of outlay. This implies that the States' effort towards fulfilling the targetted outlay was substantially below the level projected for the Plan.

2.7 An in depth review of financial targets and achievements is essential for a realistic appraisal of the feasibility of achieving physical targets. Shortfalls in plan expenditure tend to reflect shortfalls in the achievement of physical targets, which are discussed in the sector-specific chapters of this document. This chapter seeks to review the resource position of both the Centre and States in the light of Plan expenditure during the first three years of the Eighth plan (1992-95) vis-a-vis the approved public sector outlay for the Eighth Plan (1992-97). In order to ascertain the magnitude of the tasks in terms of overall plan outlay commensurate with approved outlay during the remaining period of the Eighth Plan and identify the Sectors requiring significant step up in plan outlays, plan expenditure during 1992-95 is analysed both in overall terms and by Heads of Development such as Rural Development, Education, Health, etc. as per the classification in the Plan/Budget documents. This is followed by an assessment of resource scenario for plan financing, which forms the basis for the forecast of resource position and the likely gap between resource availability and resource requirements during the remaining period (1995-96 and 1996-97) of the Eighth Plan.

2.8 The figures (Annex2.1) reveal that as against the overall approved Eighth Plan Outlay of Rs. 4,34,100 crore (at 1991-92 prices), the overall plan expenditure in real terms during the first three years (1992-95) amounted to Rs. 2,27,955 crore or about 52.5 per cent of the five year outlay. If the expected level of plan expenditure for the first three years is taken as 60 per cent in pro-rata terms of the approved outlay, there has been a shortfall of Rs. 32505 crore at 1991- 92 prices, or around seven percentage points. The approved Plan outlay for 1995-96 amounted to 20.4 per cent of the five year outlay at 1991-92 prices. Even if this Annual Plan were fully implemented, it would be necessary to provide for 27.1 per cent of the Eighth Plan outlay in 1996-97 to avoid any shortfall in real terms in the final outlay. For the purpose of comparison, the figures of outlay and expenditure for the Sixth and Seventh Plans are also given in Annex. 2.1. The figures reveal that plan expenditure during the comparable period of the Seventh Plan was 55.1% while that in the Sixth Plan was 45.3% of the total plan outlays.

2.9 At the disaggregated level the figures reveal more serious shortfall in the State Plans than at the Centre. As against the approved Eighth Plan outlay of Rs. 1,79,985 crore, the plan expenditure (including area programmes) during 1992- 95 amounted to only Rs. 80,575 crore or about 45 per cent of the approved five year outlay. In pro-rata terms, the shortfall was of the order of Rs. 27,416 crore, or 15 percentage points. In the case of the Central Sector, plan expenditure during the corresponding period amounted to Rs. 1,43,528 crore, or about 58 per cent of the approved Eighth Plan outlay of Rs. 2,47,865 crore. This meant that the shortfall in the central sector at Rs. 5,191 crore or less than two percentage points in pro-rata terms was much less serious than that in the state sector. This large gap in plan performance between the States and Centre has brought about a reduction in the relative share of States in public sector plan outlay from 41.5 per cent envisaged in the Eighth Plan to 35.3 per cent during the first three years of the plan. As regards Union Territories, the plan expenditure amounting to Rs.3,852 crore during 1992-95 accounted for about 62% of the approved outlay of Rs. 6,250 crore, thereby exceeding the pro-rata share by Rs. 102 crore or about two percentage points. These figures have to be seen in the context of the deteriorating fiscal deficit of the Centre which jumped from an average of 6.3% during the Sixth Plan to an average of 8.2 per cent during the Seventh Plan which clearly called for a reduction in the fiscal deficit. To add to the fiscal problems during the initial years of the Eighth Plan the country also faced the balance of payments crisis.

2.10 Analysis of the trends in plan expenditure by heads of development has revealed serious shortfalls in infrastructure and social sectors. The figures (Annex 2.2 and 2.3) show that even in the case of the Central Sector, where the overall shortfall in plan expendture was marginal, there were large slippages in the Social Sector (including Rural Development). In the case of the central sector, the approved outlay on social sector amounted to Rs. 58,615 crore (23.6 per cent of total Central Plan Outlay) whereas the corresponding amount for States was Rs. 51,802 crore (28.8 per cent of total State Plan Outlay). In pro-rata terms the shortfall was of the order of Rs. 8,188 crore or 14 percentage points in the Central Sector and Rs. 6,355 crore, or about 12 percentage points in the case of States.

2.11 In the case of infrastructure sector (Annex. 2.4 and 2.5) overall shortfall in plan expenditure was witnessed only in the State Sector. While expenditure during 1992-95 accounted for about 64 per cent of the approved plan outlay of Rs. 1,32,869 crore (53.6 per cent of total Central Plan outlay) in the Central Sector, the corresponding proportion was only about 44 per cent of the approved outlay of Rs. 60,926 crore (33.8 per cent of total States Plan outlay) in the State Sector. However, even in the case of the Centre, there was shortfall in certain sub-sectors, notable among them being Power, Roads & Bridges and Ports.

2.12 In regard to other sectors also shortfalls in Plan expenditure vis-a-vis the prorata expenditure of 60 per cent of approved outlay for the Eighth Plan were noticed in the case of both the Centre and States. These sectors include Agriculture & Allied Activities and Irrigation and Flood Control. In the case of Agriculture and Allied Activities in respect of Centre, expenditure during 1992-95 accounted for around 50 per cent of the Eighth Plan outlay. The corresponding proportion in the State sector was more at 58 per cent of the approved outlay for Eighth Plan. In the case of both Centre and States shortfalls of equal magnitude (41% as against 60%) were noticed in respect of irrigation and flood control also.

Resource Mobilisation

2.13 The projected financing pattern for the Eighth Plan outlay may be seen from Annex.2.6. As per this, domestic resources comprising Balance from Current Revenues (BCR), resources of public enterprises and borrowings (including miscellaneous capital receipts) account for 88.8 per cent of the approved Eighth Plan outlay of Rs. 4,34,100 crore. BCR accounts for about 8 per cent of aggregate resources for financing this outlay , while contribution of public enterprises accounts for 34 per cent of the same. Borrowings, including market borrowings, small savings, provident funds and miscellaneous capital receipts (MCR) constitute 46.6 per cent of aggregate resources for the plan. Net inflow of capital (external aid) from abroad contributes 6.6 per cent of the approved plan outlay. The resource gap accounting for the remaining 4.6 per cent of the approved outlay is projected to be filled by deficit financing.

Balance from Current Revenues

2.14 The emerging resource scenario indicates serious deviations from the projected financing pattern. As against an average positive BCR of Rs. 4,404 crore per annum projected for the Eighth Plan in respect of the Centre including Union Territories, the observed BCR as per the revised estimates had been negative in all the three years of the Plan. The deviation in BCR from projections brought about by the combined impact of decline in current revenues and increase in non-plan revenue expenditure necessitated greater dependence on borrowings for financing the plan. Similar deviations from projections for similar reasons were noticed in respect of the BCR of states also. The deterioration in BCR and the consequent increase in the dependence on borrowings during the first three years of the Eighth Plan can be seen from Annex.2.7. The positive BCR in the projected financing pattern for the Eighth Plan is based on fairly optimistic assumptions about growth in the revenue and control of non-plan revenue expenditure during 1992-97. The projected real growth rates for direct and indirect taxes for this period are 9.9% and 8.5% per annum respectively. In contrast to this, corresponding rate of growth in respect of direct taxes during 1992-95 was 15.1 per cent. In the case of indirect taxes there was a marginal decline in real terms during the same period.

2.15 For the Eighth Plan, the BCR was expected to contribute 6.6 per cent of the aggregate resources and 11.5 per cent of the Plan outlay of the Central sector including Union Territories. During the Fifth Five Year Plan, the contribution of BCR was 41.6 per cent of aggregate plan outlay of the Centre. After that it has been declining steadily and during the Sixth and Seventh Plans the share of BCR went down to 19.9 per cent and 0.7 per cent respectively. This has come about essentially because during the period covering these plans, non-plan revenue expenditure has progressively outstepped current tax and non-tax revenues leading to the BCR turning negative. Whereas the comibed BCR of Centre and States was supposed to raise nearly 8 per cent of aggregate resources over the Eighth Plan period amounting to Rs. 35,005 crore at 1991-92 prices, actual showing on BCR during 1992-95 was of the order of (-) Rs. 33,876 crore. If the target of BCR is to be met during the plan period a sum of Rs. 63,744 crore has to be collected under this head from the Centre and the States put together during 1995-97 comprising 31.5 per cent of resource effort during the remaining two years of the Eighth Plan. A BCR figure of this magnitude would appear to be daunting.

Resources of Public Sector Enterprises

2.16 Plan outlay of the Central Public Sector Enterprises (CPSEs) accounts for 70 to 75 per cent of the total central plan outlay. In pursuance of the policy intitiated in the 1980s, the dependence of CPSEs on budgetary support has registered significant reduction from around 50 per cent of their plan outlay at the commencement of the Seventh Plan (1985-86) to around 15 per cent in the third year (1994-95) of the Eighth Plan. This has been made possible through greater dependence by CPSEs on Internal and Extra Budgetary Resources (IEBR). In pro-rata terms, generation of internal resources comprising retained profits and depreciation provision contributed 85 per cent and 92 per cent of the Eighth Plan projections for 1992-93 and 1993-94 respectively. The corresponding proportion for 1994- 95 exceeded the pro-rata level. Mobilisation of funds from the market through bonds constituted only about 15 per cent of the pro-rata amount in 1992-93 but improved to account for around 70 per cent and 73 per cent in 1993-94 and 1994-95 respectively. Resource mobilisation through external commercial borrowing and the category 'others' comprising intercorporate transfers, public deposits, etc. exceeded the pro-rata levels during each of the first three years of the Eighth Plan.

