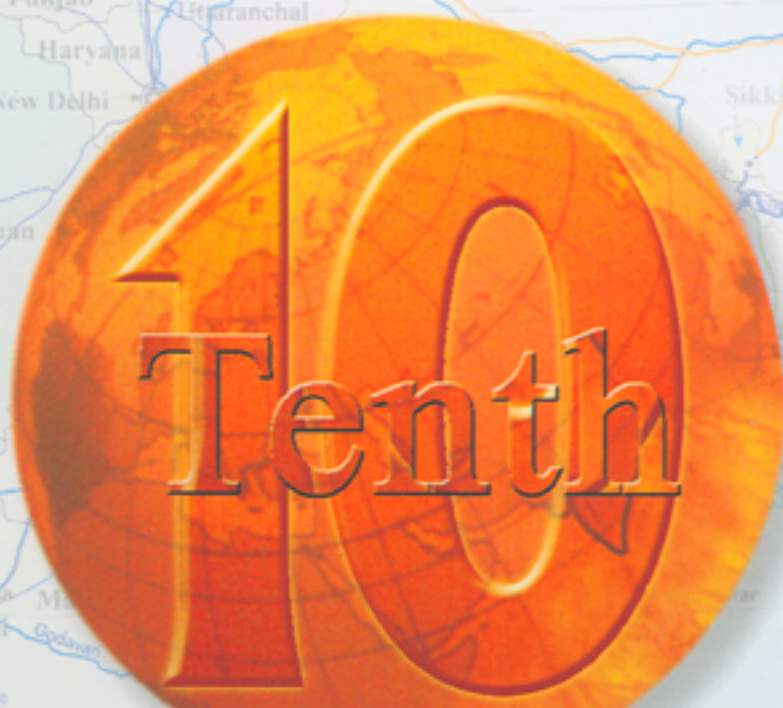


Planning Commission
Government of India
New Delhi



Five Year Plan

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Volume - I

Dimensions and Strategies

FOREWORD

I have a vision of an India free of poverty, illiteracy and homelessness – free of regional, social and gender disparities – with modern physical and social infrastructure – and a healthy and sustainable environment. Above all, an India which stands tall and proud in the comity of nations, confident in her capability to face all possible challenges. In short, I dream of an India which is counted among the ranks of developed nations before the end of the second decade of this new century.

The most pressing challenge facing us in the coming years will be to provide every Indian with the opportunity to realize his or her full creative potential. Demographic trends indicate that the rate of growth of our working age population during the next ten years will be the highest we have ever experienced, and unless we achieve a significant improvement in the pace of creation of work opportunities, there will be an increase in the level of unemployment. Such a situation cannot be allowed to materialize.

Unemployment not only entails high human costs, it can also lead to serious social disruption, and put enormous strain on the fabric of our society. More importantly, the youth of our country is our most valuable resource and there can be no greater shame than to let it go waste for the lack of will and determination. Future generations will not forgive us for opportunities lost. We have, therefore, made a commitment to the young people of this country that our economy will generate one crore work opportunities each year for the next ten years so that their talents and potentials are utilized for the benefit of the Nation.

These dreams cannot be realized without rapid growth and development. We must, therefore, explore every conceivable way to accelerate the rate of growth of the economy. We must collectively show the firm resolve to actualize the latent potentialities of our great country, putting behind all doubts and differences.

Planning has been one of the pillars of our approach to economic development since independence, and has stood us in good stead. Planning is not a static concept, and each of our Plans has reflected the changing imperatives of the times. The Tenth Plan carries forward this tradition.

While working out the road-map we need to follow to realize my vision of doubling the per capita income of our country and providing one crore work opportunities in the next ten years, the Planning Commission has firmly kept in view the ongoing process of transition to a market economy. The changing role of the Government and its relationship with the private sector, forms the cornerstone of the Plan.

There are four dimensions of this transformation that I consider to be of critical importance, which need to be guided at the highest political level.

First and foremost is the centrality of good governance to the development process. The best policies and programmes can flounder on the rock of poor governance and shortcomings in implementation. The Tenth Plan document has highlighted this issue by focusing on governance and implementation in a significant manner. We need to bring about dramatic improvements in the functioning of our administrative, judicial and internal security systems in order to foster a dynamic and vibrant market economy.

Second, over the years, we have created numerous barriers to inter-state, and even intra-state, trade and commerce. Creation of a common economic space is one of the basic advantages of nationhood. All over the world, countries are coming together for this purpose, but we have continued to maintain and erect barriers. We must reverse this process decisively.

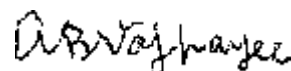
Third, we have inherited from the past a wide range of controls and restrictions on entrepreneurial initiatives, which have retarded the emergence of an investor-friendly climate in the country. We must

shed the mind-set of shortages that had given birth to this regime of pervasive controls, and create an environment which welcomes entrepreneurship with open arms.

Finally, effective delivery of basic social services to our people cannot be ensured unless the institutions that are charged with these functions are made accountable to the people themselves. For this it is necessary to empower the Panchayati Raj Institutions by transferring to them both functions and resources. The PRIs must become the cutting edge of our three-tier political structure and the focal point of democratic decentralization.

The unanimous adoption of the Tenth Five Year Plan by the National Development Council is an affirmation of our collective belief in the potential of our country and the extent to which we share a common vision of our future. I congratulate the Deputy Chairman, Members and officials of the Planning Commission for having done a commendable job in shaping and giving substance to this shared vision. I would like to express my appreciation for the contribution made by a wide cross-section of our political leadership, representatives of civil society, academics, industrialists, and individuals from various walks of life, in this truly National effort. The process of Plan formulation encapsulates our deep commitment to democracy and the consultative process that form the core of our National ethos.

It is, however, important that we effectively communicate the goals, strategies and tasks of the Tenth Plan to the various constituencies of our diverse society, without whose support we cannot hope to move ahead rapidly. We need to generate enthusiasm about the Plan and its targets among our people, especially our youth. We can achieve these ambitious targets only when we are able to make development a people's movement, and the Tenth Plan a people's Plan. I seek the cooperation of all political parties, social organizations, voluntary agencies and the media in this important endeavour.



(Atal Bihari Vajpayee)
Prime Minister of India, and
Chairman, Planning Commission

New Delhi
December 21, 2002

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PREFACE

The Tenth Five Year Plan marks the return of visionary planning to India after a long interregnum of cautious optimism. During the past two decades, India has no doubt been one of the ten fastest growing economies in the world, but we cannot be content with that. The Tenth Plan aims to take the country even further ahead, potentially to become the fastest growing country by the end of the Plan period. It calls for us to stretch beyond our immediate capabilities and set targets which are in consonance with our needs and the evident aspirations of our people.

The tone was set by the Prime Minister two years ago when he asked the Planning Commission to examine the feasibility of doubling the per capita income of the country in ten years and of providing 100 million work opportunities over the same period. The timing was significant. The country was already in the middle of what has proved to be an extended period of industrial stagnation, and weather-related agricultural failure had reemerged after nine years of normal monsoons. The international economy too was not performing well. The euphoria generated by the 7 per cent plus growth rates of the mid-1990s had, therefore, all but evaporated, and there was a perceptible lack of national self-confidence. In such a context, it would have been prudent to set one's sight relatively low and seek refuge in "ground realities" – an oft-repeated euphemism for caution bordering on pessimism.

The very fact that the Prime Minister chose to go against the tide of popular sentiment and assert confidence in the growth potential of our economy was sufficient to reinvigorate the planning system in its widest sense. The process of introspection and search for the hidden sources of growth began with a series of consultation meetings with a wide range of experts and stake-holders. It was most heartening to find that almost everyone we interacted with firmly believed that the Prime Minister's vision was attainable, but that it would necessitate fundamental changes in the way we did things. This broad-based intellectual endorsement led to a more detailed search for the possible sources of growth in the Indian economy.

The process culminated in the Approach Paper to the Tenth Plan, which was presented to the National Development Council (NDC) for approval in September 2001. It was suggested that although the objective of doubling the per capita income was feasible in the ten year time frame, it may be preferable to settle for an intermediate target of 8 per cent per annum average growth rate for the Tenth Plan period, with a further acceleration during the Eleventh Plan. The Approach Paper made it clear that the task would not be an easy one, and that full political commitment at all levels would be necessary for its fulfillment. It did not in any way gloss over the wide range of reforms covering policies, procedures and institutions which would have to be implemented and the difficult decisions that would have to be taken.

In approving the Approach Paper to the Tenth Plan, the NDC also adopted a set of quantifiable and monitorable targets which would enable us to focus on accelerating growth, not only as an end in itself but also as the means to achieve success in other dimensions such as poverty reduction, employment creation and improvement in certain critical indicators of the quality of life. These include health, environment and education indicators. This was a path-breaking decision. Although such objectives have been mentioned in earlier Plans, in no case were specific targets set. As a result, these were viewed as being desirable, but not essential; which diluted the importance accorded to them.

Armed with the NDC mandate, the Planning Commission embarked upon the herculean task of preparing the Tenth Plan document. Most people do not appreciate the magnitude of the effort that

goes into the preparation of an Indian Five Year Plan. The process of Plan preparation reflects our democratic tradition. The degree of involvement of and range of consultations with various constituents of our society that have gone into the making of the Plan is probably unparalleled in the world. We have involved Central Ministries and State Governments fully in this process. Academics, subject experts, civil society organisations, trade unions and industrialists have been involved at various stages of preparing the Plan in order to take full advantage of their expertise and ideas.

The Tenth Plan document contains a number of unique features which have been dictated by the targets set and the strategy that has been evolved to attain them. Much that could be left unsaid when considering only incremental progress needs to be explicitly brought out when dramatic improvements are envisaged. The essential message of the Plan is that a business-as-usual approach will not deliver the goods – urgent action has to be taken on a wide range of issues across a large number of sectors if the Tenth Plan targets are to be achieved.

The first unique feature of the Plan is its explicit recognition that the Indian economy is in a phase where the growth process alone will not be able to provide adequate work opportunities for the emerging work-force, let alone reduce the back-log of unemployment. Even at an average annual growth rate of 8 per cent, the economy is likely to generate 30 million work opportunities during the Tenth Plan period as compared to the estimated 35 million people who will be added to the work force. It, therefore, becomes necessary to devise suitable strategies which can accelerate the pace of work creation by modulating the growth process itself.

Considerable work has gone into this issue in the Planning Commission, and it is felt that there are a number of sectors and economic activities which have the potential to increase labour absorption significantly with the right kind of policy and programme interventions. By and large, the strategy relies on encouraging individual entrepreneurship and self-employment. It is recognised, however, that the skills required for these activities are not adequately provided by our existing education and training system. Special focus must, therefore, be laid on vocational education in order to ensure that there is consistency between the demand for and supply of skills.

Second, although the issue of regional balance has been an integral component of almost every five-year plan, there has been perceptible increase in regional imbalances over the years. We have also been conscious of the fact that national targets do not necessarily translate into balanced regional development. The potentials and constraints that exist at the state-level vary significantly. Therefore, for the first time, we have broken down the national targets to the state-level in consultation with State governments. The Tenth Plan contains a separate volume on States as a reflection of the importance we place on the role of the States in our development process.

We hope that this will enable the States to better focus their own development plans by more careful consideration of the sectoral pattern of growth and its regional dispersion within the State. In order to facilitate this process, the Planning Commission is preparing a series of State Development Reports, which will take stock of the capabilities of each State and develop appropriate strategies. We have also proposed a number of initiatives for reducing both inter-state and intra-state imbalances. In particular, we believe that the States need to be incentivised in order to carry out the requisite reform agenda, and several steps have been proposed in this direction.

Third, we believe that improvement in the quality of governance forms the essential ingredient for success. Administrative and judicial efficiency is central to the functioning of a vibrant market economy, and people's welfare is largely determined by the efficiency of public delivery mechanisms. The best plan cannot compensate for poor implementation. Bringing about transparency,

accountability and efficiency in all our public institutions is the key to unlocking the potential of our country and to sustained social development.

Fortunately, all over the country, people have begun to demonstrate that by working collectively they can make a tremendous difference not only to their own lives, but also in the manner that public institutions function. There are any number of examples that can be held up from different fields, such as self-help groups (SHGs), pani panchayats, village education committees, local health committees, joint forest management committees, etc. Such civil society impulses need to be encouraged and nurtured by the government so that development eventually becomes a people's movement and not merely an exercise in State paternalism.

We have, therefore, prepared a separate chapter on the issues of governance and implementation. We believe that this must be brought into the centre-stage of public discourse on development. We have also recently brought out a compendium on State government initiatives and civil society responses which have resulted in significant improvements in governance, entitled – "Successful Governance Initiatives and Best Practices – Experiences from Indian States". We hope that this will be a trend-setter in encouraging experience-sharing between our States.

Fourth, although our country has been subjected to natural disasters from time to time, these have never been adequately factored into our planning process. By and large, we have taken the approach that these events are transient in nature and, therefore, can be addressed as and when they arise. The experience of recent years, however, suggests that even episodic shocks can disrupt the development process quite substantially unless contingency plans are already in place and fiscal and monetary policies can be adjusted with sufficient flexibility. Therefore, disaster management must be integrated into our planning framework so that growth and development can progress without major disruption even in the face of adverse events. As a start, the Tenth Plan includes a chapter on disaster management, although its full integration with planning may yet take some time.

Fifth, a persistent complaint voiced by State governments, civil society organisations and numerous other entities has been about the lack of complete information on the wide range of programmes and schemes undertaken by Central Ministries and Departments. It has been said that many useful development interventions have not had the desired impact simply on account of lack of information. In order to address this grievance, the Tenth Plan document contains a detailed listing of all on-going and proposed Plan programmes and schemes of every Central Ministry and Department, along with the indicative resources. It is hoped that this information will enable our various partners in development to identify the Central government initiative that best suits their needs.