2.17 However, the growing dependence of CPSEs on borrowings to finance plan outlays has not been matched by higher levels of productivity and profits in all cases. As per the survey of public enterprises released by the Deptt. of Public Enterprises (1993-94), 106 out of 240 operating enterprises could not earn enough revenues to meet the provisions for depreciation and deferred revenue expenditure during 1993-94. The cash losses suffered by them amounted to Rs.4038 crores in 1993-94 as against Rs.2608 crore in 1992-93. The units suffering from major cash losses belonged to fertilisers (Rs.714 crores), consumer-goods (Rs.613 crores), textiles (Rs.606 crores) and heavy engineering (Rs.473 crores). The growing dependence on borrowings also eroded the profits of the relatively better off enterprises. During 1993-94, they had to set apart about 65 per cent of their profits for the purpose of interest payments. As a result, their pre-tax profits constituted only around 35 per cent of their gross profits in the same year. It is also significant to note that the petroleum sector contributed nearly 90 per cent of the total net profits generated in 1993-94. A number of enterprises have accummulated huge losses thereby making their networth negative. As per the amendment to the Sick Industrial Companies (Special Provision) Act, 1985 effected in 1991, sick public sector enterprises are referred to the Board for Industrial and Financial Reconstruction (BIFR).

2.18 As part of the industrial policy announced in 1991 Government have initiated partial disinvestment of the Government equity holding in public enterprises with effect from 1991-92. The disinvestment effected in 1991-92 constituted 8 per cent of Government holding in 30 public enterprises at a total value of Rs.3038 crores. The proceeds from disinvestment to the extent of 5 per cent of equity holding in 16 enterprises effected in 1992- 93 amounted to Rs.1912 crores. In this context, it may be noted that the Rangarajan Committee on disinvestment of shares in public enterprises recommended the target level of ownership at 51 per cent in the case of all units reserved for the public sector, 26 per cent in the case of enterprises having a dominant market share or otherwise important for strategic reasons, and zero level in other cases. The main difficulty facing PSUs in raising resources from the market either through sale of equity or borrowing through bonds/debentures is their inherent inability to compete with the private sector on equal terms. In order to further reduce and,if possible, eliminate dependence on budgetary support, it is necessary for CPSEs to operate on commercial basis and raise resources from the market through a sound combination of equity and debt. Since PSUs have to compete with private sector, they should be able to adapt quickly to legal, procedural and accounting requirements of the capital market. They should also be able to pay dividends to share holders. During 1993-94 only 67 out of 240 operating enterprises surveyed by DOP paid dividends, which amounted to Rs.1014 crores or around 2 per cent of the total equity held by the Central Government in CPSEs as on 31.3.94.

2.19 As for the State Level Public Sector Enterprises which made negative contribution towards plan financing the root cause of the problem continues to lie in the poor performance of the State Transport Corporations and the State Electricity Boards. The problem is more acute in the case of SEBs which incurred commercial losses to the tune of Rs. 6,332 crore in 1994-95 against Rs. 4,995 crore and Rs. 4,358 crore in 1993-94 and 1992-93 respectively. The inability of SEBs to raise tariff commensurate with the economic cost of electricity generation and distribution also adversely affect financing of plan projects.

Borrowings and Miscellaneous Capital Receipts

2.20 The projected financing pattern envisages 35.4 per cent of Centre's aggregate resources from domestic borrowings (including MCR). The corresponding proportion in respect of States is 83.3 per cent. The period 1992-95, however, witnessed much higher dependence on borrowings by both Centre and States. While borrowings during this period accounted for around 60 per cent of aggregate resources in respect of Centre, the corresponding proportion in the case of States worked out to more than 100 per cent. The combined dependence of Centre and States on borrowings during 1992-95 accounted for around 68 per cent as against the projected level of 46.6 per cent of aggregate resources. It should be pointed out here that an increased reliance on borrowings for financing the Plan would increase the debt service burden which would in turn result in a squeeze on resources for the Plan in subsequent years.

Net Capital Inflow from Abroad to Public Sector

2.21 As per the projected financing pattern the net capital inflow from abroad to public sector (excluding CPSUs) comprises only external aid and accounts for 8.6 per cent of the aggregate resources in respect of the Centre. As against that, net inflow of capital from abroad, including external commerical borrowing by the CPSUs, accounted for 12.0 per cent of Centre's aggregate resources during 1992-95.

Deficit Financing

2.22 The budgetary deficit projected for the Eighth Plan amounts to Rs.20,000 crores at 1991-92 prices. The projected financing pattern for the Eighth Plan does not indicate the estimated fiscal deficit during the plan period (1992-97). However, the estimated borrowing requirements of the Central Government, including the borrowings by the Central Public Sector Enterprises (CPSEs) but excluding external aid received as loans, amount to Rs.1,60,055 crores. When this is added to the projected budgetary deficit, the total amount rises to Rs.1,80,055 crores which accounts for 72.6 per cent of the approved Eighth Plan oultay in respect of the Centre. The borrowing requirement in respect of the States projected for the Eighth Plan amounts to Rs.84,500 crores. These figures however cannot be considered as equivalent to Gross Fiscal Deficit

(GFD) which represents the difference between total Government expenditure and the sum of revenue receipts and non-debt capital receipts.

2.23 GFD, however, can be viewed as the difference between the sum of revenue deficit, capital outlay and net lending on the one hand and disinvestment of equity holdings of the Government in Public Sector Enteprises on the other. The trends in the composition of GFD for Centre as well as States during the first three years of the Eighth Plan may be seen from table 2:

2.24 The figures given above reveal that there

Table 2

Composition of Gross Fiscal Deficit

(Rs. in crores)

	Amount 1992-93 (Actuals)	1993-94 (RE)	1994-95 (BE)
Centre			
1. Revenue Deficit	18,574	34,058	32,727
2. Capital Outlay	13,619	13,229	14,123
3. Net lending	9,941	13,764	12,065
4. Disinvestment	1,961	2,500	4,000
GFD (1+2+3-4)	40,173	58,551	54,915
States			
1. Revenue Deficit	5,114	6,055	7.948
2. Capital Outlay	10,655	12,187	14,781
3. Net lending	5,123	5,070	6,592
4. Disinvestment	0	0	0
GFD (1+2+3-4)	20,892	23,312	29,321

has been a significant increase in the proportion of revenue deficit in GFD in respect of the Centre. Revenue deficit of the Centre consituted 46.2% of GFD in 1992-93 but rose to 58.2% and 59.6% in 1993-94 (RE) and 1994-95 (BE) respectively. As regards capital outlay, there was a substantial decrease in its share from 33.9% of GFD in 1992-93 to 22.6% in 1993-94 (RE) but rose to 25.7% in 1994-95 (BE). During the corresponding period the proportion of revenue deficit of the States in their GFD rose only marginally from 24.5 per cent in 1992-93 to 26.0 per cent in 1993-94 (RE) and 27.1 per cent in 1994-95 (BE). As regards capital outlay, the corresponding period witnessed a marginal increase from 51.0 per cent of GFD in 1992-93 to 52.3 per cent in 1993-94 (RE). This however declined to 50.4% in 1994-95 (BE). The substantial increase in revenue deficit in the case of the Centre during the first three years of the Eighth Plan was largely the result of significant increase in the burden of non-plan revenue expenditure on account of heavy interest payments.

Budgetary Support to Plan

2.25 The projected budgetary support to the Eighth Plan at 1991-92 prices amounts to Rs. 1,88,475 crore, or 43.4 per cent of the approved Eighth Plan outlay. The remaining 56.6 per cent is projected to come from the Internal and Extra Budgetary Resources (IEBR) of CPSEs for their plans and own resources of States for financing their plans.

2.26 As mentioned in the preface to the Eighth Five Year Plan (Vol. I) budgetary support is a crucial factor in the determination of outlays of sectors which do not have any access to internal resources or borrowings. Thus sectors like education, health, family welfare, agriculture etc. depend almost exclusively on budgetary support for financing their plan outlays. Even in the case of sectors like power, railways, coal etc. in the infrastructure sector, where the public enterprises generate interal resources and have recourse to borrowings, a minimum budgetary support is necessary to protect the plan outlays of these sectors. As brought out in para 2.11, plan expenditure in key sub-sectors of the infrastructure like power and roads fell far short of the pro-rata level of 60 per cent of the approved outlay during 1992-95, and higher oultay on those sectors during 1995-97 pre-supposes more budgetary support.

2.27 The budgetary support to Central Plan (excluding Union Territories) amounts to Rs.1,03,725 crore, which accounts for 55.0 per cent of the total budgetary support to central plan envisaged in the Eighth Plan. As per the approved budgetary support under different heads of development, bulk of this budgetary support goes to the social sector (including Rural Development) which accounts for 51.8 per cent (Rs.53,678 crores) of total budgetary support to Central Plan, followed by infrastructure sector (21.7 per cent or Rs.22,487 crores) and Agriculture & Allied Activities (10.5 per cent or Rs.10,894 crores). Within the Social Sector, Rural Development accounts for 45.0 per cent of the total budgetary support for Social Sector followed by Education (13.9%), Family Welfare (12.1%) and Water Supply and Sanitation (10.7%). As regards infrastructure sector, power accounts for maximum share of 39.8 per cent of the total budgetary support to infrastructure followed by Railways (23.9%), Surface Transport (13.0%) and Coal and lignite (11.6%).

2.28 The budgetary support to States goes in the form of Central Assistance for State Plans, which consist of : formula- based Normal Central Assistance; Additional Central Assistance for Externally Aided Projects; Special Central Assistance for Area Programmes; and Transferred Centrally Sponsored Schemes. The share of budgetary support for State Plans envisaged in the Eighth Plan accounts for 41.7 per cent of the total budgetary support to the Eighth Plan. However, during the first three years of the Eighth Plan, the share of States in the overall budgetary support to the Eighth Plan (42.4%) was higher than that during the comparable period of the Seventh (33.4%) and the Sixth (33.2%) Plans.

2.29 In the case of Union Territories the budgetary support envisaged in the Eighth Plan amounts to Rs.6,250 crore, or 3.3 per cent of the total budgetary support to the Eighth Plan.

2.30 During 1992-95, the budgetary support to Central Plan amounted to Rs. 58,930 crore, which accounts for 56.8 per cent of the approved Eighth Plan budgetary support for Central Plan. In pro-rata terms this meant a shortfall in utilisation of budgetary support to the extent of Rs.3,302 crore at 1991-92 prices and Rs.4,746 crore at current prices. In the case of States, the Central Assistance for their Plans amounted to Rs.45,221 crore (as per the figures in the Union Budget) or 57.6 per cent of the Central Assistance for State Plan envisaged in the Eighth Plan, thereby indicating a shortfall of the order of Rs.1,879 crore at 1991-92 prices and Rs.2,698 crore at current prices.

2.31 External aid constitutes a significant proportion of budgetary support to public sector plan. External aid generally accounts for around 20% of the budgetary support to Central as well as State Plans (Central assistance). One major area of concern in regard to external aid has been the significant amount of the undrawn balance, which stood at Rs.26824 crore as on March 31, 1995. The trends in the utilisation of external aid separately for Centre and States can be seen from the figures given in Annex. 2.8. There has been an improvement in the pace of utilisation of external aid in the State sector as a result of promotional measures taken by the Government of India, namely, release of 100% aid for all sectors and release of advance additional Central Assistance at the beginning of the year to the extent of 25% of the expected annual disbursement of aid. However, problems relating to land acquisition for projects, paucity of counterpart funds to meet domestic component of total cost, etc. affect the absorptive capacity of both Centre and State Governments which in turn slow down the pace of utilisation of foreign aid.

Plan of CPSEs

2.32 The Plan outlays of CPSEs account for about 70-75% of the total Central Plan Outlay. Part of the budgetary support to Central Plan goes towards the financing of plan outlays of CPSEs. This now forms 20 - 25 per cent of the total budgetary support to Central Plan. The budgetary support is extended to CPSEs by way of both equity and loan. Equity component generally accounts for 55 to 60 per cent of the total budgetary support to CPSEs. Though the stated aim is to eliminate the dependance of CPSEs on budgetary support, the need to continue budgetary support persists because (i) CPSEs in infrastructure like power, transport, etc. are unable to recover the economic cost of rendering the goods/services produced by them, and (ii) there is a felt need for helping sick units with minimum necessary plan support.

Prospects for 1995-97

2.33 Analysis of plan expenditure has revealed severe shortfalls in plan expenditure in the State Sector. As regards the Central Sector, inspite of relatively less severe shortfalls in overall terms, serious shortfalls occurred in the social sector, certain key infrastructure sectors and in some other important sectors like agriculture and irrigation, which depend either exclusively or signficantly on budgetary support. In the case of both Centre and States there were noticeable shortfalls in Agriculture & Allied Activities as well as in Irrigation & Flood Control. In order to make good these shortfalls it is necessary to step up plan outlays signficantly during the remaining period of Eighth Plan.

2.34 The overall resource requirement, which takes into account the shortfall in plan expenditure during the first three years as well as the pro-rata outlay for the last two years, amounts to Rs.206145 crore at 1991-92 prices. The resources for financing plan outlays of the CPSEs which form part of the central Plan should mainly come from the Internal and Extra Budgetary Resources of the Central Public Sector Enterprises for the Plan of CPSEs and from States' own resources for their plans. While profit making/resource rich CPSEs would be able to meet the approved outlay, other CPSEs, especially those in the infastructure sector will not be able to protect their approved outlay in the absence of more budgetary support. Similarly, the plan outlays in respect of Ministries/Departments in the social sector require considerable step up in their plan outlays to enable them to make good the shortfall in the last two years of the Eighth Plan. Thus, budgetary resources would be required on a substantially larger scale during the last two years of the plan. This in turn pre-supposes more favourable Balance from Current Revenues which can be secured through more revenue collection and/or reduction in non-plan revenue expenditure.

2.35 Since budgetary support available for plan is a residual amount (difference between revenue and capital receipts on the one hand and non-plan expenditure on the other), more budgetary resources for the plan of the Centre as well as the States can come through only in two ways : (a) higher residual amount either through more revenue and/or less non-plan expenditure, and (b) higher fiscal deficit to allow for larger amount of capital receipts. The prospects in this regard are discussed in the following paragraphs.

2.36 The Central budgetary support for the fourth year (1995- 96) of the Eighth Five Year Plan has already been fixed at Rs.48,500 crore (B.E), which is higher than that in 1994-95 (BE) only by 4.3% in nominal terms. Of the aggregate amount of Rs.48.500 crore (B.E.) for 1995-96, total budgetary support for the Central Plan has been fixed at Rs.28,994 crore while total Central assistance for State and UT Plans has been fixed at Rs.19,506 crore. Revenue expenditure is expected to comprise about 60% of total Plan expenditure in 1995-96, up from about 57% in 1993-94.

2.37 In assessing the resource availability question for the Annual Plan of 1996-97, i.e. the final year of the Eighth Plan, the most important issue would be that of forecasting the tax revenues in respect of the four major central taxes viz., Income Tax, Corporation Tax, Union Excise and Customs Duties. The buoyancies of the major Central taxes have been computed, as detailed in Annex.2.10, and have been applied to the respective bases to arrive at the projected tax revenues during 1996-97. It may be pointed out here that the Tenth Finance Commission (TFC) Report (p.168) has also made separate estimates of buoyancy of the major Central taxes. The period of analysis of those estimates is 1983-84 to 1992-93 whereas our period of analysis is 1980-81 to 1994-95. Our buoyancy estimates and those of the TFC in respect of the direct taxes are fairly close. For income tax and coporation tax we have the figures of 1.14 and 1.28 as against the TFC figures of 1.103 and 1.310. In respect of Union excise duties our buoyancy estimates are marginally lower (0.98 as against the TFC estimate of 1.013) which is mainly due to some rate reduction and rationalisation of the excise duty structure. As regards customs duties our estimate of 0.72 is significantly lower as compared to the figure of 1.389 in the TFC report. This is owing to two factors viz, (i) while the TFC has regressed Customs duties on GDP, we have chosen the value of imports as the explanatory variable and (ii) there has been a continuing across the board reduction in import tariffs after 1992-93, the terminal year of the TFC analysis. For purposes of tax projections it is assumed that during 1995-96 GDP grows at a rate of 5.6%, with an inflation rate of 9%. For the terminal year of the Plan i.e. 1996-97, a GDP growth rate of 6%, with an inflation rate of 7%, is projected.

2.38 The remaining Central taxes which include, among others, Interest Tax, Expenditure Tax, Wealth Tax, Gift Tax, etc. constitute only a small fraction, about 2.5%, of the gross tax revenue of the Centre. These have been assumed to grow at the same rate as nominal GDP. Of the gross tax revenues available to the Centre, a part of it, 77.5% of personal income tax and 47.5% of Union Excise duties, constitutes States' share as per the Tenth Finance Commission (TFC) dispensation. To the balance amount must be added the non-tax revenue to arrive at the total revenue receipts available with the Centre. Non-tax revenue has also been assumed to grow pari passu with nominal GDP.

Non-Plan Expenditure

2.39 The three principal items of non-plan expenditure are interest, defence and subsidies. Interest payments and defence expenditures in 1996-97 are projected at Rs.58,000 crore and Rs.29.000 crore, representing increases over 1995-96 B.E. figures by 11.5% and 13.7% respectively. As regards subsidies, a perusal of the data from 1985-86 reveals that while the average growth of subsidies during 1985-89 was at a rate of 23%, the growth rate has been arrested significantly during 1990-95. It may not be unreasonable to expect that barring some unforeseen events subsidies in 1996-97 will not go beyond Rs.11,300 crore, growing at the same rate as observed over the last four years taken as a whole. As regards other non-plan expenditure (NPE) the major items are postal deficits, exchange loss under FCNR accounts scheme, general services, social services, economic services, non-plan grants to states and UTs, non-plan loans to states and UTs, non plan capital outlay and non plan loans to public enterprises. These have been assumed to grow at the same rate as in the post reform years. The projections of the non-plan grants to States have been carried out as per the recommendations of the Tenth Finance Commission.

2.40 Finally a critical question pertains to the extent of fiscal deficit that the Government may like to aim at for the year 1996-97. Controlling aggregate expenditure has been a major plank of the Government's post reform policy of bringing down fiscal deficits. Given the compulsion on the current expenditure side, this has however had the unfortunate impact of bringing about cuts in capital expenditure, particularly in infrastructure and the social sectors. There is wide consensus that a much more appropriate objective would be to ensure that the revenue deficit be curbed. This would bring about fiscal compression in a more desirable manner in that it would be carried out without cutting down on capital expenditure on infrastructure and the core sectors. Table 3 presents the fiscal and revenue deficits as a percentage of GDP from 1990-91 onwards. In this context it is worth mentioning that the principal reason for the revenue deficit being high is the substantial amount of interest payments on accumulated debts. If one were to focus on primary deficit, i.e. fiscal deficit less interest payments, there has in fact been a significant compression starting 1991-92 barring a year of sharp increase during 1993-94. The real problem however is that the primary deficit has gone down owing to significant cuts in capital expenditure, which would have ad-

Table - 3
Fiscal and Revenue Receipts

Year	FiscalDeficit (% of GDP)	Revenue Deficit (%of GDP)	Primary Deficit (% of GDP)
1990-91	8.3	3.5	4.3
1991-92	5.9	2.6	1.6
1992-93	5.7	2.6	1.3
1993-94	7.4	4.3	3.0
1994-95 (R.E)	6.6	3.7	1.9
1995-96 (B.E)	5.5	3.4	0.5

verse effects for the long term gowth prospects of the economy.

2.41 While it is undoubtedly true that there has been a reduction of the Centre's fiscal deficit from 8.3% of GDP in 1990-91 to 5.5% in 1995-96 (B.E) it is important to emphasise that the overall borrowing requirement of the Centre, States and UTs (including the extra budgetary resources of PSUs) has been relatively steady. In order to have a more disciplined fiscal regime it is imperative that the overall public sector borrowing requirement, and not the fiscal deficit alone, be reduced.

Table 4

Budgetary Transactions of the Centre, States and UTs

(Including extra budgetary resources of PSUs for financing their Plans)

Year	Gap of total outlay over current revenue (as % of GDP)
1980-81	9.0
1981-82	8.3
1982-83	9.5
1983-84	9.6
1984-85	11.1
1985-86	10.4
1986-87	12.7
1987-88	11.6
1988-89	11.2
1989-90	12.0
1990-91	12.3
1991-92	10.6
1992-93	10.2
1993-94	11.7
1994-95 (R.E)	11.3

2.42 One disconcerting feature of the Plan expenditure is the growing revenue component arising mostly from the implementation of a large number of staff-oriented schemes. In the Central Sector, the revenue component constituted about one-third of the total plan expenditure on the eve of the Seventh Plan but rose to nearly 60 per cent in 1994-95. This calls for a critical review of schemes so as to facilitate identification of steps aimed at containing growth in the revenue component of Plan expenditure by substantial reduction in the multiplicity of schemes. Such a review may also be helpful in initiating action aimed at achieving not only economy in expenditure but improvement in productivity. A similar review is equally necessary in the State sector.