Finally, in addition to the focus on sectoral investments and on schemes and programmes, which has been integral to every Plan, the Tenth Plan lays out the policy and institutional reforms that are required for each sector, both at the Centre and in the States. In other words, the full reform agenda that is considered to be essential for attaining the targets set in the Plan is encapsulated in one comprehensive chapter. Although the rationale and logic of each of these measures are detailed in various parts of the Plan, it has been felt that the magnitude of the efforts required is such that there should be no ambiguity about the actions that are expected from the various arms of the government.

Given the ambitious targets that have been set for the Tenth Plan, a few words on the strategic approach that has been adopted may be in order. Achieving the 8 per cent annual growth target will no doubt require a significant increase in our savings and investment rates, but perhaps by not as much as may be commonly believed. Detailed analysis has revealed that there is substantial excess

capacity in some of the sectors of the economy, and, therefore, it should be possible to increase output without a commensurate increase in investible resources. This, along with improvements in efficiency and better sectoral focus, should lead to a drop in the incremental capital-output ratio (ICOR) for the Tenth Plan period. It should be mentioned, however, that we have been fairly conservative in this regard, and the ICOR was even lower during the Eighth Plan period than what has been assumed for the Tenth.

Bringing unutilised capacities into production requires action along two broad fronts. The first is to revive aggregate demand in the economy, especially through stimulating investment activity. We believe that at the present time, public investment in infrastructure will “crowd in” private investments. Therefore, during the first two years of the Plan, the burden of industrial revival will have to be carried by public investment, with private investment taking the lead role in the latter years. This will require strengthening of the institutional capacity to undertake public investment, which has eroded to some extent in recent years. Furthermore, we need to simplify the rules, regulations and procedures which unnecessarily hamper private investment activity in the country, so that private initiative can play its required role in due course. Every Ministry and State government needs to focus on these issues so that early action can be taken to bring about policy and procedural reforms.

The second source of productive potential is the huge stock of capital assets that are locked up either in the form of incomplete projects or due to legal and procedural restrictions on the transfer of assets. Bringing these into productive use will require, on the one hand, emphasis on completion of on-going projects, especially in the public sector, and creating the legal framework for quick transfer of assets, on the other.

Even with the projected decline in the ICOR, it will be necessary to raise the savings rate of the economy quite substantially. In the recent past, private savings have grown more or less steadily since the early 1990s. However, public savings turned sharply negative from 1998-99 onwards. This must be corrected; and from 2004-05 onwards, we must aim at achieving positive and growing public savings. Unless this can be brought about, the growth process will be hampered by inadequacy of resources.

It will be noticed that the fiscal stance of government, both at the Centre and in the States, is central to the strategy proposed for attainment of the growth target. However, it is equally important to recognise that the nature of the fiscal stance has to exhibit a significant shift within the Plan period itself. During the initial years, it has to focus primarily on the task of industrial revival through increased public investment in infrastructure, even if it is at the cost of some delay in fiscal correction. In the latter years, however, it has to steadily augment its role in providing investible resources for the economy by a sustained reduction in the revenue deficit. This transition requires a carefully crafted, and yet flexible, medium-term fiscal plan for the Centre and every State, which will be one of the major challenges facing policy makers in the coming years.

The other major challenge lies in creating the conditions for vibrant and dynamic private activity in practically every sector of the economy. There are numerous barriers to the free expression of entrepreneurial energies in the country; some of which are in the Centre and some in the States. In particular, our agricultural sector is hamstrung by a plethora of controls which prevent our farmers from realising the full value of their efforts. We have brought about considerable reforms in the industrial arena over the past decade, but the agricultural sector continues to be governed by regulations which were framed during an era of shortages. This must change.

In our opinion, the rural sector holds the key to our future growth efforts. It is home to 70% of our people and nearly 80% of our poor. Thus it offers the greatest potential for widespread

development. Apart from the removal of needless controls, the two main areas of focus should be connectivity and water management in all parts of the country. In particular, we need to pay attention to the regeneration and revival of old irrigation systems and projects. In the dry land areas of the country, appropriate watershed development is critical. We need to bring wastelands and degraded lands into productive use, either under crops or agro-forestry, and to improve credit flows to our farmers through innovative methods. There is also need to change our strategic and policy approach to agricultural development, away from subsidies towards creating rural infrastructure. Technological interventions are essential to improve agricultural productivity and to widen the range of products. Institutional structures governing rural activities also need to be reformed and strengthened.

Even for the non-agricultural sectors, there are a number of critical reforms which are still pending, and which need to be implemented as soon as possible. For instance, construction is one of the most labour-intensive sectors and needs to be vigorously promoted, but it too has been hamstrung by excessive controls on land use and poor urban management practices. In order for urban development and the construction activity to gain momentum synergistically, significant changes in land use policies and municipal functioning will have to take place.

The power sector can potentially be a serious constraint on our growth process. During the Eighth and Ninth Plans we were able to achieve less than half the targeted capacity addition mainly due to the infirmities of the State Electricity Boards. We need to make vigorous efforts to complete the restructuring of our power sector so that the ambitious targets that we have set for the Tenth Plan are realised. The pace of investment in the power sector cannot be accelerated unless there is significant improvement in profitability and internal resource generation. The financial condition of the State Electricity Boards not only limits their own ability to invest, but also discourages private investments.

In so far as the social sectors are concerned, one of the most important decisions that has been taken in recent years is to provide universal elementary education, and indeed to make it a right. We must, however, bear in mind that the turn-out from elementary education would be looking for further training in order to access the job market. We must, therefore, begin the process of strengthening the secondary stream, including vocational education and training, and also our institutions of higher learning.

One of the most disturbing facts about the current situation is the prevalence of under-nutrition among a large segment of our people despite sufficient availability of food in the country. The vulnerable groups, particularly women and children and people living in remote areas, need special attention to meet their dietary requirements. In addition, the primary health system needs to become more sensitive to the specific requirements of different parts of our country both in terms of differences in disease incidence and in the nature of medical care.

Some of the measures that we feel are necessary for meeting the Plan objectives no doubt involve taking hard decisions, but I am certain that with appropriate coordination between the Centre and the States, and with cooperation of all political parties, we can achieve the targets that we have set for ourselves and thereby meet the aspirations of our people. We need to constantly keep before our eyes the vision of India that we hope to create by the end of the Plan. An India where every child has had 5 years of education. Where every village is electrified and has access to drinking water. Where every family can dream of having a roof over its head. Where the country is crisscrossed by high quality road and rail networks. Where every Indian knows that he is in control over his own destiny.

India is in the midst of transforming an agrarian economy into a modern multi-dimensional economic power-house and a traditional stratified society into an egalitarian society through consultative politics. It is inevitable that such rapid social, economic, technological and political development of one billion people would generate turbulence. Yet it is essential that this turbulence be managed and confined within limits that preserve the social fabric and permit the nation's transformation to continue apace. Our Five Year Plans are a central component of this process in that they lay out a vision which we can all share and work towards in a spirit of cooperation and resolve. It is my earnest hope that the Tenth Five Year Plan will fulfill this purpose.



(K. C. Pant)
Deputy Chairman
Planning Commission

New Delhi
December 21, 2002

CHAPTER 1

PERSPECTIVE, OBJECTIVES AND STRATEGY

1.1 The Tenth Five Year Plan, covering the period 2002-03 to 2006-07, represents but another step in the evolution of development planning in India. In the 55 years that have passed since our Independence, the challenges, the imperatives and the capabilities of the nation have undergone profound changes. The planning methodologies have attempted to keep pace with the emerging requirements and to guide the economy through the vicissitudes of national and global events, with greater or lesser success. The Tenth Plan carries on this tradition in the context of the objective realities of Indian economic life as they are manifested today.

1.2 The single-most important feature of our post-colonial experience is that the people of India have conclusively demonstrated their ability to forge a nation united despite its diversity, and to pursue development within the framework of a functioning, vibrant and pluralistic democracy. In this process, democratic institutions have put down firm roots, which continue to gain strength and spread. The degree of democratisation that has been achieved in the political sphere is, however, not matched by its progress on the economic front. There are still too many controls and restrictions on individual initiatives, and many of our developmental institutions continue to exhibit paternalistic behaviour, which today has become anachronistic. For the country to attain its full economic potential, and for the poorest and weakest to shape their destiny according to their own desires, it requires a comprehensive reappraisal not only of our development strategy, but also of the institutional structures that guide the development process. This is the task that the Tenth Plan has set for itself.

THE PERSPECTIVE

1.3 The last decade of the 20th century has seen a visible shift in the focus of development

planning from the mere expansion of production of goods and services, and the consequent growth of per capita income, to planning for enhancement of human well being. The notion of human well being itself is more broadly conceived to include not only consumption of goods and services in general but more specifically to ensure that the basic material requirements of all sections of the population, especially those below the poverty line, are met and that they have access to basic social services such as health and education. Specific focus on these dimensions of social development is necessary because experience shows that economic prosperity, measured in terms of per capita income, alone does not always ensure enrichment in quality of life, as reflected, for instance, in the social indicators on health, longevity, literacy and environmental sustainability. The latter must be valued as outcomes that are socially desirable in themselves, and hence made direct objectives of any development process. They are also valuable inputs in sustaining the development process in the longer run. In addition to social development measures, in terms of access to social services, an equitable development process must provide expanding opportunities for advancement to all sections of the population. Equality of outcomes may not be a feasible goal of social justice but equality of opportunity is a goal for which we must all strive.

1.4 The development process must therefore be viewed in terms of the efficiency with which it uses an economy's productive capacities, involving both physical and human resources, to attain the desired economic and social ends (and not just material attainment). To this end, it is absolutely essential to build up the economy's productive potential through high rates of growth, without which we cannot hope to provide expanding levels of consumption for the population. However, while this is a necessary condition, it is not sufficient in itself. It becomes imperative, therefore, to pursue a

development strategy that builds on a policy focus for exploiting synergies between economic growth, desirable social attainments and growing opportunities for all. Such a strategy must have at its heart a commitment to widen and deepen the participation of people in all decisions governing economic and social development.

1.5 The Tenth Five Year Plan (2002-07) has been prepared against a backdrop of high expectations arising from some aspects of the recent performance. GDP growth in the post-reforms period has improved from an average of about 5.7 per cent in the 1980s to an average of about 6.1 per cent in the Eighth and Ninth Plan periods, making India one of the ten fastest growing countries in the world. Encouraging progress has also been made in other dimensions. The percentage of the population in poverty has continued to decline, even if not as much as was targeted. Population growth has decelerated below 2 per cent for the first time in four decades. Literacy has increased from 52 per cent in 1991 to 65 per cent in 2001 and the improvement is evident in all States. Sectors such as software services and IT enabled services have emerged as new sources of strength, creating confidence about India's potential to be competitive in the world economy.

1.6 These positive developments are, however, clouded by other features which give cause for concern. The economy is currently in a decelerating phase and urgent steps are needed to arrest the deceleration and restore momentum. This reversal is all the more difficult because it has to take place in an environment where the world economy is slowing down. There are several aspects of development where progress has been clearly disappointing. Growth in the 1990s has generated less employment than was expected. The infant mortality rate has stagnated at around 70 per 1000 for the last several years. As many as 60 per cent of rural households and about 20 per cent of urban households do not have a power connection. Only 60 per cent of urban households have access to drinking water in their homes, and far fewer have latrines inside the house. The situation in this regard is much worse in the rural

areas. Land and forest degradation and over-exploitation of groundwater is seriously threatening sustainability of rural livelihoods and food production. Pollution in the cities is on the increase.

1.7 All of these issues, among many others, will have to be tackled during the coming years, and the strategies and programmes for doing so are discussed at the appropriate places in this Plan document. However, there are a few which are of critical concern, and which need to be highlighted right at the outset.

1.8 First and foremost, it needs to be emphasised that the Tenth Plan straddles a cusp in the evolution of our demographic structure. Although the growth rate of population in the country has declined to below 2 per cent during the decade of the Nineties, and is expected to decline even further during the next decade, the growth rate of the population in the working age group of 15 to 60 years will continue to accelerate before it turns down towards the end of this decade. This pattern of the growth rate of the working age population, exceeding the overall population growth rate, was in evidence during the 1990s as well, and it is fortunate that the country has not faced a serious unemployment problem as yet. The significant reduction in the labour force participation rates between 1993-94 and 1999-2000 has ensured that the pace of creation of work opportunities has nearly absorbed the accretions to the labour force, at least in the aggregate. It would not, however, be prudent to assume that participation rates will continue to decline in the future, since there are at least two possibly contradictory forces in operation. On the one hand, the increasing trend in the average years of education will reduce the rate of addition to the labour force; while, on the other, greater workforce participation by women will tend to increase it. Although the recent data seems to suggest that women are withdrawing from the workforce, particularly in rural areas, it is not obvious that this is entirely a voluntary phenomenon. It may simply reflect the non-availability of appropriate work opportunities. With economic growth, improved connectivity and higher female literacy, the situation can, and indeed should, change dramatically.

1.9 There is, therefore, every likelihood that the labour force will increase faster than the economy's current ability to provide gainful and decent work opportunities. During the 1980s and the early part of the 1990s, the average growth rate of employment has been above 2 per cent per annum, which has dropped to only 1.1 per cent in the latter part of the 1990s. Therefore, if these past trends in work creation continue into the future, the country faces the possibility of adding at least half a percentage point of the labour force – that is nearly 2 million young people – to the ranks of the unemployed each year. By the end of the Tenth Plan, open unemployment, measured on the usual principal and subsidiary status (UPSS) basis, could then be as high as 5 per cent, or even higher, as compared to around 2.8 per cent at present. Such a situation is clearly insupportable. Unemployment not only entails high human costs, but also imposes significant costs on society in terms of social unrest and deterioration of law and order.