2.43 An examination of the Tax : GDP ratio (see table 5) at the All India level from the period 1985-86 reveals that while the ratio had reached 17.10 per cent in 1987-88 and was 17.01 per cent in 1989-90, it has systematically come down in the post reform years from 16.76 per cent in 1991-92 to 15.5% as in 1994-95 (R.E). As regards Central taxes as a percentage of GDP, while the ratio had reached around 11.3 per cent in 1987-88 it has steadily climbed down to about 9.9 per cent during the past two years. Assuming that the Central revenue mobilisation effort in the terminal year of the Plan were to be increased by one percentage point to 10.9 per cent, which would still be well below the levels achieved in the years preceding economic reform, the additional tax mobilisation would be well in excess of Rs.10,000 crores.

Table 5

Tax : GDP Ratios

	Total Tax Revenue (All India)	Central Taxes Gross
1985-86	16.50	10.93
1986-87	16.91	11.21
1987-88	17.10	11.30
1988-89	16.91	11.24
1989-90	17.01	11.30
1990-91	16.49	10.82
1991-92	16.76	10.94
1992-93	16.24	10.62
1993-94	15.50	9.63
1994-95 (R.E)	15.50	9.87
1995-96 (B.E)	--	9.92

2.44 An analysis of the direct and indirect tax structure reveals that the buoyancy of indirect taxes, viz, Union excise and customs, has declined in the post reform years as compared to the pre 1991-92 period. As mentioned in the para above this has come about owing to some rationalisation of excise and custom duties, but there is a large scope for improving tax collection and expanding the coverage of tax payers. Computations reveal that if the buoyancy observed in the pre reform years was to be maintained the tax revenue collections, particularly in respect of Union Excise and Customs, would have been higher by about Rs.20,000 crores.

2.45 There is wide consensus that a substantially higher mobilisation of direct tax revenues is imperative as part of the fiscal restructuring programme. This view also forms the core of the recommendations of the Tax Reforms Committee which reported in 1992. Now that the rate schedule in respect of personal income tax has been reduced to the top marginal rate of 40 per cent, as suggested both by tax theory as well as actual experience in several countries, what needs now to be done is to widen the tax base by bringing into the tax net all the potential income tax assessees such as professionals, shop keepers and traders who are outside the tax net. The experience with presumptive tax on income has not been particularly salutary as yet. This is not for lack of potential in this area. Better organisation and tighter enforcement would undoubtedly yield substantially higher revenues. One ought to seriously consider taxing fringe benefits. In the sphere of corporate taxes it is seen that a large number of corporate entities, even though showing substantial profits and giving regular dividends, are in the zero tax paying category. A number of fiscal scholars are of the view that one may introduce a "gross assets tax" as a minimum tax on business to garner resources for such companies. Such a tax has already been imposed in Mexico and Argentina. A minimum tax would serve as a check against avoidance of tax through manipulation of accounts. Some other important avenues of taxation are taxation of services which constitute a large and growing sector of the economy, tax deduction at source (TDS) on dividends, agricultural taxation, and taxation of urban property. In addition to all of the above there is considerable scope for resource mobilisation by upward revision of user charges in respect of electricity tariff, irrigation rates as well as charges for services provided by Government hospitals.

2.46 In this context it would be particularly relevant to emphasise here that the total number of income tax assessees comprises less that 1% of the population of the country. Some computations based on N.S.S. household consumer expenditure data (1987-88) suggest that about a third of the population with incomes above the exemption limit actually pay personal income tax. This implies that substantial numbers of potential income tax assessees have to be brought into the fold of direct taxes. This would call for a major effort in tax administration and enforcement. Further, it should be noted that while direct taxes comprised about 2.7% of GDP in India during 1993-94, the recent average for 14 developing Asian countries was about 5 per cent of GDP. Thus a step-up in direct tax revenue in India by say 1 percentage point of GDP ought to be regarded as being entirely feasible.

Resource Requirement for 1996-97

2.47 Keeping in view the projections of revenues and non-planexpenditure detailed in the paras above, and assuming alternative levels of fiscal deficit (5.1% & 5.5% of GDP), the extent of Central budgetary support available for the Plan have been worked out to be in the range of Rs.50988 crore to Rs.63,561 crore for the terminal year of the Plan. These are detailed in Annex.2.11. The salient features of this resource exercise may be enumerated here. All the alternatives are based on uniform projections of revenue receipts, using the historical buoyancy rates. The differences lie mainly in the projections of subsidies and non-plan expenditure. Alternatives 1 and 3 have projected subsidies for the year 1996-97 based on available information, at Rs.12,400 crores. Alternatives 2 and 4 have projected a sum of Rs.11,305 crores for subsidies, based on the trend observed during the post reform years. Similarly, for the other non plan expenditure (NPE), as discussed in para 2.39, the higher figure projected in Alternatives 1 and 3, at Rs.42,600 crore, is based on somewhat more liberal projections while Rs.35,875 crore as projected in Alternatives 2 and 4 take into account the growth rate of expenditure in the post reform years. Given the above scenario, the amount of Central budgetary suport available for the Plan would depend critically upon the extent of fiscal deficit that we choose to have. If for example, the fiscal deficit is to be pegged at 5.1% of GDP for the year 1996- 97 the amount of Central budgetary support available for the Plan would be of the order of Rs.50988 crores according to Alternative 1, whereas the amount would be Rs.58808 crores as per Alternative 2. Similarly, if the extent of fiscal deficit were to be stepped up to 5.5 per cent of GDP then the amount of Central budgetary support available for the Annual Plan of 1996- 97 would be Rs.55741 crore as per Alternative 3 and Rs.63561 crore as per Alternative 4.

2.48 A number of alternative scenarios have been examined by the Planning Commission regarding the requirement of resources that would have to be financed by the Central budgetary support for the Annual Plan of 1996-97. The first scenario is where there is a step up of budgetary support of 10% in 1996-97 over 1995-96 in nominal terms. The requirement of Central budgetary support for the Annual Plan of 1996-97 works out to Rs.53350 crore. In the second scenario we examine the question as to how much of resources would be required in 1996-97 so that the original targets of the Eighth Plan were to be fulfilled. The amount of Central budgetary support required would work out to Rs.69,908 crores. Finally, in the third scenario, we examined the assessment of the different Divisions of the Planning Commission regarding the minimal amounts of funds required in their respective sectors. This amount comes to Rs.64000 crores for 1996-97. Thus it may be argued that a figure of a minimum of Rs.64,000 crores may be regarded as being the absolute minimum for the terminal year of the Eighth Plan, if one would want to protect the Plan size particularly in the social and infrastructural sectors, as well as in agriculture and rural development.

2.49 It would be pertinent to examine at this point the extent of Central budgetary support for the Annual Plan during the Eighth Plan period (Table 6). It is clear that there has been a significant decline in the Central budgetary support for the Plan as a fraction of GDP during the Eighth Plan years as compared to the Sixth and Seventh Plan years. After averaging at more than 5 per cent of GDP in the first three years of the Eighth Plan there has been a significant dip of Central budgetary support to 4.6 per cent of GDP during 1995-96. This trend will have to be reversed in the final year of the Eighth Plan so that there is no curtailment in the Plan allocation, particularly in the social sector as well as in the infrastructure sector.

2.50 If India has to enter into a phase of sustained growth of GDP of 6% or more in the years to come it cannot be gainsaid that substantially higher amounts of allocations have to be made for the infrastructure and social sectors. Fiscal compression should never mean a compression of expenditure in these vital areas, and it should in fact be focussed instead at drastically curbing inessential revenue expenditure. The fact that the revenue deficit is in the range of 3.4% of GDP in 1995-96 (B.E) which is considerably higher than the average of 1.1 per cent during the Sixth Plan, and 2.6%

Table 6

Year	Central Budgetary Support for the Plan as % of GDP	Average	
1980-81	6.6		)
1981-92	6.4		)
1982-83	6.7	6.7	) VIth Plan
1983-84	6.8		)
1984-85	7.2		)
1985-86	7.6		)
1986-87	8.8		)
1987-88	7.3	7.2	) VIIth Plan
1988-89	6.6		)
1989-90	6.0		)
1990-91	5.3		) Annual
1991-92	5.0	5.15	) Plan
1992-93	5.2		) First 4
1993-94	5.5	5.15	) years of
1994-95	5.3		) VIIIth
1995-96 (BE)	4.6		) Plan

average of the Seventh Plan means that we still have a long way to go to bring this about. It should also be pointed out that too tight a squeeze on fiscal deficit by cutting capital expenditure may be counterproductive if it impairs the growth prospects of the economy. In the alternative scenarios 2 and 4 we have shown reasonable projection of subsidies and non-plan expenditure based on recent trends and some discipline. Our earlier discussions on potential increases in tax revenues would suggest that an increase of revenue of about Rs.10,000 crores next year is not at all infeasible. In that case, a Rs.64,000 crore Plan for 1996-97 should be possible to finance without increasing the fiscal deficit beyond the target of 5.1 per cent. If, however, all other avenues of resource augmentation are found unavailing, such as higher revenue growth or further compression of current expenditure, some relaxation of the fiscal deficit target might be more conducive to stability on a sustainable basis if that helps strengthen the badly deficient social and economic infrastructure of the country.

2.51 A crucial question centres on two important components of fiscal deficit, viz, RBI financing of the budget deficit via money creation, and market borrowings. As per the understanding reached by the Ministry of Finance with the RBI, the budget deficit is to be limited to Rs.4,000 crore in 1996-97, before being phased out altogether. As a consequence the extent of borrowing has been growing, and at rates of interest which have been increasing since the latter are now largely market determined as per explicit Government policy. This implies that interest payments which are considerable at present, constituting 51.6% of revenue receipts of the Central Government in 1995-96 (B.E), are going to continue to be the major claimant of the Centre's revenue receipts in the years to come, thereby constraining expenditure on infrastructure and the social sector. Higher interest rates may also have adverse impact on private investment, arresting the process of economic growth. These trade -offs of the otherwise desirable policy of containing the budget deficit, should be carefully considered, before fixing some ceilings on the RBI financing of a part of the growing fiscal deficit.

Savings and Investment

2.52 The Seventh Plan achieved a growth rate of GDP of 5.8 per cent per annum against a target of 5.5 per cent. The target set for the Eighth Five Year Plan was 5.6 per cent. This was based on the assumption of an incremental capital outpur ratio of 4.1 and an average domestic savings ratio of 21.6 per cent. With the assumed current account deficit of 1.6 per cent, the average rate of investment was to be around 23.2 per cent.

2.53 Of the total investment of Rs.7,98,000 crore domestic savings were to comprise Rs.7,43,000 crore, or about 93 per cent, with the rest being sourced from the rest of the world. Of the total domestic savings, 81.4% were to be mobilised in the household sector, with the remaining 18.6% divided almost equally between the public sector and the private corporate sector.

2.54 As per the quick estimates of the CSO, Gross Domestic Savings (GDS) at current prices in 1993-94 amounted to 20.2 per cent of GDP at market prices as aginast 20 per cent in 1992-93. Thus in both these years there has been a shortfall from the original target of 21.6 per cent for the Eighth Plan. In 1993-94 as compared to 1992-93 there has been a growth of savings in the household and private corporate sectors while there has been a drop in GDS in the public sector. The savings of the household sector went up by 15.1 per cent from Rs.1,06,938 crore in 1992-93 to Rs.1,25,396 crore in 1993-94 and that of the private corporate sector by 49.7 per cent from Rs.20,804 crore in 1992-93 to Rs.31,153 crore in 1993-94. The decline in the public sector savings is essentially due to an increase in the dissaving of the Government Administrative Department from (-) Rs.13,608 crore in 1992-93 to (-) Rs.29,631 crore in 1993-94. In the medium term there is clearly a need to raise the public saving rate. The private saving rate in India compares quite favourably with that in many high performing countries of East and South-East Asia. Table-7 would show that although the household sector savings in 1992-93 and 1993-94 were lower than in the Seventh Plan and much lower than in 1990-91 and 1991-92, the savings in the private corporate sector have registered a significant growth and considering both of them taken together the rate of private savings in the three post reform years was significantly higher than in the Seventh Plan. The public saving rate performance however has been consistently poor, especially in the Government administration. It is imperative that all efforts are made to raise public savings so as to generate resources to finance

Table 7

Gross Domestic Savings

(percentage of GDP)

S.No.	Items	Sixth Plan	Seventh Plan	1990 -1991	1991 -1992	1992 -1993	1993 -1994
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Household Sector	14.33	16.21	19.96	17.82	15.5	15.95
2.	Private Corporate Sector	1.62	2.07	2.7	3.16	2.9	3.96
3.	Public Sector	3.69	2.36	1.02	2.07	1.55	0.25
(i)	Govt.Adm.	1.26	-1.44	-2.80	-2.07	-1.94	-3.77
(ii)	Public Enterprises	2.43	3.80	3.82	4.14	3.49	4.02
	Total	19.74	20.64	23.68	23.05	20.01	20.16

public investment allowing a reduction in the fiscal deficit.

Progress in resource mobilisation at State level : 1992-97

2.55 The aggregate Plan outlay for all States in the Eighth Plan 1992-97 was fixed at Rs.1,79,985 crore at 1991-92 prices. This outlay was to be financed through Balance from Current Revenue (BCR) including Additional Resource Mobilisation (ARM) and Opening Balance of Rs.12,985 crore, contribution from State Level Public Enterprises (SLPE) of Rs.4,000 crore, borrowing and other Miscellaneous Capital Receipts of Rs.84,500 crore and Central Assistance for State Plans of Rs.78,500 crore. The BCR included only that of 15 Non-Special Category States as the negative BCR of 10 Special Category States was ignored at the time of Plan finalisation. The market borrowings and miscellaneous capital receipts included drawings from States own Provident Fund, Loans against net collection from Small Savings, Debentures/Bonds, Open Market Borrowings (SLR based), Negotiated Loans and "other" finances from financial institutions like LIC/GIC, NABARD, REC and IDBI.

2.56 The actual mobilisation during 1992-95 on the basis of information made available by the States as actuals for 1992-93, pre-actuals for 1993-94 and revised estimates of resources for 1994-95 indicate that the resource mobilisation fell far short of the projections for the Eighth Five Year Plan (1992-97). The States could mobilise only Rs.74,429 crore, i.e. about 41.4% of the resources projected for the Eighth Five Year Plan (inclusive of Central assistance). Substantial shortfalls were noticed in the BCR and Contribution of State Level Public Enterprises. As against Rs.12,985 crore anticipated as Balance from Current Revenues, the BCR of all the States was negative (including Opening Balance and ARM Commitments) Rs.8008 crore for the first three years. The States' resources from BCR came down mainly because of the States' inability to raise additional resources through tax and non-tax measures and also due to their inability to contain non-plan revenue expenditure. Similarly, as against a positive contribution of Rs.4000 crore for SLPEs in 5 years, the contribution was negative Rs.1,420 crore in the first 3 years. There has been also been pro rata shortfall in borrowing and miscellaneous capital receipts to the extent of about Rs.13,000 crore mainly because of shortfalls in net collections of small savings in the first two years of the Eighth Five Year Plan. However, the central assistance for State plans, including area programmes, has been almost in line with the pro rata assistance for State Plans. Mobilisation of resources in the first three years may be seen at Annex.2.12.

2.57 The Plan resources for the year 1995-96 at 1991-92 prices have been estimated at Rs.32,790 crores (excluding Area Programmes) comprising Rs.1,620 crore from BCR (assuming that all the commitments by the Chief Ministers at the Deputy Chairman-level meeting would be coming from BCR and including Opening Balance), Rs.627 crore as contribution from SLPEs, Rs.14,201 crore as borrowings and other miscellaneous capital receipts and Rs.16,342 crore as Central Assistance for State Plans. A sum of Rs.1,516 crore (Rs.2137 crores at current prices) has been allocated for area programmes. Thus, including the area programmes, the resources available for the States in 1995-96 would be Rs.34,306 crore. Presuming that the resources for the Annual Plan 1996-97 would be maintained at 1995-96 level in real terms, the total resources likely to be realised during 1992-97 would be of the order of Rs.1,43,000 crore i.e. about 80% of the Eighth Five Year Plan approved outlay. Based on the experience during the first 3 years of the Eighth Five Year Plan, the actual resources likely to be mobilised by the States in 1995-97 may fall short of the Annual Plan estimates at least by 10% and thus, the estimated resources for 1995-97 are likely to fall by about Rs.6,550 crore. Taking this conservative scenario, the total resources for the Eighth Five Year Plan could come down to about Rs.1,36,500 crore, which is only 76% of the projected resources for the Eighth Five Year Plan. Thus, taking the 1995-96 financing pattern of the States and assuming that this would be really achieved, the shortfall in resources would be around Rs.37,000 crore and taking the likely realisation of the committed level of resources in 1995-96 and the same level in 1996-97 shortfall will be about Rs.43,500 crore. In the scenario of Rs.37,000 crore, the BCR would be estimated at (-) Rs. 4,768 crore in the 5 year period as against the original estimate of Rs.12,985 crore and the contribution from SLPEs at negative Rs.166 crore as against a positive contribution of Rs.4,000 crore. As indicated earlier, the resources are likely to fall below the projections in 1995-97 and fall in resources of Rs.6,500 crore from the estimated level would be substantially in BCR and contribution of SLPEs only and thus both would be highly negative at the end of the Eighth Five Year Plan. The deterioration in these two heads would be around Rs.28,000 crores. In the above scenario indicating shortfall in resources between Rs.37,000 crore to Rs.43,500 crore, inflation rate in 1995-96 has been assumed at 7 per cent per annum. At a higher rate of inflation in 1995-96, the resources gap may deteriorate further.

2.58 The performance of States in respect of BCR varies widely . The States of Goa, Gujarat, Haryana, Karnataka and Maharashtra had positive BCRs in the first three years of the Eighth Five Year Plan period. Madhya Pradesh had also a marginal positive BCR in three year period, though it had a negative BCR in the second and third years. An important observation in this regard is that BCR has been steadily declining from the first year of the Eighth Five Year Plan. All the ten Special Category States had negative BCRs in all years except Arunachal Pradesh with a small positive BCR in 1992-93. Among non-Special Category States negative BCRs were predominant in the first three years in the case of Uttar Pradesh, Bihar, West Bengal, Punjab and Kerala.

2.59 The performance of State level public enterprises also has not been quite satisfactory. The negative contribution of SEBs of some of the non-Special Category States (excluding positive contributions) was of the order of about Rs.2800 crores in the three years period 1992-95. The major contributors in this regard are Gujarat, Punjab and Haryana. At the same time the State Electricity Boards and Road Transport Corporations taken together made substantial positive contribution in the case of Maharashtra, Tamil Nadu, Karnataka, Kerala, Rajasthan and Orissa. Quite a few Special Category States had their electricity and road transport operations departmentally conducted. However, those States like Jammu and Kashmir, Assam etc. which had separate electricity and Road Transport Corporations also incurred heavy losses and ended up with substantial negative contribution.

2.60 Annex.2.13 indicates the performance of the States in the first 3 years vis a vis. their outlays for the Eighth Five Year Plan. It was only Maharashtra and Arunachal Pradesh which could mobilise more than 60% of the resources projected for respective States for their Eighth Five Year Plan during the first 3 years. Andhra Pradesh, Goa, Karnataka and Tamil Nadu have mobilised resources between 50 to 60 per cent of their Eighth Five Year Plan projections during the first three years. Gujarat, Kerala, Madhya Pradesh, Mizoram and Sikkim could mobilise between 40 to 50 per cent of their Eighth Plan projections during the first 3 years. The performance of rest of the States during the first three years of the Plan was less than 40 per cent of their Eighth Five Year Plan projections.

2.61 In the case of externally aided projects, the participation of the States varied very much. It has been noticed that the assistance for externally aided projects was utilised largely by a few States namely, Maharashtra, Andhra Pradesh, Tamil Nadu, Karnataka and Uttar Pradesh. States like Bihar, Goa and Madhya Pradesh and Special-Category States had very little participation in the utilisation of funds for externally aided projects. Inspite of the promotional measures taken by the Central Government like passing on the assistance to the extent of 100 per cent to the States and also advance releases have not improved the participation of these States in any significant way.

2.62 In resource mobilisation, the Central support to the State Plans has taken a predominant position in the case of a number of States. The Central support included the allocations for Open Market Borrowing (SLR based), Negotiated Loans from financial institutions, Plan Revenue Deficit Grant provided by the Ninth Finance Commission (for the first 3 years), Normal Central Assistance (formula based) for State Plans, Additional Central Assistance for Externally Aided Projects and specific assistance in the form of plan loan etc. A large number of states have received Central support of more than 100 per cent of their Plan outlay/resources as can be seen from Annex. 14. This clearly indicates that a part of the Central support is being utilised by the States for financing their non- plan current revenue expenditure.