1.10 The effects of underemployment and disguised unemployment are at least as pernicious as those of open unemployment. The composite incidence of unemployment and underemployment, as captured by the current daily status (CDS) basis, presently stands at nearly 9 per cent of the labour force and at almost 13 per cent for the youth. Recent evidence suggests that the incidence of underemployment among rural males has actually risen during the mid- to late-1990s, which is a matter of grave concern indeed. On the basis of past trends, the composite measure of unemployment is likely to rise to an average of 11 per cent by the end of the Tenth Plan, and 15 to 16 per cent for the youth. The principal cause of this problem is the steadily worsening land-man ratio and the continued dependence of a high proportion of the population on agriculture. Indeed, in absolute terms, the number of people dependant on agriculture has actually increased. But this is not the only reason. The failure to significantly improve the intensity of land use in large tracts of the country is also responsible for a high degree of seasonality both in agriculture and in all other activities that are linked to it. Over the perspective period, it is expected that the land available for agriculture will actually

reduce, partly due to the need for increasing forest cover in the country for environmental reasons, and partly to the expanding need of land for non-agricultural purposes. Under such circumstances, the extent of underemployment can rise alarmingly unless measures are taken to either increase the intensity of land use through increased irrigation and watershed development or to shift a significant proportion of the labour force out of agriculture to non-agricultural activities, or both.

1.11 The trends noticeable in the availability of agricultural land lead naturally to the issue of food security in the country. This has been a central theme of Indian planning right since its inception, and particularly after the experience of the famines of 1965-66. In recent years, however, it appears that food security in the traditional sense of the term – i.e. calorific requirement – may no longer be such a pressing problem. Although per capita availability of food grains has not risen very sharply, there appears to have been a distinct shift in consumption patterns away from food grains towards other forms of food. This change partly reflects the changes that have taken place in the age structure and occupational patterns of the population, and partly the effect of higher incomes leading to consumption of a more diversified basket of food products. The evidence that exists of pervasive under-nutrition in our population, particularly among children and women, suggests that this shift in consumption patterns is desirable and needs to be encouraged. Nevertheless, care must be taken to ensure that the availability of staples is not allowed to drop beyond a point. Moreover, the relatively short shelf life of most non-cereal food products requires that the storage structures in the country are reoriented to keep pace with the desired change in the product composition.

1.12 A related issue is the environmental degradation that has taken place in the country and which threatens both our nutritional security and health. Urban pollution is already having serious effects on the health status of the people, and it is feared that unless measures are taken immediately, pollution related disease burden could go up alarmingly. In the rural areas, land and water

degradation have reached alarming proportions, and at current trends, will lead to unsustainability in agricultural production and forest cover. It is estimated that more than 45 per cent of India's geographical area is already affected by serious soil erosion and this proportion is increasing year by year. An even more pressing problem is that of water availability. Already, substantial parts of the country are experiencing water stress, both in terms of quantity and quality. It is felt that unless urgent measures are taken, water, for both drinking and irrigation purposes, may become the single most important problem by the end of the decade. A particularly disturbing aspect of our present water management policies is the almost complete neglect of the origins and catchment areas of our rivers, both major and minor. Unless considerably greater attention is paid to this issue, it is feared that many of our rivers may cease to exist, with disastrous consequences for the economy and ecology.

1.13 Ecological issues, unfortunately, have not been adequately incorporated into our development strategy, despite the fact that there has long been recognition of the importance of environmental and ecological factors in Indian planning and policy. The biological wealth of the nation has not been nurtured and utilised for the welfare of both our people and humanity at large to the extent it should have. Although India has been a signatory to all international treaties and conventions on ecology and bio-diversity, and has enacted several laws on these issues, there is evidence that bio-diversity loss is continuing apace. Much of the problems are no doubt attributable to lack of resources, but possibly more is due to an inadequacy of emphasis and poor governance.

1.14 The limitations that are placed by land and water availability on agricultural output and employment necessitate careful consideration of the alternatives. It is becoming increasingly clear that the solutions would have to be found by increasing productivity in agriculture, including agro-forestry, horticulture, animal husbandry and fisheries, and by creating employment opportunities in other activities. In both cases, it has now become necessary to significantly enhance the education and skill

levels of our workforce. An important step in this direction has been taken by recognising that elementary education should be treated as the right of every citizen. It is now necessary to ensure that this recognition is translated to appropriate action. This step alone will no doubt contribute to a large extent in increasing the opportunities that can be accessed by the poor. But it is not enough. The skill requirements of modern agriculture and of most alternative occupations demand more specialised training than is usually imparted in the standard school curriculum, including the vocational stream at the secondary level. Unless such skills are imparted, the possibility exists that the growth process may be constrained not so much by the availability of capital but by the availability of appropriate skills. Since much of the new work opportunities will continue to involve physical labour, it is important to emphasise the dignity of labour within the educational system itself.

1.15 Recent evidence suggests that the gender bias that exists in the Indian social system is more persistent than was earlier believed. The unexpected decline in the sex ratio of those below the age of six years, that has emerged from the 2001 census, is a particularly disturbing manifestation of this. It is also conceivable that the decline in women's labour force participation rates is a reflection of this bias. Unless such trends are reversed decisively within the next decade, the efforts towards social and demographic transition and improving the quality of life of people are likely to prove less than effective. It is, therefore, imperative that the development process must include gender equity as an integral component of the broader strategy.

1.16 Economic and social development of the country must also take full cognisance of the growing regional imbalances in practically all indicators. Not only have the per capita incomes in the various States of the Union started diverging rapidly during the past decade, the disparities in social attainments also appear to be persistent, as brought out by the National Human Development Report 2001. These trends indicate a growing polarisation of the country, which can have an extremely damaging effect on national unity and

harmony. There is also evidence that protectionist and 'beggar-my-neighbour' behaviour is becoming increasingly more prevalent among the States. In a context where the country as a whole is in the process of fostering greater integration with the rest of the world, such behaviour is fraught with serious dangers.

1.17 There are two additional issues which have traditionally not been a part of Indian planning, but which today demand integration into the broader planning framework. First, notions of national security today are broader than merely that of defence or military preparedness. The two most critical aspects of this wider view are energy and food security. Although the performance of the agricultural sector has obviated the urgency of the latter quite considerably, it cannot be totally taken for granted. Energy security is another matter altogether. India's high level of dependency on external energy sources, and the vulnerability of its supply routes will have to be factored into any planning for the energy sector. Similar considerations, albeit to a lesser extent, apply to the transport and communication sectors, which are critical for modern-day military operations. The second issue relates to disaster management. Until now, disasters have been treated as being inherently episodic in nature, and therefore to be addressed only as and when they occur. This is clearly no longer adequate. The consequences of global climate change on the frequency of cyclones, droughts and floods are more in evidence today than before. Disaster management, if not disaster relief, must therefore form an integral element of national planning. Even for disaster relief, the macro-economic stance that should be taken has to be informed by the needs of growth and development.

1.18 Finally, our democratic traditions demand that the people do not merely remain as beneficiaries of our growth and development plans, but see themselves as active participants and arbiters of their own destiny. The conditions are already propitious in that the unorganised sector in India has been performing strongly in recent years and displaying entrepreneurial dynamism of a signifi-

cantly higher order than the organised. In particular, the success of micro-credit programmes through self-help groups has been most encouraging. The potential that can be unleashed by the removal of the various barriers to individual initiatives that have been erected over the years, is considerable.

1.19 The Prime Minister has set the stage for formulation of the Tenth Five Year Plan by articulating a vision in which the per capita income is to be doubled within the next ten years. A target of creating 100 million employment opportunities over the next ten years has also been announced by the Prime Minister. The purpose of the Tenth Plan is to give shape to this vision keeping in mind the constraints and potentialities that have been discussed earlier. Since the Tenth Plan is only the first phase of the ten-year road map, it is felt that the Prime Minister's vision can be realised through targeting a growth rate of 8 per cent during the Tenth Plan period and 9.3 per cent during the Eleventh Plan, and by focusing attention on the growth of employment intensive sectors. Since there are significant lags in the process of creation of capacities and their being brought into production, the Tenth Plan will have to consciously take into account the pipeline investments that would be necessary to accelerate the growth during the Eleventh Plan period. This fact increases the investment requirements and also lends a degree of urgency in taking the appropriate policy steps.

OBJECTIVES OF THE TENTH PLAN

1.20 Traditionally, the level of per capita income has been regarded as a summary indicator of the economic well being of the country, and growth targets have therefore focused on growth in per capita income or per capita GDP. The Prime Minister's vision has been the basis for setting the target in this regard, not only for the Tenth Plan period, but for all of the next ten years.

1.21 The Approach Paper had proposed that the Tenth Plan should aim at an indicative target of 8 per cent average GDP growth for the period 2002-07. It is certainly an ambitious target, especially in view of the fact that GDP growth has decelerated

to below 6 per cent at present. Even if the deceleration is viewed as a short-term phenomenon, the medium-term performance of the economy over the past several years suggests that the demonstrated growth potential is only about 6.5 per cent. The proposed 8 per cent growth target therefore involves an increase of at least 1.5 percentage points over the recent medium term performance, which is substantial. Nevertheless, the National Development Council (NDC) affirmed its faith in the latent potentialities of the Indian economy by approving the 8 per cent growth target for the Tenth Plan period.

1.22 The Approach Paper also recognised that economic growth cannot be the only objective of national planning and indeed, over the years, development objectives are being defined not just in terms of increases in GDP or per capita income but more broadly in terms of enhancement of human well being. To reflect the importance of these dimensions in development planning, the Tenth Plan identifies specific and monitorable targets for a few key indicators of human development. The NDC has approved that, in addition to the 8 per cent growth target, other targets as given in Box 1.1 should also be considered as being central to the attainment of the objectives of the Plan:

1.23 These targets reflect the concern that economic growth alone may not lead to the attain-

ment of long-run sustainability and of adequate improvement in social justice. Earlier Plans have had many of these issues as objectives, but in no case were specific targets set. As a result, these were viewed in terms of being desirable but not essential. Thus a 'best endeavour' approach was usually adopted in this regard. In the Tenth Plan, however, these targets are considered to be as central to the planning framework as the growth objective.

1.24 The targets mandated by the NDC at the time of approval of the Approach Paper to the Tenth Five Year Plan are, by and large, consistent with the 8 percent growth target either through direct linkages that exist or through the resources that are generated by the growth process for more intensive public interventions. At the time of formulation of the Approach Paper, these linkages had been assessed on the basis of economy-wide aggregative trends observed in the past, and it was felt that achievement of even these targets would require concerted efforts. Subsequently, more detailed study and analysis by the Planning Commission have revealed that it may be possible to record even better achievement as far as employment generation and poverty reduction are concerned. The Report of the Special Group on Targeting 10 Million Employment Opportunities Per Year, which was constituted to deliberate upon the Prime Minister's vision, indicated that with appropriate sectoral focus and directed

BOX 1.1

MONITORABLE TARGETS FOR THE TENTH PLAN AND BEYOND

- Reduction of poverty ratio by 5 percentage points by 2007 and by 15 percentage points by 2012;
- Providing gainful and high-quality employment at least to addition to the labour force over the Tenth Plan period;
- All children in school by 2003; all children to complete 5 years of schooling by 2007;
- Reduction in gender gaps in literacy and wage rates by at least 50 per cent by 2007;
- Reduction in the decadal rate of population growth between 2001 and 2011 to 16.2 per cent;
- Increase in Literacy rates to 75 per cent within the Plan period;
- Reduction of Infant mortality rate (IMR) to 45 per 1000 live births by 2007 and to 28 by 2012;
- Reduction of Maternal mortality ratio (MMR) to 2 per 1000 live births by 2007 and to 1 by 2012;
- Increase in forest and tree cover to 25 per cent by 2007 and 33 per cent by 2012;
- All villages to have sustained access to potable drinking water within the Plan period;
- Cleaning of all major polluted rivers by 2007 and other notified stretches by 2012.

interventions, it would be possible to generate substantially more employment opportunities than arising merely out of the growth process, not only to take care of the additions to the labour force, but also to reduce the backlog of unemployment. Similarly, internal exercises carried out in the Planning Commission revealed that the state-wise break down of the aggregate growth target, which seeks to redress regional imbalances, could lead to even faster reduction in the poverty rate than the assessment made on the basis of the aggregative trends. The Tenth Plan, therefore, seeks to achieve targets in these two areas which go beyond those set by the NDC in the Approach Paper. (Box 1.2).

BOX 1.2

EMPLOYMENT GENERATION AND POVERTY REDUCTION : CAN WE DO BETTER?

The current back-log of unemployment at around 9 per cent, equivalent to 35 million persons, is too high, and every effort needs to be made to not only arrest the rising trend, but to actually reduce it during the Tenth Plan period itself. The Prime Minister's vision of creating 100 million employment opportunities over the next ten years is taken as the basis for targeting the creation of 50 million employment opportunities during the next five years, which is about 14 million higher than the target mandated in the Approach Paper on the basis of additions to labour force during the Plan period. If this target is achieved, the unemployment rate is likely to decline significantly to 5 per cent by the end of the Tenth Plan.

Similarly, the mandated reductions in the poverty rate of 5 percentage points during the Tenth Plan and another 10 percentage points during the Eleventh Plan, as stipulated in the Approach Paper, will still leave more than 11 per cent of the population, or about 130 million people, below the poverty line in 2012. Every effort, therefore, needs to be made to reduce the poverty rate even faster. It is estimated that with a proper sectoral and regional focus, it may be possible to reduce the poverty rate by nearly 7 percentage points over the Tenth Plan period if the growth target of 8 per cent is achieved through the state-wise break down that has been drawn up in consultation with the States.

THE DEVELOPMENT STRATEGY

1.25 The Tenth Plan provides an opportunity, at the start of the new millennium, to build upon the gains of the past and also to address the weaknesses that have emerged. There is growing impatience in the country at the fact that a large number of our people continue to live in abject poverty and there are alarming gaps in social attainments even after five decades of planning. To meet this challenge squarely, the Tenth Plan must learn from past experience. It must strengthen what has worked well, and at the same time also avoid repeating past mistakes. There must be willingness to modify policies and institutions based on past experience, keeping in mind the changes that have taken place in the Indian economy and in the rest of the world.