Progress in Resource Mobilisation of the Union Territories : 1992-97

2.63 The Eighth Plan outlay for the Union Territories was fixed at Rs.6,250 crore at 1991-92 prices. During the first three years of the Plan (i.e. 1992-95) they have utilised resources to the tune of Rs.3,868.67 crore at constant prices, which forms 61.90% of the total Eighth Plan outlay. Except Chandigarh and Lakshadweep, all other UTs have utilised more than 60% of the total Plan outlays. Details are given in Annex.2.15. All the UTs except Chandigarh and Lakshadweep are expected to utilise resources exceeding the original outlay by the end of the Eighth Plan.

Measures needed to boost State Resources

2.64 It has already been mentioned in paragraph 2.54 above that a resource gap of Rs.37,000 crore to Rs.43,500 crore at the States' level would emerge at the end of the Eighth Five Year Plan at current projections of resource mobilisation. It is most unlikely that the States would be able to bridge this gap fully during the remaining period of the Plan. However, the States can make an attempt to reduce this gap by taking the following measures :

2.64.1 Taking effective steps to fully meet the Additional Resources Mobilisation (ARM) commitments made while finalising the Annual Plan 1995-96. The ARM commitments made by 25 States for 1995-96 Plan through improved BCR, surpluses of SLPEs, impounding of Dearness Allowance liabilities and various other measures work out to about Rs.6350 crore at 1991-92 prices.

2.64.2 BCR commitments for 1995-96 continue to contain large negative contributions from State Irrigation Departments. Through revision of irrigation rates and improved collections, annual losses amounting to about Rs.650 crore (i.e. Rs.460 crore at 1991-92 prices) can be made up. In two years (1995-97), the BCR improvement would be about Rs. 920 crore at 1991-92 prices.

2.64.3 Improving the financial performance of State level Public Enterprises. At present the State Electricity Boards and Road Transport Corporations in many States are running at losses which result in a negative contribution for public sector enterprises as a whole. If all the SEBs and RTCs presently making a negative contribution towards resources mobilisation are brought at least to somewhat better level of efficiency so that their contribution is brought to zero level, an amount of about Rs.1,150 crore (about Rs.800 crore at 1991-92 prices) can be realised during 1995-96. The above measures can help the States to exceed the Plan targets finalised for 1995-96.

Variation in States' tax mobilisation

2.65 It may be pointed out that there is considerable variation in the tax mobilisation effort amongst the States. Annex. 16 presents the ratios, in percentage terms, of per capita tax revenue to per capita SDP in respect of the 25 States. While Kerala tops the list with per capita tax revenue accounting for 10.76 per cent of per capita SDP, followed by Gujarat with 10.10 per cent, substanitally lower revenue mobilisation effort is witnessed for certain major states like Bihar (4.64%), Orissa (5.06%) and Uttar Pradesh (5.72%). The lowest ratios are recorded for Arunachal Pradesh (0.6%) and Mizoram (1.03%).

Conclusions

2.66 In assessing the availability and requirement of resources for the remaining two years of the Eighth Plan the following conclusions emerge:

2.66.1 The balance from current revenues (BCRs) of both the Centre and the States has been in the negative region during 1992-95. This is against the target of 8% of aggregate resources for the Plan to be raised via this source. Substantial effort needs to be made to redress this imbalance. This may be achieved via simultaneous efforts to garner increased tax revenues while curbing non essential revenue expenditure.

2.66.2 The contribution of PSUs in the State sector towards the Plan resources has been well below the target set out originally in the Plan.

2.66.3 Due to the shortfall in the above two heads, borrowings and miscellaneous capital receipts have had to be stepped up significantly. But this would entail a severe interest burden in the years to come, especially because Government borrowings are now increasingly at market rates of interest. This also raises serious questions regarding the sustainability of debt.

2.66.4 During 1992-95 there has been an overall shortfall in Plan expenditure of about around 7 percentage points in pro-rata terms. The shortfall in the State sector is quite pronounced, whereas the expenditure for the central sector has been nearer the target. The performance during the corresponding period of the Seventh Plan was better but the first three years of the Sixth Plan witnessed more serious shortfalls.

2.66.5 As regards investment in the social sector there have been serious shortfalls in outlay in both the central and state sectors. Since this sector relies almost exclusively on budgetary support, there are likely to be severe constraints unless the budgetary imbalance is removed. In the infrastructure sector there have been serious shortfalls in several key areas, viz, power, road transport and ports. The shortfalls in the State sectors have been more acute.

2.66.6 Even though in the past year there has been a buoyant growth in tax revenues, non-plan revenue expenditure, especially interest payments and subsidies, have surged, resulting in lower central budgetary support for the Plan in real terms. Budgetary support for the Plan has reduced from 5.8% of GDP in 1993-94 to 5.1% of GDP in 1994-95 and it is estimated to go down to 4.6% in 1995-96 (BE).

2.66.7 With gross domestic savings at current prices amounting to 20 and 20.2% of GDP respectively in the first two years of the Plan as against the Eighth Plan target of an annual average of 21.6%, and with the borrowing requirement of the Government going up significantly, the upward pressure on interest rates is likely to persist. The debt servicing burden in subsequent years, is therefore bound to be substantially high.

2.66.8 After a careful examination of the resources position both from the points of view of additional tax and non tax revenue mobilisation as well as expenditure compression it is seen that an amount of Rs.63561 crores should be feasible as the Central budgetary support for the terminal year (1996-97) of the Eighth Plan. It may be added that this amount should also be regarded as desirable so as to protect particularly the social and economic infrastructure of the economy as per the original projections of the Eighth Plan. It is also felt that with some reasonable but quite feasible extra effort, additional revenues should be possible to mobilise together with some restraint on the expansion of non-Plan expenditure, so that this amount can be financed without any significant increase in fiscal deficit.

Annex 2.1

PLAN PERFORMANCE DURING THE FIRST THREE YEARS OF THE VIIIth, VIIth AND VIth PLAN

VIII PLAN(1992-97) (Rs. Crores)

SECTOR	OUTLAY	PRORATA(60%) for 1992-95	EXPENDITURE (1992-95) Amount	% to VIII Plan Outlay
1	2	3	4	5
CENTRE	247865	148719	143528	57.9
STATES	179985	107991	80575	44.8
UTs	6250	3750	3852	61.6
TOTAL	434100	260460	227955	52.5

VII PLAN(1985-90)		PRORATA(60%) for 1985-88	EXPENDITURE (1985-88) Amount	% to VII Plan Outlay
CENTRE	95534	57320	56923	59.6
STATES	80698	48419	40376	50.0
UTs	3768	2261	1825	48.4
TOTAL	180000	108000	99124	55.1

VI PLAN(1980-85)		PRORATA(60%) for 1980-83	EXPENDITURE (1980-83) Amount	% to VI Plan Outlay
CENTRE	47250	28350	22296	47.2
STATES	48600	29160	21016	43.2
UTs	1650	990	821	49.8
TOTAL	97500	58500	44133	45.3

Note:The figure of outlay and expenditure are at base-year prices in respect of each of the three Five Year Plans covered in this statement.

Annex 2.2

SHORTFALL IN PLAN EXPENDITURE AND PROTECTION OF PLAN OUTLAY IN SOCIAL SECTOR DURING THE 8TH PLAN (CENTRE)

(Rs.Crores)

Sector	VIII Plan Outlay	Prorata Outlay (60% of VIII Plan Outlay at constant prices)	Expenditure (1992-95 at constant prices)	% w.r.t. VIII Plan Outlay	Shortfall during 1992-95 at constant (1991-92) prices	Required Outlay (1995-97) to meet VIIIth Plan target (current prices)
1.Rural Development	24170	14502	11187	46.3	3315	19297
2.Med.&Pub.Health	1800	1080	1242	69.0	-162	829
3.Family Welfare	6500	3900	3079	47.4	821	5085
4.Education	7443	4466	3168	42.6	1298	6355
5.Water Supply & Sanitation	5968	3581	1903	31.9	1678	6043
6.Housing	1691	1015	979	57.9	36	1059
7.Welfare of SCs/STs	2549	1529	1491	58.5	38	1572
8.Social Security & Welfare	2373	1424	1581	66.6	-157	1178
9.Other	6121	3673	2352	38.4	1321	5603
Total	58615	35170	26982	46.0	8188	47020

Notes:Expenditure figures for 1992-95 are based on Actuals for 1992-93,RE for 1993-94 and BE for 1994-95. Required outlay at current prices has been worked out by adding the shortfall in each case to the prorata outlay(40% of approved VIIIth Plan Outlay). The amount thus obtained in each case has been adjusted for price rise by multiplying half the amount by the relevant factor for 1995-96 and the remaining half by the factor for 1996-97.

Year	Inflation(%)
1992-93	9.5
1993-94	8.4
1994-95	11.0
1995-96	9.0
1996-97	7.0

Annex 2.3

SHORTFALL IN PLAN EXPENDITURE AND PROTECTION OF PLAN OUTLAY IN SOCIAL SECTOR DURING THE 8TH PLAN (STATES) (Rs.Crores)

Sector	VIII Plan Outlay	Prorata Outlay (60% of VIII Plan Outlay at constant prices)	Expenditure (1992-95 at at constant prices)	% w.r.t. VIII Plan Outlay	Shortfall during 1992-95 at constant (1991-92 prices)	Required Outlay (1995-97) to meet VIIIth Plan target (current prices)
1.Rural Development	10213	6128	5544	54.3	584	6941
2.Med.& Pub.Health	5308	3185	2226	41.9	959	4581
3.Family Welfare	0	0	0		0	0
4.Education	11412	6847	4945	43.3	1902	9612
5.Water Supply & Sanitation	9847	5908	4752	48.3	1156	7572
6.Housing	3409	2045	1687	49.5	358	2558
7.Welfare of SCs/STs	3051	1831	1509	49.5	322	2293
8.Social Security & Welfare	1468	881	682	46.5	199	1169
9.Other	7094	4256	3380	47.6	876	5520
Total	51802	31081	24725	47.7	6356	40245

Notes:Expenditure figures for 1992-95 are based on Actuals for 1992-93, RE for 1993-94 and BE for 1994-95. Required Outlay at current prices has been worked out by adding the shortfall in each case to the prorata outlay(40% of approved VIIIth Plan Outlay). The amount thus obtained in each case has been adjusted for price rise by multiplying half the amount by the relevant factor for 1995-96

Year	Inflation(%)
1992-93	9.5
1993-94	8.4
1994-95	11.0
1995-96	9.0
1996-97	7.0

Annex 2.4

SHORTFALL IN PLAN EXPENDITURE AND PROTECTION OF PLAN OUTLAY IN INFRASTRUCTURE SECTOR DURING THE 8TH PLAN (CENTRE)

(Rs.Crores)

Sector	VIII Plan Outlay	Prorata Outlay (60% of VIII Plan Outlay at constant prices)	Expenditure (1992-95 at constant prices)	% w.r. t. VIII Plan Outlay	Shortfall during 1992-95 at constan (1991-92) prices	Required Outlay (1995-97) to meet VIIIth Plan target (current prices)
1.Coal & Lignite	10507	6304	6047	57.6	257	6629
2. Power	31181	18709	14743	47.3	3966	24433
3. Petroleum	24000	14400	22161	92.3	-7761	2733
4.NCSE	1107	664	473	42.7	191	942
5. Roads & Bridges	2600	1560	1452	55.8	108	1706
6. Road Transport	264	158	58	22.0	100	306
7. Shipping	3400	2040	2222	65.4	-182	1751
8. Ports	3273	1964	1159	35.4	805	3142
9. Postal Services	325	195	182	56.0	13	213
10. Railways	27202	16321	16417	60.4	-96	16030
11. Civil Aviation	3998	2399	3761	94.1	-1362	352
12. Telecom	23946	14368	14540	60.7	-172	13981
13. Others*	1066	640	1124	105.4	-484	-86
Total	132869	79721	84339	63.5	-4618	72133

* "Others" include Other Communication Services, Inland Water Transport and Other Transport Services.

Notes:Expenditure figures for 1992-95 are based on Actuals for 1992-93,RE for 1993-94 and BE for 1994-95. Required outlay at current prices has been worked out by adding the shortfall in each case to the prorata outlay(40% of approved VIIIth Plan Outlay). The amount thus obtained in each case has been adjusted for price rise by multiplying half the amount by the relevant factor for 1995-96 and the remaining half by the factor for 1996-97.

Year	Inflation(%)
1992-93	9.5
1993-94	8.4
1994-95	11.0
1995-96	9.0
1996-97	7.0

Annex 2.5

SHORTFALL IN PLAN EXPENDITURE AND PROTECTION OF PLAN OUTLAY IN INFRASTRUCTURE SECTOR DURING THE 8TH PLAN (STATES)

(Rs.Crores)

Sector	VIII Plan Outlay	Prorata Outlay (60% of VIII Plan Outlay at constant prices)	Expenditure (1992-95 at constant prices)	% w.r.t. VIII Plan Outlay	Shortfall during 1992-95 at constant (1991-92) prices	Required Outlay (1995-97) to meet VIIIth Plan target (current prices)
1. Power	46962	28177	19903	42.4	8274	40219
2. NCSE	330	198	116	35.2	82	318
3. Roads & Bridges	9516	5710	4953	52.0	757	6782
4. Road Transport	3799	2279	1591	41.9	688	3281
5. Ports	261	157	127	48.6	30	199
6. Railways	0	0	0		0	0
7. Civil Aviation	45	27	23	50.8	4	33
8. Telecom	0	0	2		-2	-3
9. Other Communication Services	13	8	5	40.6	3	11
Total	60926	36556	26721	43.9	9834	50840

Notes: Expenditure figures for 1992-95 are based on Actuals for 1992-93, RE for 1993-94 and BE for 1994-95. Required outlay at current prices has been worked out by adding the shortfall in each case to the prorata outlay(40% of approved VIIIth Plan Outlay). The amount thus obtained in each case has been adjusted for price rise by multiplying half the amount by the relevant factor for 1995-96 and the remaining half by the factor for 1996-97.

Year	Inflation(%)
1992-93	9.5
1993-94	8.4
1994-95	11.0
1995-96	9.0
1996-97	7.0

Annex 2.6

PROJECTED FINANCING PATTERN OF EIGHTH PLAN (1992-97) OUTLAY

(Rs. Crores at 1991-92 prices)

Items	Centre (including UTs)	States	Total
A. Domestic Resources			
1. BCR	22020 (6.6)	12985 (12.8)	35005 (8.1)
2. PSEs	144140 (43.3)	4000 (3.9)	148140 (34.1)
3. Borrowings including MCR	117755 (35.4)	84500 (83.3)	202255 (46.6)
Total A	283915 (85.4)	101485	385400 (88.8)
B. Net Capital inflow from abroad	28700 (8.6)	0	28700 (6.6)
C. Deficit Financing	20000 (6.0)	0	20000 (4.6)
D. Aggregate Resources	332615 (100.0)	101485 (100.0)	434100 (100.0)
E. Assistance for State Plans	-78500	78500	0
F. Approved Outlay	254115	179985	434100

Note: Figures in brackets indicate percentage to aggregate resources.

Annex 2.8

Allocation and Utilisation of External Aid

(Rs.Crores)

Agency	1992-93			1993-94			1994-95		
	Allocation	Utilisation	%	Allocation	Utilisation	%	Allocation	Utilisation	%
A Centre	6589	6496	98.6	6224	6674	107.2	6013	5696	94.7
States									
1 Andhra Pradesh	601	711	118.3	653	589	90.2	507	456	89.9
2 Assam	0	0	0.0	0	0	0.0	0	0	0.0
3 Bihar	24	37	154.2	61	4	6.6	62	43	69.4
4 Gujarat	216	448	207.4	102	104	102.0	44	65	147.7
5 Haryana	12	9	75.0	40	17	42.5	37	45	121.6
6 Himachal Pradesh	20	25	125.0	0	0	0.0	1	2	200.0
7 Karnataka	394	242	61.4	318	264	83.0	377	260	69.0
8 Kerala	114	61	53.5	226	95	42.0	138	109	79.0
9 Madhya Pradesh	40	27	67.5	51	19	37.3	26	16	61.5
10 Maharashtra	506	487	96.2	503	528	105.0	721	626	86.8
11 Orissa	111	90	81.1	118	92	78.0	147	108	73.5
12 Punjab	43	45	104.7	62	31	50.0	90	73	81.1
14 Rajasthan	58	30	51.7	140	66	47.1	171	126	73.7
15 Tamil Nadu	353	385	109.1	427	398	93.2	684	605	88.5
16 Uttar Pradesh	345	376	109.0	371	439	118.3	296	209	70.6
17 West Bengal	190	91	47.9	96	73	76.0	131	73	55.7
B States:Total	3027	3064	101.2	3168	2719	85.8	3432	2816	82.1
C Multistates	564	677	120.0	763	728	95.4	929	963	103.7
D Grand Total	10180	10237	100.6	10155	10121	99.7	10374	9475	91.3

Source: Aid Accounts And Audit Division, DEA, Ministry Of Finance

Annex 2.7

FINANCING PATTERN OF PLAN OUTLAY FOR CENTRE
(including Union Territories)

(Rs. Crores)

	1992-93(RE)	1993-94(RE)	1994-95(RE)	1995-96(BE)
I. Domestic Resources				
1. BCR incl. ARM	-2494	-15713	-13370	-14796
2. Contribution of PSEs	20048	26068	28171	35241
3. Borrowings and Miscellaneous (net) Capital Receipts (MCR)	32766	53494	57926	60692
3.1 Market Borrowings(net)	3670	3700	3700	3700
3.2 Long & Med. Term Borr.	0	13992	17000	19000
3.3 Bonds/Deb. by Pub. Sec. Enter.	6291	6237	7234	8354
3.4 Small Savings	5500	6000	14000	8000
3.5 Provident Funds	1500	1700	1900	2000
3.6 Miscellaneous Capital Receipts(net)	15805	21865	14092	19638
Total I (1 to 3)	50320	63849	72727	81137
II Net Inflow from abroad	9280	9273	10100	11870
III Deficit Financing	7202	9060	6000	5000
IV Agg. Resources(I+II+III)	66802	82182	88827	98007
V Asst. for State Plans	-14028	-17510	-17138	-18378
VI Plan Grants to States under Article275 (1)	-1780	-2217	-2680	0
VII Outlay/Resources for the Centre's (incl.UTs) Plan	50994	62455 (62848)	69009 (69963)	79629 (81150)

Note: Delhi became the National Capital Territory with effect from December 1, 1993.
Delhi is now a Union Territory with Legislature.
This table is based on the figures given in the relevant Union Budget Documents, 1994-95 and 1995-96, and, as such, the figures of outlay/resources shown in the last four coloumns include only the Central Assistance for the Union Territory Plans, which is not always equal to the outlay in the case of Union Territories with Legislature (Delhi and Pondichery). The corresponding figures inclusive of full outlay in respect of these Union Territories are therefore given in brackets.

(Rs. Crores)

Year	Internal Resources	Bonds	External Commercial Borrowing	Others	Budget Support	Of which Equity	Plan Outlay of CPSEs	Share (%)of Budget Support in Plan Outlay of CPSEs	Share (%) of CPSEs' Plan Outlay in Central Plan Outlay
1	2	3	4	5	6	7	8	9	10
1991-92	12007	5722	1854	2919	6920	4185	29422	23.5	73.2
1992-93	16129	6291	3746	3919	6576	4173	36661	17.9	73.7
1993-94	18853	6237	4136	7215	7451	3379	43892	17.0	71.4
1994-95	24153	7234	4977	4017	8205	4592	48586	16.9	71.1
1995-96	28867	8354	6260	6374	7013	3389	56868	12.3	72.1

Notes:(1)Figures for 1991-92 to 1994-95 are Revised Estimates,and those for 1995-96 Budget Estimates.
(2)Coloumn 7 shows Budget Support in the form of equity, which is included in coloumn 6.