1.26 An important aspect of the redefinition of strategy that is needed relates to the role of government. This redefinition is necessary both at the Central Government level and also at State Government level. It is now generally recognised that government in the past tended to take on too many responsibilities, imposing severe strains on its limited financial and administrative capabilities and also stifling individual initiative. An all-pervasive Government role may have been necessary at a stage where private sector capabilities were undeveloped, but the situation has changed dramatically in this respect. India now has a strong and vibrant private sector. The public sector is much less dominant than it used to be in many critical sectors and its relative position is likely to decline further as Government ownership in many existing public sector organisations is expected to decline substantially. It is clear that industrial growth in future will depend largely upon the performance of the private sector and our policies must therefore provide an environment which is conducive to such growth.

1.27 This is not to say that government has no role to play, or only a minimalist role, in promoting development. On the contrary, Government has a very important role indeed, but a different one from that envisaged in the past. There are many areas, e.g. the social sectors, where its role will clearly have to expand. There are other areas, e.g. infrastructure development, where gaps are large and

the private sector cannot be expected to step in significantly. In these areas, the role of Government may have to be expanded and restructured. It will have to expand in some areas of infrastructure development which are unlikely to attract private investment, e.g. rural infrastructure and road development. In others, e.g. telecommunications, power, ports, etc., the private sector can play a much greater role, provided an appropriate policy framework is in place. Here, the role of the government needs to change to facilitate such investment as much as possible while still remaining a public sector service provider for quite some time. In all these areas, the role of the government as a regulator ensuring a fair deal for consumers, transparency and accountability, and a level playing field is also extremely important.

1.28 With the growing importance of the private sector in economic matters, and the consequent increase in the sensitivity of the economy to business cycle fluctuations, both the role and the manner of macro-economic management demand a reappraisal. Greater flexibility in fiscal and monetary policies has now become necessary to ensure that the economy is consistently maintained on the feasible growth path. While there has certainly been considerable improvement in the flexibility and sophistication of monetary and exchange rate management in the country, the same cannot be said about the conduct of fiscal policies, which remain rooted in outmoded budgetary procedures. In recent years it has become evident that there are circumstances in which monetary policy alone is ineffective to address macroeconomic developments, and a more sensitive fiscal policy is essential. It is, therefore, imperative that a reformulation of the fiscal management system be undertaken expeditiously to make it more appropriate for the changed context.

1.29 The Indian Central Plans have traditionally focused on setting only national targets. However, recent experiences suggest that the performance of different States varies considerably, and cognisance has to be taken of this issue. For example, although the economy as a whole has accelerated, the growth rates of different States have diverged and some of the poorest States have actually seen a deceleration in growth. It is important to recognise that the sharp increase in the growth rate and significant improvement in the social indicators that

are being contemplated for the Tenth Plan will be possible only if there is a corresponding improvement in the performance of the relatively laggard States. Indeed, if the higher targets are sought to be achieved simultaneously with the slow progress, as observed in the past, in some of the most populous States, it would necessarily imply a very large increase in inter-State inequality, with serious consequences for regional balance and national harmony.

1.30 In order to emphasise the importance of ensuring a balanced development for all States, the Tenth Plan includes a State-wise break-up of the broad developmental targets, including targets for growth rates and social development, which are consistent with the national targets. These State-specific targets take into account the needs, potentialities and constraints present in each State and the scope for improvement in their performance, given these constraints. It needs to be emphasised that these State-wise targets are not meant to be a substitute for or to over-ride the process of State Plan formulation. They are more in the nature of indicative guidelines for facilitating planning in the States. It is an unfortunate fact that many States of the Union have de-emphasised the planning process and have allowed their planning systems to degenerate. As a result, many State Plans are not based on any rigorous and analytically meaningful appraisal of resources and capabilities or of the strategies that can be used to accelerate the development process. National targets are often uncritically adopted as State targets, thereby leading to a dysjunction between the planned and the possible.

1.31 It is hoped that the presentation of State-wise targets in the national Plan will serve as a catalyst to reinvigorate planning at the State level. There are two dimensions to this. First, the very recognition of the diversities that exist in the country should lead to a similar recognition at the sub-State level. Different districts within a State are at different levels of development and have different capabilities. A State Plan will, therefore, have to recognise these differences, and ensure that the State-wise targets set in the State Plan are consistent with what is planned at the district level. This will require careful consideration of the sectoral pattern of growth and its regional dispersion within the State.

It will also focus attention on the nature of reforms that will have to be implemented at the State level to achieve the growth targets set for the States. Secondly, a statement of the comparative position of the various States in different dimensions of development is in itself an important method for encouraging introspection, leading hopefully to effective benchmarking for future progress. Much has been said about the value of experience-sharing and best practice adoption, but these are contingent upon recognition of the possibilities that exist.

1.32 The objective of creating a common economic space within the country, which is an essential element of nationhood, depends critically upon the recognition of commonality of interests by the States. This need has gained urgency as external barriers to trade and commerce are in the process of being brought down. Unfortunately, there has been an increasing tendency on the part of a number of States to increase the barriers to internal trade. Such measures are specifically barred by the Constitution, and it is the responsibility of the Central Government to ensure that no policy, which has the effect of abridgement of inter-State trade and commerce, is permitted by the exercise of Article 307 of the Constitution.

1.33 It is important to re-emphasise that the equity related objectives of the Plan, which are extremely important, are intimately linked to the growth objective, and attainment of one may not be possible without the attainment of the other. For example, high rates of growth are essential if we want to ensure sufficient expansion of sustainable gainful employment opportunities for our expanding labour force, and a sufficient increase in the incomes of the poor and the disadvantaged. However, this is not just a one-way relationship. It is also true that high growth rates may not be sustainable if they are not accompanied by a dispersion of purchasing power which can provide the demand needed to support the increase in output without having to rely excessively on external markets. The inherent risks and possible consequences of such excessive dependence have become evident from the experiences of the East Asian and Latin American crises. External markets are certainly an extremely important source of demand, and we would emphasise that they need to be tapped much more aggressively for many sectors. However, given the size of the

economy and the present relative size of exports, much of the demand needed to support high growth will have to come from the domestic economy itself.

1.34 Although growth has strong direct poverty-reducing effects, the frictions and rigidities in the Indian economy can make these processes less effective, and the Tenth Plan must therefore be formulated in a manner, which explicitly addresses the need to ensure equity and social justice. A three-pronged strategy for attaining equity and social justice along with high rates of growth is proposed for the Tenth Plan period (see Box 1.3)

BOX 1.3
STRATEGY FOR EQUITY AND SOCIAL JUSTICE

- Agricultural development must be viewed as a core element of the Plan, since growth in this sector is likely to lead to the widest spread of benefits especially to the rural poor. The first generation of reforms concentrated on the industrial economy and reforms in the agricultural sector were neglected. This must change in the Tenth Plan.
- The growth strategy of the Tenth Plan must ensure rapid growth of those sectors which are most likely to create gainful employment opportunities and deal with the policy constraints which discourage growth of employment. Particular attention must be paid to the policy environment influencing a wide range of sectors which have a large employment potential. These include sectors such as agriculture in its extended sense, construction, tourism, transport, SSI, retailing, IT- and communication-enabled services, and a range of other new services which also need to be promoted through supportive policies.
- There will be a continuing need to supplement the impact of growth with special programmes aimed at special target groups which may not benefit sufficiently from the normal growth process. Such programmes have long been part of our development strategy and they will have to continue in the Tenth Plan as well. However, it is important to ensure that they are effective in achieving their objectives.

Feasibility of 8 per cent Growth

1.35 At an aggregate level, any acceleration in growth requires some combination of an increase in gross domestic fixed capital formation and an increase in efficiency of resource use. The latter requires policies, which will increase the productivity of existing resources as well as the efficiency of new investment. There can be little doubt that India cannot hope to achieve an 8 per cent growth, relying entirely, or even largely, on increased investment. With the average incremental capital output ratio (ICOR) in the Eighth and Ninth Plan period amounting to around 4.0, the investment increase needed to achieve a 1.5 percentage point increase in growth is 6 percentage points. While some part of this could come from an increase in foreign direct investments, it is unrealistic to expect this source to contribute more than 1 to 1.5 percentage points. This means that if the entire acceleration in growth has to come from additional investment with an ICOR of 4.0, it would be necessary to increase the investment ratio by 4.5 and 5 percentage points of GDP, which would have to be mobilised through additional domestic savings. An increase of this order in the average rate of domestic savings over the next five years may not be feasible. A substantial part of the additional growth must, therefore, come from increased efficiency and tapping hidden potentialities in the economy.

1.36 The principal reason why 8 per cent growth may be feasible in the Tenth Plan is that the scope for realising improvements in efficiency is very large, both in the public sector and in the private sector. However, this improvement in efficiency can only be realised if policies are adopted which ensure such improvement. The Tenth Plan must therefore give high priority to identifying efficiency enhancing policies both at the macro level and also at the sectoral level. These policies will often involve a radical break from past practices and even institutional arrangements. In many cases they will involve policy decisions, which can easily become controversial given the compulsions of competitive politics. The Tenth Plan can only succeed in achieving the targeted 8 per cent growth if sufficient political will is mobilised and a minimum consensus

achieved which will enable significant progress to be made in critical areas. If this is not possible then growth will be correspondingly lower.

1.37 There is sufficient evidence to suggest that there may be a considerable stock of existing capital assets, which are either lying idle or have never been used to their full potential. Bringing such assets into full productive use can certainly reduce the resource requirements quite dramatically. The first major area of idle capacity is in public infrastructural investment, which has been caused by the tendency to launch too many projects without the requisite financial provision or management capability, leading to a tardy pace of completion and sometimes even abandonment. Such problems are endemic in sectors such as power, roads, railways and irrigation, but are probably present in other sectors as well. It is present as much in central investments as in the State sector. Since completion of such projects and upgradation of existing capital assets will almost invariably be more cost-efficient than starting new projects, it will require a moratorium on launching new projects until at least a minimum number of partially completed projects are brought to completion. There is, however, no reason to believe that the existing set of projects necessarily represent the most desirable or optimum choice of options; therefore, some reprioritisation on sound economic principles becomes necessary.

1.38 The second area of idle capacity stock is in the public sector enterprises where financial and managerial problems have prevented adequate investment in balancing and/or upgradation, leading to inadequate utilisation of the capital assets or to the lack of market competitiveness. Prolonged periods of insufficient maintenance expenditures also have similar effects. Mere infusion of fresh funds is unlikely to solve this problem since the roots of the malaise go deeper, and usually lie in the domain of policies and excessive interference in the management of these enterprises. Measures to unlock such potential capacities through institutional change can yield rich dividends to the economy. Operational autonomy of public enterprises has been discussed, and even attempted in some cases, for many years now; but usually to no avail. Privatisation of non-strategic public

enterprises thus appears to hold the best alternative promise in this regard.

1.39 The third area is in the private sector itself, which accounts for the bulk of the economy and where efficiency is vital. Much depends here on the policy framework. A comprehensive review is needed of policies in different areas to identify constraints to efficiency and optimal utilisation of resources. The Tenth Plan will have to address these issues in a comprehensive manner. However, an over-arching problem is the legal and procedural hurdles, which prevent the transfer of capital assets from non-performing companies to those that would utilise them better. Even if such transfers are effected, the time-lag is usually so substantial that much of the effective value of the capital stock is eroded. This problem also has implications for the willingness of lenders to advance funds to companies. Solution to such problems will require legal and procedural changes for facilitating quick transfer of productive assets so that their idle time is minimised. In particular, bankruptcy and foreclosure laws need to be instituted and made more effective.

1.40 Therefore, in order to take advantage of whatever idle capital stock that exists in the economy today for accelerating the growth rate in the Tenth Plan, there are at least three categories of measures as indicated in Box 1.4, that would need to be taken immediately.

Box 1.4

Measures to Reduce Idle Capital Stock

- Full emphasis to be placed on completion of partially completed or on-going projects and upgradation of existing capital assets before starting new projects.
- Rapid privatisation of Public Sector Enterprises (PSEs), particularly those, which are working well below capacity.
- Legal and procedural changes for facilitating quick transfer of assets, including such measures as repeal of Sick Industrial Companies (Special Provision) Act (SICA), introduction of a bankruptcy law, facilitating foreclosure, accelerating judicial processes, etc:

Detailing such measures forms a core element of the Tenth Plan, and these would need to be accepted at all concerned levels of the Government, both at the centre and in the States.

1.41 Most infrastructure and industrial investments in India take an unconscionable time to come on stream. Much of this arises from the investor-unfriendly laws and non-transparent procedures and clearances that have to be gone through prior to even launching the project, but hurdles can also come up in the course of execution. As a consequence, the gestation lags get lengthened and leaves investible resources locked up for extended periods. One of the reasons why the services sectors have performed much better than the industrial sector in India is that such impediments are less in their case, though not entirely absent. The solution to this problem would have to be sought in identifying and removing unnecessary hurdles to the investment activity.

1.42 Reduction in gestation lags of industrial and infrastructural investments, and indeed in all economic activities, through removal of policy and procedural barriers is of the highest importance, since it is central not only to reducing ICORs, but also to unshackling entrepreneurial energies. Although various Governments from time to time have announced 'single window clearance' procedures and 'investor assistance cells', they have rarely been effective. The primary reason for this is that the problem lies not in inadequate coordination, but in fragmented and often arbitrary exercise of the various powers of Government, vested in a number of functionaries at different levels through a complex system of delegation of powers. It is compounded by the fact that neither are the rules and regulations governing entry and operation transparent, nor are they justiciable. Rationalisation of these various rules, notifying them in a comprehensive and transparent manner, assigning accountability of each functionary, and providing administrative and legal recourse in case of *malafide* dilatoriness will be necessary to address this problem. These are issues in governance, and are addressed in some detail in the Tenth Plan.