ANNEX 2.10

BUOYANCIES OF MAJOR CENTRAL TAXES (1980-81 TO 1994-95)

Tax	With Respect to	Buoyancy
Income Tax	GDP	1.14
Corporation Tax	GDP	1.28
Union Excise	GDP	0.98
Customs Duties	Imports	0.72

ANNEX 2.11

	1994-95 (RE)	1995-96 (BE)	Estimate (1996-97) Alt I	Estimate (1996-97) Alt II	Estimate (1996-97) Alt III	Estimate (1996-97) Alt IV
REVENUE RECEIPTS						
Incom Tax	11000	13500	15564	15564	15564	15564
Corporation Tax	13250	15500	18159	18159	18159	18159
Total Direct Tax	24250	29000	33723	33723	33723	33723
Customs	26450	29500	34173	34173	34173	34173
Union Excise	36900	42780	48398	48398	48398	48398
Total Indirect Tax	63350	72280	82571	82571	82571	82571
Other Taxes	2231	2482	2815	2815	2815	2815
Gross Tax Revenue	89831	103762	119107	119107	119107	119107
State's Tax Share	24843	29388	33436	33436	33436	33436
Net Tax to Centre (A)	64988	74374	85671	85671	85671	85671
Net Non-Tax Share (B)	23782	26413	29952	29952	29952	29952
CAPITAL RECEIPTS						
Loan Recovery	6700	6730	6760	6760	6760	6760
Disinvestment	5237	7000	10000	10000	10000	10000
Fiscal Deficit	61565	57634	60604	60604	65357	65357
Total Capital Receipts(C)	73502	71364	77364	77364	82117	82117
TOTAL RECEIPTS (A+B+C)	162272	172151	192988	192988	197740	197740
NON-PLAN EXPENDITURE						
Interest	44000	52000	58000	58000	58000	58000
Defence	23544	25500	29000	29000	29000	29000
Subsidies	10826	10965	12400	11305	12400	11305
Other NPE	35141	35186	42600	35875	42600	35875
TOTAL NON-PLAN EXP.	113511	123651	142000	134180	142000	134180
AVAILABLE FOR PLAN	48761	48500	50988	58808	55741	63561
GDP at CPM	927360	1047890	1188307	1188307	1188307	1188307
Gross Fiscal Deficit	61565	57634	60604	60604	65357	65357
GFD/GDP	6.6%	5.5%	5.1%	5.1%	5.5%	5.5%
Revenue Deficit	34132	35541	37952	35872	40986	38906
	3.7%	3.4%	3.2%	3.0%	3.4%	3.3%

Annex 2.12

Progress in Resource Mobilisation, 1992-97 (at 1991-92 prices)

Item	1992-97	1992-95			1995-96		
	AP	Spl Cat States	Non-Spl States	Total	Spl Cat. States	Non-Spl State	Total
1	2	3	4	5	6	7	8
1. Balance from Current Revenue including Additional Resources Mobilised & Opening Balance	12985	-5691	-2317	-8008	-86	1706	1620
2. Contribution from State Level Public Enterprises	4000	-691	-729	-1420	-154	781	627
3. Borrowings & Miscellaneous Capital Receipts	84500	1011	36320	37331	605	13596	14201
4. Assistance for State Plans (excluding Area Programmes)	74000	10179	33749	43928	3398	12944	16342
TOTAL (1 to 4)	175485	4808	67023	71831	3763	29027	32790
5. Area Programmes	4500			2598			1516
6. Grand Total (4+5)	179985	4808	67023	74429	3763	29027	34306

Annex 2.12 Concld.

Progress in Resource Mobilisation, 1992-97 (at 1991-92 prices)

(Rs. in crores)

Item	1996-97 Spl Cat. States	1996-97 Non-Spl States	1996-97 Total	1992-97 Spl Cat. States	1992-97 Non-Spl States	1992-97 Total	Difference (14-2)
1	9	10	11	12	13	14	15
1. Balance from Current Revenue s including Additional Resource Mobilised & Opening Balance	-86	1706	1620	-5863	1095	-4768	-17753
2. Contribution from State Level Public Enterprises	-154	781	627	-999	833	-166	-4166
3. Borrowings & Miscellaneous Capital Receipts	605	13596	14201	2221	63512	65733	-18767
4. Assistance for State Plans (excluding Area Programmes)	3398	12944	16342	16975	59637	76612	2612
TOTAL (1 to 4)	3763	29027	32790	12334	125077	137411	-38074
5. Area Programmes			1516			5630	1130
6. Grand Total (4+5)	3763	29027	34306	12334	125077	143041	-36944

Annex 2.13

Progress of Resources Mobilisation 1992-95
(At constant Prices)

(Percentage)

STATES	Realised	Targeted @
Above 60 % performance		
1. Arunachal Pradesh *	65.07	62.53
2. Maharashtra	62.75	50.91
Between 50% to 60 %		
3. Andhra Pradesh	59.67	44.68
4. Tamil Nadu	58.42	53.49
5. Goa	52.62	55.27
6. Karnataka	51.83	55.14
Between 40% to 50% performance		
7. Kerala	46.84	48.21
8. Mizoram *	46.76	60.23
9. Madhya Pradesh	44.12	56.76
10. Sikkim *	40.80	55.27
11. Gujrat	40.44	45.32
Less than 40% performance		
12. Manipur *	39.84	57.98
13. Rajasthan	39.48	39.74
14. Punjab	38.99	53.62
15. Meghalaya *	38.24	65.11
16. Uttar Pradesh	37.16	49.49
17. Haryana	34.99	40.54
18. Tripura *	34.35	66.72
19. Assam *	30.41	54.47
20. West Bengal	28.17	39.99
21. Orissa	25.50	39.85
22. Nagaland *	18.93	60.11
23. Himachal Pradesh *	16.15	56.31
24. Bihar	15.77	44.39
25. Jammu & Kashmir *	8.04	55.28

* Special Category States

@ As projected in the Annual Plan Financing Pattern 1992-95

Central Support as % of Total Plan Resources 1992-95

1. States having percentage of more than 100%

Bihar	204.05
Punjab	112.32
Uttar Pradesh	114.71
West Bengal	116.37
Assam	199.20
Himachal Pradesh	331.69
Jammu & Kashmir	889.67
Manipur	152.25
Meghalaya	147.76
Mizoram	141.25
Nagaland	394.34
Sikkim	139.72
Tripura	163.19

2. States having percentage between 75% to 100%

Andhra Pradesh	79.78
Kerala	90.80
Madhya Pradesh	74.37
Orissa	99.09
Arunachal Pradesh	99.22

3. States having percentage between 50% to 75%

Haryana	55.06
Rajasthan	67.30
Tamil Nadu	69.11

4. States having percentage below 50%

Goa	42.46
Gujarat	47.24
Karnataka	41.61
Maharashtra	32.06

Annex 2.15

PROGRSS IN RESOURCES MOBILISATION DURING 8th FIVE YEAR PLAN, 1992-97

UNION TERRITORIES

(Rs. in Crores)

Union Territories	1992-97	1992-93 (Actual)		1993-94 (Actual)		1994-95 (Revised)		1992-95	
		Current	Constant	Current	Constant	Current	Constant	Current	Constant
1	2	3	4	5	6	7	8	9	10
1. A & S ISLAND	685.00	125.83	114.91	154.13	129.85	199.49	151.36	479.45	396.12
2. CHANDIGARH	400.00	65.32	59.65	79.83	67.25	88.00	66.77	233.15	193.67
3. DADRA & NAGAR HAVELI	80.00	18.16	16.58	23.96	20.19	25.99	19.72	68.11	56.49
4. DAMAN & DIU	65.00	14.45	13.20	15.64	13.18	25.22	19.14	55.31	45.51
5. DELHI *	4500.00	911.07	832.03	980.00	825.61	1560.00	1183.61	3451.07	2841.25
6. LAKSHADWEEP	120.00	19.32	17.64	23.30	19.63	32.67	24.79	75.29	62.06
7. PONDICHERRY *	400.00	87.77	80.16	108.00	90.99	135.00	102.43	330.77	273.57
TOTAL	6250.00	1241.92	1134.17	1384.86	1166.69	2066.37	1567.81	4693.15	3868.67

* UTs with legislation.

Annex 2.15 Concld.

PROGRESS IN RESOURCES MOBILISATION DURING 8th FIVE YEAR PLAN, 1992-97

UNION TERRITORIES

(Rs. in Crores)

Union Territories	% of 8th Plan	1995-96 Current	Constant		1996-97 Constant		1992-97 Constant			% of outlays
1	11	12	13		14		15			16
1. A & S ISLAND	57.83	215.00	152.48	149.72	152.48	149.72	701.08	695.56	10.56	102.35
2. CHANDIGARH	48.42	100.00	70.92	69.64	70.92	69.64	335.52	332.95	-67.05	83.88
3. DADRA & NAGAR HAVELI	70.61	29.00	20.57	20.19	20.57	20.19	97.62	96.88	16.88	122.03
4. DAMAN & DIU	70.01	23.00	16.31	16.02	16.31	16.02	78.13	77.54	12.54	120.20
5. DELHI *	63.14	1720.00	1219.86	1197.77	1219.86	1197.77	5280.97	5236.79	736.79	117.35
6. LAKSHADWEEP	51.72	38.60	27.38	26.88	27.38	26.88	116.81	115.82	-4.18	97.34
7. PONDICHERRY *	68.39	175.52	124.48	122.23	124.48	122.23	522.53	518.03	118.03	130.63
TOTAL	61.90	2301.12	1632.00	1602.45	1632.00	1602.45	7132.67	7073.57	823.57	114.12

* UTs with legislation.

Tax Revenue as percentage of State Domestic Product (Average for the triennium 1987-90)

State	Per Cap. SDP (Rs.)	Per Cap. Tax Rev. (Rs.)	Tax Rev/ SDP (%)
	1.	2.	3.
Andhra Pradesh	3455	333	9.64
Arunachal Pradesh	4670	28	0.60
Assam	3195	135	4.23
Bihar	2135	99	4.64
Goa	7364	575	7.81
Gujrat	4602	465	10.10
Haryana	5284	507	9.60
Himachal Pradesh	3618	244	6.74
Jammu & Kashmir	3534	184	5.21
Karnataka	3810	388	10.18
Kerala	3532	380	10.76
Madhya Pradesh	3299	215	6.52
Maharashtra	5369	511	9.52
Manipur	3449	69	2.00
Meghalaya	3328	157	4.72
Mizoram	4094	42	1.03
Nagaland	3929	153	3.89
Orissa	2945	149	5.06
Punjab	6996	544	7.78
Rajasthan	3092	218	7.05
Sikkim	4846	256	5.28
Tamil Nadu	4093	385	9.41
Tripura	3163	69	2.18
Uttar Pradesh	2867	164	5.72
West Bengal	3750	265	7.07
ALL STATES	3621	283	7.83

Source Tenth Finance Commission Report

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