1.43 The efficiency and productivity of various economic activities in India are well below the international standards. Although this is partly on account of the technological gaps that exist, it is also because of the structural infirmities of the economy. As for example, the average level of inventory holdings in India (which is estimated to be around four months of output) is orders of magnitude higher than in other countries of the world (around one month), which results in a large amount of investible resources being kept in reserve for contingencies rather than being put to productive use. The causes of this problem are many, and lie in poor transport infrastructure which complicates logistics management, an inadequate insurance system, and of course in outmoded methods of management, just to name a few. Although the advent of Information Technology has helped to some extent, there is a considerable way to go before international standards are attained.

1.44 Finally, the existence of unjustifiably high capital intensity in many sectors is also a cause of grave concern since these resources could have been applied to creating additional capacity. There is no doubt that this is often caused by the excessively rigid labour laws applied to the organised sector, which make it more difficult for the corporate entrepreneur to rationalise labour than to dispose-off capital assets when the need arises. It also has a deleterious effect on work ethics and discipline. As a result, the effective cost of labour to the entrepreneur can be many times the nominal wage bill. Therefore, rationalisation of labour laws and regulations, which reduce the implicit cost of labour without affecting the explicit, can release considerable investible resources.

1.45 However, it should not be thought that excessive capital intensity is caused solely by the impact of labour laws. Overstatement of capital costs by promoters, with the intention of passing off a higher proportion of the real investment cost to the lenders, i.e. having a higher debt/equity ratio than would be otherwise acceptable, is also fairly endemic in India. This arises primarily due to the inadequate capacity of the financial sector to evaluate investment proposals, and to a lack of

information sharing between different financial institutions due to out-dated confidentiality rules. These issues will need to be addressed expeditiously.

1.46 Overstatement of capital costs is not confined to the private sector alone. It is equally prevalent in public investments. There are numerous instances where the capital cost of a public project is significantly higher than equivalent private projects and even by international comparisons. The reasons, however, are different. Poor project management, leading to time and cost over-runs, and corruption are two principal causes. Excessive acquisition of land, over-investment in amenities for employees and at times undue mechanisation are others. These are again issues of institutional design and governance, and solutions to these will have to be found in that context.

The External Sector

1.47 The proposed acceleration in the growth rate cannot take place without tapping on the opportunities offered by the international economy in terms of markets, investment and technologies. But in doing so, vulnerabilities have to be identified and addressed. This is particularly important in view of the emerging trends in the international economy which suggest a period of slow-down. The United States economy, in particular will have to be monitored carefully, since the back-wash effects of a United States slow-down can be substantial on India, not only since it is our largest trading partner, but also as countries which are heavily dependent on the United States market would search for alternative export avenues.

1.48 A high rate of GDP growth will necessarily be associated with a high rate of growth of imports. This is particularly true given the extent of dependence on imports of energy and the limited likelihood of expanding domestic energy sources rapidly enough. Liberalisation of imports as required by the World Trade Organisation (WTO) will also have a role to play. In such a situation, sustained high rates of growth of exports will be essential for keeping the current account deficit within manage-

able limits. Rapid export growth of exports will also be necessary for aggregate demand reasons, since a steady increase in the rate of domestic savings implies that the rate of domestic consumption growth will be less than the rate of growth of output. Therefore, external markets will have to be sought for sustaining high levels of capacity utilisation.

1.49 At present, the Indian economy suffers from two principal infirmities in expanding its exports rapidly – the share of tradeables in GDP has been falling steadily; and the tradeables sectors continue to be dominantly inward-looking. Measures for reversing these attributes are essential for sustainable growth. Unless capacities are created in India specifically for the export market, it is unlikely that the export growth-targets can be met. There are of course exceptions, but excessive reliance on a limited number of goods and services, in general, exposes the economy to vulnerability.

1.50 The most effective means of encouraging outward orientation is to lower tariffs on imports so that the anti-export bias both in policies and mind-sets get corrected. Protection, if at all necessary, should be provided mainly through the exchange rate mechanism. In recent years there have been periods when the real exchange rate appreciated, but these reflect the inability of the Indian economy to absorb all available investible resources more than any other factor. With investment demand growing strongly, this should not be a source of concern. Rationalisation of the domestic tax structure, and the consequent simplification of the export promotion regime, will also be necessary.

1.51 Most importantly, it is necessary to recognise that rapid growth and development will not be possible without greater integration with the international economy. In order to make most of the opportunities available, it is essential that India evolve a positive agenda for its future negotiations at the WTO. Until recently, the strategy has been largely defensive. While this was perfectly appropriate for an inward-looking development strategy, it is not so now. The Indian interventions at the Doha Ministerial demonstrate the much more active and aggressive position that is being taken by India.

This approach will have to be strengthened as the process of globalisation gathers momentum in the Indian economy.

The Financial Sector

1.52 With the steady reduction in the share and role of the public sector in the economy, the importance of activities related to financial intermediation has increased, and will continue to do so. It is becoming evident, however, that the organised financial sector in India is either unable or unwilling to finance a range of activities that are of crucial importance both for growth and development. Agriculture, unorganised manufacturing and services, and various types of infrastructure are instances of such sectors. The recent financial sector reforms have naturally focused primarily on improving the viability and stability of financial institutions, without adequately addressing this issue. It is, therefore, necessary to consider methods of encouraging the financial sector to finance such activities without impinging on its viability or compromising on prudential concerns.

1.53 The most important issue in this context is the utility and effectiveness of subsidised interest rates for various purposes and segments of people. The evidence suggests that, on one hand, financial institutions are reluctant to give such loans and advances since these are not in their interest; and, on the other, the benefits are systematically misused by the powerful and the influential. Often, the actual beneficiary ends up bearing a higher effective interest rate than would be available in the normal course. It thus appears to be more important to ensure a smooth flow of resources than providing limited amounts with subsidy.

1.54 Finally, there is a problem of serious shortage of long-term risk capital in India, which will need to be rectified if rapid growth is to be achieved. In addition, excessive reliance on debt instruments by savers for meeting their long-term income flow requirements places pressure on the level and structure of interest rates. A judicious mix between interest and capital gains incomes is necessary to balance the needs of both savers and

investors. Therefore, a widening and deepening of the capital market, including equity and long-term debt, with adequate regulatory over-sight is central to the process of a sustained growth in savings and investment in the country over the longer run.

Agriculture and Rural Development

1.55 The policy approach to agriculture, particularly in the 1990s, has been to secure increased production through subsidies in inputs such as power, water and fertiliser, rather than through building new capital assets in irrigation, power and rural infrastructure. This strategy has run into serious difficulties. Deteriorating State finances have meant that subsidies have crowded-out public agricultural investment in roads and irrigation and expenditure on technological upgrading. Apart from the inability to create new assets, the lack of resources has eroded expenditure on maintenance of canals and roads. The financial unviability of the State Electricity Boards has made it difficult to expand power supply in uncovered rural areas and contributed to the low quality of rural power supply. These problems are particularly severe in the poorer States.

1.56 The equity, efficiency, and sustainability of this approach are however questionable. The subsidies have grown in size and are now financially unsustainable. Some of these, as for example the fertiliser subsidy, are really subsidies to cover the high cost of the fertiliser industry, and need to be re-examined in the context of liberalisation. Other subsidies, e.g. under-pricing of power and irrigation, do not improve income distribution in rural areas and may also be environmentally harmful. Excess use of subsidised fertiliser has created an imbalance between N, P and K, whereas excess use of water has produced water logging in many areas.

1.57 It is necessary to evolve a new approach to agricultural policy, based on a careful assessment of current constraints and possibilities. A sober and careful assessment of resources indicates that both land and water will be crucial constraints on the efforts to expand production in agriculture. India is already in a situation where the extent of forest cover has declined alarmingly. Although in recent years there has been some improvement, it is a long way

from our eventual target. In such a situation there is little possibility of increase in the cultivated area of the country other than through reclamation of wasteland for agriculture and forestry. Indeed, perhaps there would be an eventual decline, as urban demand and environmental imperatives lead to conversion of some agricultural land. There is, therefore, no alternative but to focus on raising the productivity of our land and water resources in a manner, which is sustainable over the longer term.

1.58 The first, and possibly the most important, area of focus must be to raise the cropping intensity of our existing agricultural land. Climatically India is fortunate in that it is possible to have multiple crops practically all over the country. The critical problem though is water, as water resources are also under severe strain. Despite large investments in irrigation in the past, only about 40 per cent of the agricultural area are irrigated. The progress on this front has slowed down considerably in recent years, particularly in terms of major and medium irrigation projects. Moreover, capacities of existing projects are also getting eroded due to insufficient expenditure on maintenance and upgradation.

1.59 Public investment in irrigation has fallen significantly over successive Plan periods. This is largely due to resource constraints faced by Governments both at the Centre and the States. However, resources are not the only problem. Potential irrigation projects are located in areas which are either very difficult or environmentally sensitive, which makes it difficult to implement them. The Tenth Plan must aim at a major revival of public investment in irrigation capacity and water management. Greater attention will also have to be paid to rain water harvesting and increasing the irrigation potential through scientific watershed development and minor irrigation. There is also considerable scope to improve the efficiency of the existing irrigation infrastructure through better and more participative management practices.

1.60 The second priority must be the development of other rural infrastructure that supports not only agriculture but all rural economic activities. A number of recent studies have indicated that the rate of growth of rural incomes and reduction in rural poverty are strongly influenced by the provision of

rural road connectivity. Other forms of rural infrastructure are also important, but the impact of rural roads has a dominant bearing on widening the opportunities and alternatives available to our people. Although this is an area that is in the domain of the State Governments, the Centre has taken initiative to provide earmarked funding for a significantly accelerated rural roads programme. It is also necessary to reorient the poverty alleviation programmes in a manner that they contribute more efficiently to the creation of rural assets, both private and community.

1.61 The third area that needs attention is the development and dissemination of agricultural technologies. Over the years India has developed an extensive system of agricultural research centres and extension services. There is reason to believe, however, that the quality of the agricultural research efforts has weakened while the extension system has virtually collapsed. Strengthening of the agricultural research and development system, with special emphasis on bio-technology, and a significant improvement in the degree of sophistication in the technology dissemination methods are essential to achieving rapid and sustained growth in agricultural productivity. A radical overhaul of the extension services is also needed.

1.62 Finally, the true potential of Indian agriculture can be realised only when there is diversification of agricultural products, both geographically and over time. The food and nutritional requirements of the people for leading healthy lives demand a wider range of food products than are presently consumed on the average. For such diversification to gain momentum, the requisite science and technology inputs will have to be provided along with appropriate supportive price policies. Most of the non-grain food products are, however, perishable in nature. In order to encourage the diversification through minimum wastage, considerable attention will be required to focus on post-harvest technologies and marketing infrastructure. It would also require a reconsideration of the various rules and regulations that govern agricultural trade, which frequently act against the interests of the farmers and distort their incentive structure.

1.63 Forests are natural assets and provide a variety of benefits to the economy. The recorded

forest area in the country is about 23 per cent of the total geographical area, but 41 per cent of this is degraded, and hence unable to play an important role in environmental sustainability and in meeting the forest produce needs of the people, industry and other sectors.

1.64 The problems and constraints in forestry development include lack of awareness about multiple roles and benefits of forests; lack of linkage between management and livelihood security of the people; application of low level of technology; inadequate research and extension, weak planning capability, wastage in harvesting and processing, market imperfections, over-emphasis on Government involvement and control, low level of people's participation and NGOs involvement, lack of private sector participation, unwanted restrictions on felling, transport and marketing of forest products grown by the people, lack of inter-sectoral coordination and weakness and conflicting roles of public forest administration.

Industrial Policy Issues

1.65 The industrial sector will have to grow around 10 per cent to achieve the Tenth Plan target of 8 per cent growth for GDP. This represents a major acceleration from its past performance; the sector grew at only about 7 per cent in the Eighth and Ninth Plan periods taken together. Besides, this acceleration has to take place in an environment, which will be significantly different from the past. Two differences are particularly important. First, industry will have to face much stronger international competition, as our domestic market is now more open with quantitative restrictions (QRs) on imports having been removed with effect from April 1, 2001. Second, the relative role of the public sector as a distinct entity will decline in the course of the Tenth Plan as the process of disinvestment converts many of the existing public sector enterprises from Government controlled enterprises to non-Government enterprises in which Government may have a minority stake but the units will either become board managed or managed by a strategic investor. In either case, they will not be part of the public sector.

1.66 The Tenth Plan must therefore focus on creating an industrial policy environment in which

private sector companies, including erstwhile public sector companies, can become efficient and competitive. Some of the sources of efficiency that can be tapped in the Tenth Plan period have been discussed earlier. The specific policy issues that deserve special attention in the context of industrial development are discussed in the following paragraphs.

1.67 The removal of quantitative restrictions on imports is an important step in opening the economy to foreign competition. However, while QRs have been removed, import protection is still high. It is estimated that India's import weighted tariffs have declined from around 90 per cent at the start of the reforms to around 34 per cent in 2001-02 but this reduced level is three times higher than the level prevailing in East Asia. It is now well recognised that while industrial protection may sometimes be needed to help a particular sector, it tends to raise domestic costs and makes downstream industrial activity uncompetitive. The net effect is to make industry as a whole uncompetitive in world markets. Recognising this, developing countries the world over have steadily reduced the level of protection over the past ten years. The Government of India too has announced that India's tariff levels will be brought to the East Asian levels within a three-year period. This is in our view the right approach and will give Indian industry a clear indication of the pace at which the transition will be made. Care, however, will have to be taken to ensure that adequate safeguards are provided to prevent dumping and other forms of misuse.

1.68 A second important policy issue relates to the need to extend industrial liberalisation, which has been implemented extensively at the Central level, to the State level also. Industry circles frequently complain that the administration of regulations at the State level is extremely cumbersome and subjects entrepreneurs to frequent harassment. The transactions cost imposed by this system, including costs on account of corruption spawned by excessive regulation, are very large. What is more, they are especially burdensome for small-scale units. Radical changes are thus needed in these areas.

1.69 The small scale industry (SSI) has a vital role to play in the process of industrialisation providing a vehicle for entrepreneurship to flourish and a valuable entry point for new entrepreneurs who can start as small enterprises and then grow big. Small scale industries are also vehicles for achieving a broader regional spread of industry. Since SSIs are generally more employment intensive per unit of capital than large scale industry they are also a source of the much needed employment avenues. Khadi and village industries also have an important role to play, especially in promoting non-farm employment in rural areas. The Tenth Plan must ensure that policies are supportive of the small scale sector. Liberalisation of controls and doing away with unnecessary procedures at the State level can help in this process. Equally important is the need to ensure that adequate credit is made available to the SSI units. A proactive policy, encouraging the banks to meet the needs of the SSI while maintaining all necessary banking diligence in credit appraisal, is very necessary. Procedures for credit approval and disbursement in the public sector banks need to be modernized to ensure quick response.

1.70 The policy of reservation of certain products for SSI also needs to be reconsidered. While there is an overwhelming case for providing support to SSIs through specialised credit access schemes and fiscal incentives, a similar case cannot be made for reservation on economic grounds. Several expert committees have examined this issue and come to the conclusion that the policy of reservation has impeded healthy growth and export capability in many areas. It is often regarded as irrational once competition from imports is freely allowed. For these reasons, the expert view is that the policy of reservation needs to be phased out in due course. While doing so, however, the effect on employment should be carefully considered, since the present employment situation is rather grim. There is also a need for preferential opportunity to extend investment limits for SSI units with immediate effect, while restricting entry of new large units until later. There must also be recognition of the fact that the relationship between the large and the small units is not always adverse, and that quite often there is a strong complementarity between the two. There are, however, a number of policy distortions, which

obscures or even prevents the operation of such complementarities. The extent of ancillarisation in India, although increasing in recent years, is well below the potential. Policies that impede this relationship must be identified and removed.

1.71 Finally, it needs to be mentioned that the principal responsibility for achieving competitive efficiency rests with the private enterprises themselves. The policy environment cannot always be used as an alibi for non-performance. Recent research suggests that in India the main barriers to achieving international levels of efficiency are internal to the firms, and only to a minor extent in the policy environment. Private enterprises need to take these results to heart and engage in the introspection that is necessary for them to overcome and remove these internal limitations.

Social Infrastructure

1.72 Performance in the field of education is one of the most disappointing aspects of India's developmental strategy. Out of approximately 200 million children in the age group 6-14 years, only 120 million are in schools and net attendance in the primary level is only 66 per cent of enrolment. This is completely unacceptable and the Tenth Plan should aim at a radical transformation in this situation. Education for all must be one of the primary objectives of the Tenth Plan. Assertion of the dignity of labour and vocationalisation of curricula are essential to ensure that a dysjunction does not take place between the educational system and the work place.

1.73 Mere establishment of schools and hiring of teachers will not lead to an improvement in education if teachers remain absent as happens in many parts of the country, especially in rural areas. It is therefore essential that control over schools and teachers be transferred to local bodies which have a direct interest in teacher performance. States should be encouraged to implement the 73rd and 74th Amendments of the Constitution, which facilitate the transfer of management of primary and upper primary schools to panchayats/local bodies. Planning, supervision and management of education would have to be through local bodies at district, block and village levels. Efforts should also be made

for social mobilisation of local communities for adult literacy campaigns and for promotion of primary education.

1.74 The University and Higher Education Sector also needs attention. Although the number of universities has increased, and many universities continue to maintain high standards of education, it is a matter of serious concern that on the whole, the expansion in quantity has been accompanied by a fall in quality. Modernisation of syllabi, examination reforms and greater attention to issues of governance of universities and colleges, all require urgent attention. Part of the problem facing universities is the inadequate provision of budgetary resources from the Government. Since budget resources are limited, and such resources as are available, need to be allocated to expanding primary education, it is important to recognise that the universities must make greater efforts to supplement resources from the Government.

1.75 Improvement in the health status of the population has been one of the major thrust areas in social development programmes of the country. This was to be achieved through improving the access to and utilisation of health, family welfare and nutrition services with special focus on under-served and under-privileged segments of population. Technological improvements and increased access to health care have resulted in a steep fall in mortality, but the disease burden due to communicable diseases, non-communicable diseases, environmental pollution and nutritional problems continue to be high. In spite of the fact that norms for creation of infrastructure and manpower are similar throughout the country, there remain substantial variations between States and districts within a State in availability and utilisation of health care services and health indices of the population.

1.76 There will have to be a continued commitment to provide essential primary health care, emergency life saving services, services under the National disease control programmes and the National Family Welfare programme free of cost to individuals based on their needs and not on their ability to pay. At the same time, suitable strategies will have to be evolved, tested and implemented for levying and collecting charges and utilising the

funds obtained for health care services from people above poverty line.

1.77 One of the major factors responsible for poor performance in hospitals is the absence of personnel of all categories who are posted there. It is essential to ensure that there is appropriate delegation of powers to panchayati raj institutions (PRIs) so that there is local accountability of the public health care providers, and problems relating to poor performance can be sorted out locally.

Shelter for All

1.78 The objective of the National Housing and Habitat Policy 1998 was to provide shelter to all, especially to the poor and the deprived. The policy envisaged construction of 2 million additional houses annually. Of these, 1.3 million units were to be in rural areas and 0.7 million units in urban areas. The time has come to ensure that the goal of shelter to all is achieved by the end of the Eleventh Plan. The issues and problems relating to provision of rural and urban housing are very different and hence require specific interventions.

1.79 As per the 1991 Census, the total rural housing shortage was 13.72 million, which included households without shelter and those living in kutcha unserviceable houses. In addition, it was estimated that 10.75 million households would require housing during the period 1991 to 2002, on account of population growth. By the end of the Eighth Plan, around 6 million units had been created. During the Ninth Plan it is estimated that 4.5 million houses have been constructed under IAY and related programmes. In addition, HUDCO has sanctioned schemes for construction of close to 6 million dwelling units in the rural areas. Thus, the backlog left at the end of the Ninth Plan is estimated to be around 8 million dwelling units.

1.80 Urban housing shortage at the beginning of Tenth Plan has been assessed to be 8.89 million units. As much as 90 per cent of the shortfall pertains to the urban poor, and is attributable to the 'congestion' needs of joint families, obsolescence and replacement of old houses, upgrading of kutcha houses, and provision of housing to slum-dwellers. In urban areas, the problem becomes complex due

to two factors: the high cost of land, and the lack of access to institutional credit for workers in the informal sector, including the self-employed. Provision of affordable land requires allocation of Government-owned lands, and cross-subsidization from commercial properties and colonies developed for the affluent, to those for the urban poor.

1.81 During the Tenth and Eleventh Plan housing shortage would go up further due to population growth, in addition to the backlog of housing shortage in the Ninth Plan. It would be possible to make a more precise assessment of the housing shortage and requirement once details for 2001 are available from the Census. However, in view of the housing shortage even on the basis of 1991 Census, a major thrust to the housing programme would have to be accorded in the Tenth and Eleventh Plan to meet the goal of 'Shelter for All' by year 2012. For this a detailed action plan would have to be drawn up incorporating housing programmes of public, private and household sectors. Nevertheless, it would be necessary to provide free houses under IAY to the shelterless rural poor, with some subsidy for upgradation of kutcha houses. There is also a need to promote credit linked housing in the rural areas for easing the housing shortage for non-BPL families. As regards credit for the urban poor, which is required even in the programmes of slum-rehousing (Valmiki Ambedkar Awas Yojana), there is need for measures to create institutional arrangements. The steps to ensure availability of credit will include strengthening of State Housing Boards, arranging tie-ups between self-help / thrift-and-credit groups of urban poor and Housing Finance Institutions, and promotion of co-operative housing schemes for the benefit of urban poor.

Economic Infrastructure

1.82 The energy-transport infrastructure will be a major constraint on any effort to achieve a significant acceleration in the growth of GDP during the Tenth Plan period. A GDP growth of around 8 per cent or so will require an industrial sector growth around 10 per cent. This will place heavy demands on the generation and distribution of electric power and also transport sectors. Since these are non-tradable services, the necessary expansion in

supply must come from increased domestic production. Furthermore, in a globally competitive environment, the quality of these services in terms of both price and reliability are as important as availability, and it is well known that we face serious problems on both counts. Unless these problems are speedily resolved, India will neither be able to accelerate its growth nor compete effectively in the increasingly integrated international economy.

1.83 The power sector has been suffering from serious problems which were identified as early as ten years ago. However, no corrective action was taken and the result is that the power sector faces an imminent crisis in almost all States. No State Electricity Board (SEB) is recovering the full cost of power supplied, with the result that they make continuous losses on their total operations. These losses cannot be made good from State budgets, which are themselves under severe financial strain, and the result is that the SEBs are starved of resources to fund expansion and typically end up even neglecting essential maintenance. The annual losses of SEBs at the end of the Ninth Plan are estimated at Rs. 24,000 crore, and this has led to large outstanding dues to Central Public Sector Undertakings (PSUs) amounting to Rs. 35,000 crore.

1.84 The reasons for the huge losses of the SEBs are well known. Power tariffs do not cover costs because some segments, especially agriculture, but also household consumers, are charged very low tariffs, while industry and commercial users are overcharged. However, the overcharged segments do not always pay the high charges because theft of electricity, typically with the connivance of the staff in the distribution segment, is very high. Only 80 per cent of the electricity charges billed are actually collected. These serious issues were hidden by claiming a large absorption of electricity in agriculture which, being unmetered, enabled SEBs to claim transmission and distribution (T&D) losses of around 24 per cent. However, when actual losses were calculated more precisely, in States power sector reforms were being undertaken, it was found that the actual T&D loss is as high as 45-50 per cent.

1.85 Operational efficiencies in generation are also very low in some States. Overstaffing is ram-

part. Political interference on the management of SEBs has become the norm in most States, making it difficult to ensure high levels of management efficiency.

1.86 These problems were known at the start of the economic reforms and it was recognised at the time that the public sector may not be able to invest in the power sector to expand capacity to the required extent. The Government therefore invited private investors in power generation in the hope that private investment would fill the gap. However, it soon became evident that significant volumes of private investment cannot be attracted in an environment where the independent power producer is expected to sell power to a public sector distributor who may not be in a position to pay for the power purchased. The result has been that the inflow of private investment has been much below the targeted level. Since the financial problems of the SEBs have worsened over the Ninth Plan period, even this volume cannot be expected to continue unless State Governments undertake serious reforms in the power sector, including especially distribution, to make the sector financially viable.

1.87 Fortunately, a consensus is beginning to emerge on what needs to be done in this area and a handful of States have started the process of reform. However, it is important to note that the process will necessarily be long drawn out. Systems that are operating at a T&D loss of 45 per cent cannot suddenly go to a 15 per cent level, which is otherwise technically feasible. And yet, unless they make this transition, we cannot expect to provide adequate power of assured quality at a reasonable price. The Centre will have to assist this process through legislative changes and financial support to the investment requirements. As States embark on power sector reforms, it will also be necessary to deal with the problems of the very large outstanding dues of SEBs and also the medium term restructuring of the SEBs to bring about viability in operations over a three to four year period. Substantial financial resources will be needed to help States make the transition.

1.88 The optimum mix of power generation in terms of primary energy sources is an important issue for long-term planning of the power sector.

Over the years, the balance between thermal and hydro-electricity has shifted steadily against hydro-electricity, which now accounts for only 24 per cent of total power generation whereas an ideal level would be much higher. Special efforts need to be made to restore the balance. Hydro-electricity not only avoids carbon emissions, it is also particularly well suited to dealing with situations where there are large peaking deficits. India has large untapped hydro resources and although there are environmental constraints in tapping these resources, a concerted effort at exploiting this potential, while at the same time protecting against environmental damage and ensuring fair resettlement compensation is definitely needed.

1.89 Atomic energy is another important source of electric power, which has environmental advantages and is also likely to be economical in the longer run. At present, nuclear energy accounts for only 2.4 per cent of total electricity generated. This is far too low. The Nuclear Power Corporation has demonstrated the capability of setting up and operating nuclear energy power plants with high levels of technical efficiency and safety. It is desirable to plan for a significant expansion in the nuclear power generation capacity. An expanded programme would also make it possible to reduce costs of construction. This would necessarily require much larger allocation of budgetary support to this sector.

1.90 Considering India's continental size, geography and resource endowment, it is natural that the Indian Railways should have a lead role in the transport sector, not to mention other considerations such as greater energy efficiency, eco-friendliness and relative safety. However, Indian Railways has experienced a continuous decline in its position relative to the road transport system. Some reduction in its share in favour of road transport was to be expected and is in line with trends elsewhere, but there is reason to believe that in India this has been excessive. This has happened primarily because of policy distortions, which need to be corrected urgently.

1.91 The most important policy distortion is the skewed tariff policy which overcharges freight movement in order to subsidise ordinary passenger

traffic. This is accompanied by an investment strategy, which has placed excessive emphasis on opening new lines for passenger traffic and not enough emphasis on expanding capacity in areas where there is potential commercial traffic. The net result has been an alarming deterioration in the financial condition of the Railways and an inability to undertake the investment needed to improve Railway transport services.

1.92 The heavy cross-subsidisation of passenger fares cannot fully be justified on either economic or social grounds since the beneficiaries of the subsidy are not necessarily the poor. This system must be phased out gradually over the Tenth Plan period. Due consideration should be given to establishing an independent Rail Tariff Regulatory Authority for tariff fixation on technical and commercial considerations.

1.93 Greater emphasis has to be laid on completion of existing projects, and a proper prioritisation of all ongoing projects has to be made to ensure that resources are not spread too thinly across projects. Capacity on the saturated high density corridors needs to be augmented, particularly on the Golden Quadrilateral by undertaking doubling, opening up of alternative routes through new lines, gauge conversion etc. The programme of containerisation needs to be accelerated, not only to promote inter-modal transport but also as a strategy for increasing its own market share and catering to high value traffic.

1.94 The Indian road network is not up to the requirement of rapid growth in an internationally competitive environment, in which the Indian industry must compete actively with other developing countries. Improvement in the national highway network should have high priority in the Tenth Plan. Competition of the ongoing work on the Golden Quadrilateral and the related North-South and East-West corridor projects must have top priority. More generally, the existing deficiencies in the road network should receive higher priority than the extension of the network itself. In the longer run, it is necessary to plan and take preliminary action for expressways to be built in future on those sections where they can be commercially justified.

1.95 There are a number of areas of concern, which affect the efficiency of road transport operations. These include the need for reform of State road transport corporations to make them more efficient, rationalisation of road transport taxation structure, which will support cost-effective road transport systems, restraining of overloading of trucks, control of encroachments and unplanned ribbon development, and promoting road safety. Particular emphasis needs, however, to be given to removing all unnecessary policy and procedural hindrances to greater private participation in road transport operations, especially in rural areas, without compromising on road safety considerations.

1.96 Rural road connectivity is an extremely important aspect of rural development. Substantially enhanced rural road accessibility should be achieved in the Tenth Plan by linking up villages with all-weather roads. However, while constructing rural roads, connectivity of public health centers, schools, market centers, backward areas, tribal areas and areas of economic importance should be given priority.

1.97 The civil aviation sector also needs to be given careful consideration. As the economy moves towards higher value-added products, particularly in agriculture, an increasing proportion of the produce will have to move by air, both within the country and abroad. In addition, the more remote and inaccessible regions of the country, such as the North-east, can realise their true potential when such a transition becomes possible. The aviation policy and planning must, therefore, be reassessed in order to make it consistent with the emerging needs of the economy.

1.98 Telecommunications is a crucial component of infrastructure and one that is becoming increasingly important, given the trend of globalisation and the shift to a knowledge-based economy. Until 1994, telecommunication services were a Government monopoly. Although telecommunications expanded fairly rapidly under this arrangement, it was recognised that capacities must expand much more rapidly and competition be introduced to improve the quality of service and encourage induction of new technology. Telecommunications has become especially important in

recent years because of the enormous growth of information technology (IT) and its potential impact on rest of the economy. India is perceived to have a special comparative advantage in information technology or in IT-enabled services, both of which depend critically on high quality telecommunications infrastructure.

1.99 The Telecommunications policy in the Tenth Plan must, therefore, provide the IT and related sectors with world class telecommunications at reasonable rates. Formulating a policy for the sector faces an additional challenge because technological change in telecommunication has been especially fast and is constantly leading to major changes in the structure of the telecommunication industry worldwide. The goal should now be to provide a telephone on demand, anywhere in the country. With its technological and cost advantages, Internet telephony should be opened up. Tariff rebalancing with the objective of cost based pricing, transparency and better targeting of subsidies should be the guiding principles for tariffs. Convergence of data, voice and image transmission and use of wide bandwidth and high speed Internet connectivity have added new dimensions which need to be taken into account in the policy regime. Such convergence of services and single licence regime is needed to optimise the utilisation of resources with least cost of provision and encourage competition across the country in services and among the service providers.

Governance Reforms

1.100 Successful implementation of development programmes requires adequate funds, appropriate policy framework, formulation of suitable plan schemes, and effective delivery machinery. However, past experiences suggest that availability of funds is no panacea for tackling the problems of poverty, backwardness and low human development in India. Funds may be necessary, but they are not a sufficient condition; the determining factor seems to be the capability of the funding Ministries/ State Governments to formulate viable schemes and of the delivery system to implement these schemes on the ground. There are serious deficiencies in both respects and they can be regarded broadly as due to poor governance. These weak-

nesses can no longer be side-stepped as merely macro-level field problems. They need to be faced squarely and redressed at the planning stage itself. Reform of governance therefore has to be the one of cornerstones of the Tenth Plan.

1.101 While the functions of the State in India have steadily widened, capacity to deliver has declined over the years due to administrative cynicism, rising indiscipline, and a growing perception that the political and bureaucratic elite views the State as an arena where public office is to be used for private ends. In almost all States, people perceive bureaucracy as wooden, disinterested in public welfare, and corrupt. The issue of reform in governance has acquired critical dimensions, more so in poorer States, in the light of low economic growth and fiscal crisis. Weak governance, manifesting itself in poor service delivery, excessive regulation, and uncoordinated and wasteful public expenditure, is seen as one of the key factors impinging on growth and development.

1.102 There has also been less than adequate decentralisation of the functions of Government, to the detriment of the delivery of a number of key services. The spirit of the 73rd and 74th Constitutional Amendments has not been observed in many of the States. It is believed that little improvement will be possible until such decentralisation becomes effective, both in terms of functions and resources. But decentralisation cannot stop at the level of PRIs and urban local bodies (ULBs). The potential of civil society organisations, such as water users' associations or health and education committees to name only a few, to improve delivery of services is vast, and advantage must be taken of these possibilities through appropriate devolution of functions and authority.

1.103 In the area of civil services reform, the Government faces three critical challenges. It must enhance the productivity of the civil service and make certain that each employee is performing socially relevant tasks. It must ensure the long-term affordability of the civil service, and it must enforce procedures for rewarding and promoting

merit, disciplining malfunction and misconduct, to strengthen accountability and performance quality. It has become necessary to reshape the bureaucracy so that it perform its core public functions and develop new ways of ensuring that critical economic and social services are provided directly or indirectly. A new work culture will have to be evolved at all levels of the staff. Innovation and performance should be encouraged and rewarded and steps should be taken to ensure effective devolution and control of the elected bodies over the functionaries.

1.104 The issue of institutional design is not restricted to the Government or the bureaucracy alone. Practically all mechanisms by which commerce and intercourse take place or by which services are delivered to the people need to be re-examined in the light of increasing efficiency and accountability. Corporate governance, therefore, is just as important an issue as civil service reforms, and this applies just as much to the small-scale as to the large. Consumer protection too requires the establishment and strengthening of appropriate institutions, which can effectively articulate the needs of the average consumer. Such bodies must be encouraged, and not seen in an adversarial role by the Government and the private enterprise. In addition, reform of the cooperative system has become essential to ensure that this sector plays the role that it is capable of doing. This requires a complete unshackling of this sector from the needless political and bureaucratic control that it suffers from today.

1.105 Finally, nowhere is the issue of institutional reform as important as in the delivery of law and justice. All efforts at development can flounder in the absence of peace and of law and order. Increasing insecurity can not only retard new investment, but actually lead to closure of existing activities. Similarly, it must be recognised that the success of a market-based economy rests critically on the sanctity of contracts and the speed with which they can be enforced. This requires both expeditious delivery of justice by the legal system and of its enforcement by the concerned arms of the State.

CHAPTER 2

MACROECONOMIC DIMENSIONS

2.1 The Tenth Five Year Plan aims at achieving an average growth rate of the Gross Domestic Product (GDP) of 8 per cent per annum over the period 2002 to 2007. It also seeks to create the conditions for a further acceleration in the growth rate over the Eleventh Plan period (2007-12) in order to achieve a doubling of per capita income of the country over the next ten years. These are no doubt ambitious targets, but the Tenth Plan is predicated on the belief that the country has the potential to meet these expectations, provided that the appropriate policy measures and institutional changes are implemented expeditiously and effectively.

2.2 Economic growth should not be seen as an end in itself. Its true importance lies in the central role that it plays in realising the core objectives of all planning and public policy, such as providing adequate and decent work opportunities, eradicating poverty, reducing disparities and, in general, improving the quality of life of the people. Therefore, the growth strategy needs to embed these concerns and wherever trade-offs are involved, to explicitly indicate the preferred choice. Seen in this light, the growth rate is both a target and an instrument. However, it must also be recognised that the growth rate of the economy is probably the most important summary measure of the degree of success of the development strategy and macroeconomic management, and of the extent to which the recommended measures have been implemented.

2.3 The purpose of this chapter is to indicate the targets that will have to be set for the various macroeconomic variables and parameters which would be consistent with the overall growth target. The strategies for attaining these macroeconomic targets and their implications will also be discussed in some detail.

THE CONTEXT AND THE STRATEGIC APPROACH

2.4 The 8 per cent average growth target set for the Tenth Plan period appears ambitious when juxtaposed with the growth performance of the economy in the very recent past. However, a more optimistic picture emerges if a longer historical context is considered. Table 2.1 gives the growth performance of the Indian economy, relative to the targets set in the various Plans right since the inception of planning in India. As can be seen, the economy has performed better than the target in five of the nine previous plans, and even in the Second Plan, the gap was not large. As far as the Third and Fourth Plans were concerned, the shortfalls were largely due to severe exogenous shocks that could not possibly have been predicted. The Third Plan witnessed the drought years of 1965 and 1966, which were possibly the worst droughts in recent history, and also the Indo-Pakistan War of 1965. The Fourth Plan experienced three consecutive years of drought (1971-1973) and the first oil-price shock of 1973. More importantly, it may be noted that since the Fourth Plan, the growth rate of the economy had improved steadily until the Ninth Plan, when it received a set-back. Thus, there is evidence that the track record of planning in India is reasonably good, and indeed tends to err on the side of caution. Moreover, the evidence also suggests that there has been a steady improvement in the growth potential of the economy, and no reason to believe that this trend has actually reversed of late.

2.5 Nevertheless, the set-back suffered during the Ninth Plan period needs to be addressed right at the outset. The growth rates of GDP and its broad constituent sectors during the Eighth and the Ninth Plans are presented in Table 2.2. It may be seen from the table that the rate of growth of GDP during

Table 2.1:
Growth Performance in The Five Year Plans

(per cent per annum)

		Target	Actual
1	First Plan (1951-56)	2.1	3.60
2	Second plan (1956-61)	4.5	4.21
3	Third Plan (1961-66)	5.6	2.72
4	Fourth plan (1969-74)	5.7	2.05
5	Fifth Plan (1974-79)	4.4	4.83
6	Sixth Plan (1980-85)	5.2	5.54
7	Seventh Plan (1985-90)	5.0	6.02
8	Eighth Plan (1992-97)	5.6	6.68
9	Ninth Plan (1997-02)	6.5	5.35

Note : The growth targets for the first three plans were set with respect to National Income. In the Fourth Plan it was Net Domestic Product. In all Plans thereafter it has been Gross Domestic Product at factor cost.

the Eighth Plan was close to 6.7 per cent per annum, which has dropped to 5.3 per cent during the Ninth Plan, as per the latest estimates available from the Central Statistical Organisation (CSO). This was as against the target of 6.5 per cent for the Ninth Plan period. The causes of this decline can be traced through the sectoral structure of the growth rates.

Table 2.2
Recent Growth of the Indian Economy

(Per cent per annum)

	Eighth Plan	Ninth Plan
Agriculture	4.69	2.06
Manufacturing	7.58	4.51
Services	7.54	7.78
Total	6.68	5.35

2.6 During the Ninth Plan, the rate of growth has declined particularly in the agriculture and manufacturing sectors, as compared to the Eighth Plan; whereas in the services sector there has been marginal increase in the growth rate. Insofar as agriculture is concerned, three of the five years of the Ninth Plan witnessed poor performance as a result of weather-related shocks. In this respect, the Eighth Plan had been more fortunate. Following the Asian crisis in 1997 and subsequent reduction in the growth rates in the other parts of the world,

there was a slow-down in the Indian economy as well. The slow-down in the world economy also affected the level of exports. This, coupled with lower than expected public investment as well as the relatively poor performance in Agriculture sector in three of the five years of the Ninth Plan, led to a reduced demand for industrial goods and consequent reduction in the growth rate in the industrial sector. Some other developments, e.g. cyclone in Orissa, earthquake in Gujarat, Kargil war, etc., also resulted in diversion of resources from investment and consequent decline in the growth rates.

2.7 The rate of investment in the economy during the Ninth Plan was 24.2 per cent of GDP at market prices. The investment rate during different years of the Ninth Plan, as can be seen from Table 2.3, was in the range of 23.4 per cent and 24.6 per cent. Public investment accounted for nearly 29.5 per cent of total investment, the balance 70.5 per cent being accounted for by private investment.

Table 2.3
Total and Public Investment in the Ninth Plan

	Total Investment (% of GDPmp)	Public Investment (% of Total Investment)
1997-98	24.5	27.7
1998-99	23.4	30.4
1999-00	24.6	29.2
2000-01	24.3	30.0
2001-02	24.4	30.0
IX Plan	24.2	29.5

2.8 The rate of savings in the economy during the Ninth Plan works out to 23.3 per cent of GDP. The bulk of the savings was accounted for by the private sector. In fact, there were dissavings in the public sector to the tune of (-)0.8 per cent. Within the private sector, the household sector and private corporate sector accounted for 80 per cent and 20 per cent of the savings respectively. On the other hand, within the public sector, the savings of the public sector undertakings (PSUs) were 3.5 per cent of GDP while government savings were (-) 4.3 per cent of GDP. The excess of investment over savings resulted in a current account deficit of 0.9 per cent for the Ninth Plan. This deficit was met from external sources.

2.9 For the Ninth Plan as a whole, gross investment was targeted at Rs. 2,171 thousand crore (at 1996-97 prices) and public sector investment was targeted at Rs. 726 thousand crore. It is estimated that for the Ninth Plan, while the actual total investment was Rs. 2,050 crore, i.e. a shortfall of around 5.5 per cent, the private sector exceeded the targeted investment by 2.7 per cent, but public investment fell short of the targeted investment by nearly 22 per cent. Part of the investment requirement of the public sector was to be met from own savings, which were targeted at Rs. 127 thousand crore, while the rest of the investment requirement was to be met from borrowings. However, actual public savings missed the target by a substantial margin. Instead of positive savings, the public sector ended up with dissavings or negative savings to the tune of nearly Rs. 67 thousand crore during the Ninth Plan, the indications of which were mentioned in the Mid-term Appraisal of the Ninth Plan. The fiscal position of both Central and State Governments worsened on account of the lower than expected generation of internal resources by the public sector as well as a decline in the tax-GDP ratio. With very little scope for reducing government expenditure, there was an increase in government borrowings. The tax-GDP ratio declined from around 14.7 per cent in the Eighth Five Year Plan to 14.2 per cent in the first four years of the Ninth Plan. On the other hand, the government expenditure to GDP ratio was 23.5 per cent in 1996-97. Even for the Eighth Plan as a whole, it was 24.8 per cent. It was expected to be 26.7 per cent during the Ninth plan, with 28.5 per cent projected for the year 2001-02. The combined fiscal deficit of Central and State Governments increased from 6.3 per cent of the GDPmp in 1996-97 to 8.7 per cent of GDPmp in 2001-02 (as per the Budget Estimates).

2.10 It may also be noted that while public expenditure (including larger burden of subsidies) as a ratio of GDP has increased, there has been a cutback in public capital formation, especially in infrastructure, in order to control the fiscal deficit. The presence of growing food-stocks along with rising foreign exchange reserves also point towards a demand deficiency in the system. Furthermore, there has been a decline in bank credit to the commercial sector and banks have been holding

SLR securities in excess of the stipulated minimum requirement. In addition, there has been a failure of the capital market, more so in the latter half of 1990s, to provide finance for domestic capital formation.

2.11 It is thus clear that in the Ninth Plan the economy achieved a much lower growth rate of 5.35 per cent despite higher levels of investment, i.e. 24.2 per cent, as compared to the Eighth Plan, when the investment ratio and the growth rate were 22.4 per cent and 6.5 per cent respectively. This implied that the incremental capital output ratios (ICOR) for the Eighth and Ninth Plans were 3.43 and 4.53 respectively. This increase in ICOR is not necessarily a reflection of the greater inefficiency in the economy, but could be on account of a slow-down in the demand, thus resulting in the existence of excess capacity in the economy.

2.12 The deficit in demand was seen not only in the domestic sector but also in the performance of the external sector. It may be noted that during the Ninth Plan, exports had increased by 5.6 per cent as against the target of 11.8 per cent. On the other hand, imports had increased by 4.1 per cent as against the target of 10.8 per cent. The trade deficit for the Plan as a whole was US\$ 74 billion, or an average annual trade deficit of around US\$ 15 billion. However, despite trade deficits of such magnitude, the foreign exchange reserves increased from US\$ 26.4 billion in 1996-97 (i.e. the base year of the Ninth Plan) to US\$ 54.2 billion in 2001-02, i.e. the base year of the Tenth Plan. This has been on account of large net inflow of invisibles and foreign investment. The Ninth Plan ended with a surplus in the current account, to the tune of nearly US\$ 1.35 billion, or around 0.3 per cent of the GDPmp.

2.13 The Tenth Plan has been prepared against the backdrop of the performance of the Indian economy during the Eighth and Ninth Plan periods, during which many of the commonly held beliefs regarding the potentialities and constraints governing the operation of the economic system have been brought into question. Although much of this has been covered in some detail in the Ninth Five Year Plan document and the Mid-term Appraisal of the Ninth Plan, it is nevertheless useful

to briefly outline a few of the developments that have taken place in the Indian economy during the past decade in order to lay the groundwork for the macroeconomic strategy being proposed for the Tenth Plan and beyond. There are indeed four major features of the experience of the immediate past, which need to be highlighted.

2.14 First and foremost, there is now clear evidence that the growth rate of the Indian economy may no longer be constrained by the availability of savings or, more generally, investible resources. All previous Plans have been based on the implicit, and often explicit, assumption of a binding savings constraints. In other words, it has been assumed that the demand for investible resources always exceeds the supply, which implies a belief that the total level of investment in the economy is determined uniquely by the availability of savings. This assumption was questioned for the first time in the Ninth Five Year Plan, where it was pointed out that there was a strong likelihood that investment demand in the country may not be able to fully absorb the resources available. For this reason it was proposed that public investment may have to be increased sufficiently to make up for this lack of private investment demand, if growth opportunities were not to be missed. Subsequent experience during the course of the Ninth Plan appears to have borne out this contention.

2.15 The clearest evidence that savings or investible resources have not been the primary limitation on investment in the country is given by the persistent difference between the external capital inflows and the current account deficit (CAD) that has existed through much of the 1990s. Theoretically, the CAD represents the excess of total investment in the country over domestic savings, while external capital flows represent the inflow of potential savings from abroad. The excess of the latter over the former is therefore an indication of the failure of investment demand to absorb foreign savings. The position in this regard is shown in Table 2.4. It can be seen that, with the exception of a few years, the economy has been unable to absorb the external resources that, have become available.

2.16 Of course, not all external capital inflows can be treated as potential savings. There is sometimes need to borrow abroad for balance of payments reasons. Normally, therefore, an assessment of excess savings in an economy is measured by the excess of voluntary capital inflows over the CAD. Such voluntary inflows would exclude extraordinary external finance (such as from the IMF) and much of government borrowings. In the Indian context, however, such a separation is not easy to carry out. On the one hand, government borrowings from multilateral

Table 2.4
Absorption of External Resources

(US\$ billion)

	Current Account Balance	Capital Account(Net)	Foreign Investment	Reserves to Imports Ratio (Months)
1990-91	-9680	7188	103	2.51
1991-92	-1178	3777	133	5.25
1992-93	-3526	2936	557	4.85
1993-94	-1158	9695	4235	8.64
1994-95	-3369	9156	4807	8.42
1995-96	-5910	4689	4805	5.96
1996-97	-4619	11412	6153	6.48
1997-98	-5500	10011	5390	6.88
1998-99	-4038	8260	2312	8.20
1999-2000	-4698	11100	5117	8.24
2000-01	-2579	8435	4588	8.56
2001-02	1351	10406	5286	11.27

aid agencies, such as the World Bank and the Asian Development Bank, or bilateral donors are almost always determined ex-ante and therefore cannot be treated as involuntary or as being for balance of payments purposes. On the other hand, since the Indian government does not directly engage in sovereign external debt, some part of its extraordinary financing can be, and sometimes is, carried out through public sector entities, particularly the banks. During the 1990s, such financing was carried out in the early years, in order to restore the heavily depleted foreign exchange reserves after the 1991 crisis. In addition, the Resurgent India Bonds (RIBs) of 1997 and Millennium Deposit Bonds (MDBs) of 1999 could also possibly be classified in this category. Despite these complexities, it is perfectly clear from the table that since 1993, by which time the level of foreign exchange reserves was adequate, 'voluntary' external inflows have consistently exceeded the CAD in all years except one (1995-96), and often by a large magnitude. To further underscore this point, it may be noted that foreign investment flows alone exceeded the CAD in six of the nine years. Thus, it can be unequivocally stated that during the Eighth and the Ninth Plan periods, availability of investible resources was not the primary constraint to growth and investment in India, and that the reasons would have to be sought elsewhere.

2.17 The literature offers a number of alternative constraints to growth and investment. In brief, there are six : (a) the foreign exchange constraint, or the adequate availability of foreign exchange for ensuring balance of payments (BOP) sustainability ; (b) the agricultural constraint, which arises from the insufficiency of 'wage goods', on one hand, and the lack of a widely dispersed distribution of purchasing power, on the other; (c) the fiscal constraint, or the availability of sufficient resources with the government to meet the development objectives in a fiscally sustainable manner; (d) the infrastructural constraint, which arises from the lack of adequate infrastructure for sustaining a high level of capacity utilisation in the rest of the economy; (e) the financial intermediation constraint, where weaknesses in the financial system prevents savings from being translated

into investment; and of course (f) the general aggregate demand constraint in which there is a basic imbalance between the productive capacity of the economy and the level of aggregate demand.

2.18 Although each of these constraints is conceptually distinct, it is difficult to identify what exactly is the binding constraint with any degree of quantitative precision on the basis of ex-post data. The reason for this is that most of these constraints eventually manifest themselves either as an investment rate lower than the total savings rate (inclusive of foreign savings) or a rising rate of inflation. Nevertheless, it is important to identify at least which are the proximate constraints, since it has a crucial bearing on the macroeconomic strategy and conduct of policy. From the recent economic experience it is evident that neither the foreign exchange constraint nor the agricultural constraint provides an adequate explanation, since both foreign exchange reserves and food-stocks have been rising steadily and the rate of inflation has come down significantly. All the other four are, however, candidates, and none can be excluded on a-priori grounds. Therefore, the strategy has to address the likelihood of each of them being a contributory factor to the lower than potential growth performance.

2.19 The second issue that needs to be highlighted is the fact that the growth rate of the economy is no longer being driven entirely by the level of investment activity in the country. The most compelling proof of this assertion is available from the observed growth rates during the Eighth and Ninth Plan periods. A statement of the year-wise investment rates and the associated rates of private savings is given in Table 2.5. It may be seen that the real investment rate has been consistently higher during the Ninth Plan period as compared to the Eighth, with the exception of one year (1995-96). On the average, the Ninth Plan recorded a real investment rate of 26.3 per cent of GDP as compared to 24.9 per cent during the Eighth Plan. Nevertheless, the rate of growth during the Eighth Plan was significantly higher at 6.7 per cent per annum on the average as against 5.3 per cent during the Ninth Plan.

Table 2.5
Investment and Private Savings Ratios

(as % of GDPmp)

Years	Investment Real*	Ratios Nominal	Private savings
1991-92	22.0	22.6	20.1
1992-93	22.9	23.6	20.2
1993-94	23.1	23.1	21.9
1994-95	26.4	26.0	23.2
1995-96	27.2	26.8	23.1
1996-97	25.1	24.5	21.5
1997-98	26.4	25.0	22.0
1998-99	25.4	23.0	23.0
1999-2000	26.7	24.3	24.1
2000-01	26.3	24.0	25.0
2001-02	26.4	24.4	25.2
Eighth Plan (1992-97)	24.9	24.8	22.0
Ninth Plan (1997-02)	26.3	24.3	23.6

* at 1993-94 prices

2.20 Although it is tempting to infer a dramatic fall in the efficiency of capital from these figures (Table 2.5), the real explanation lies elsewhere. This is the third feature which needs to be noted. It may be seen from the second column of the table that the investment ratios, when measured in nominal terms, actually decline during the Ninth Five Year Plan. A further point of interest that should be noted is that in four of the five years of the Ninth Plan period, the nominal investment rate has been at or below the private savings rate. This has never happened before in India. The inference that can be drawn from the differential behaviour of the investment rate when measured in real terms and in nominal terms is that while the pace of capacity creation in the economy actually rose during the Ninth Plan period, the role of investment as a component of aggregate demand actually declined. As a consequence, the evidence suggests that the Ninth Plan period was characterised by a steady decline in the levels of capacity utilisation. This conclusion is borne out by exercises carried out in the Planning Commission which indicate that the capacity utilisation in a number of sectors did decline in the Ninth Plan period, especially in manufacturing in which the assessed level of excess capacity at the end of the Ninth Plan was about 21 per cent of the actual production.

2.21 The fourth feature of the change that has taken place in the Indian economy over the years and which needs to be factored into the growth strategy is the role of agriculture. In the past, when the share of agriculture in the Indian economy was high, the growth rate of GDP was strongly influenced by the growth of agriculture through its direct contribution to the GDP. Over the years, however, the share of agriculture in GDP has fallen significantly and, as a result, the aggregate GDP has become relatively less sensitive to fluctuations in agricultural performance. This factor is of course well recognised, but the role of agriculture, and particularly agricultural incomes, in influencing GDP growth indirectly through the demand side is less well understood. Table 2.6 presents the share of agriculture in GDP and the share of non-food consumption in rural expenditures over the last three decades. As can be seen, while the share of agriculture in GDP has fallen from 44 per cent in 1973-74 to 27 per cent in 1999-2000, non-food expenditure has risen from 25 per cent in 1973-74 to nearly 41 per cent in 1999-2000. In other words, a 1 per cent change in the growth rate of agriculture would have affected the GDP growth rate by 0.44 per cent in 1973-74 but only by 0.27 per cent in 1999-2000. On the other hand, the indirect effects of change in agricultural growth through the demand for non-agricultural goods and services has actually gone up from a little under 12 per cent of total aggregate demand in 1973-74 to nearly 14 per cent in 1999-2000. In the future, as average agricultural incomes increase, this indirect effect of agricultural incomes on non-agricultural growth will become progressively stronger as the bulk of the incremental income in rural areas will be spent on non-agricultural goods and services and not on food.

Table 2.6
Role of Agriculture in Growth

(per cent)

	Share of Agriculture in GDP	Share of Non-food in Rural Expenditures
1973-74	44.0	25.1
1983	38.7	34.4
1993-94	32.9	36.8
1999-2000	26.9	40.6

2.22 Keeping in mind these features of the Indian economy as they obtain at the end of the Ninth Plan, the growth strategy for the Tenth Plan period has to be decided. The most important feature that needs to be taken into account is the existence of large excess capacities, especially in the manufacturing sector. The existence of such unused capacity presents both an opportunity and a problem for accelerating the growth in the Tenth Plan. On the one hand, if much of these capacities can be brought into productive use, it would be possible to accelerate the rate of growth significantly without a commensurate increase in the rate of capacity creation through fresh investment. Thus, the aggregate investment rate can be significantly lower than would have been otherwise. On the other hand, the existence of large unutilised capacities is likely to curb the desire to invest by the private sector. Thus, the strategy will have to be developed in a manner in which these idle capacities are progressively brought into production during the early years of the Plan on the basis of demand generated from the non-private investment components of aggregate demand, with strong growth of private investment driving the growth process in the later years.

2.23 The other major components of aggregate demand are private consumption, public expenditure on goods and services, and exports. Of these three, the immediate prospects of export growth cannot be relied upon due to the conditions prevailing in the international economy. Although India is a small country in terms of total world trade, and therefore it is possible to increase exports through improvements in market share, the task will be a difficult one. Growth in private consumption demand has more or less kept pace with the growth rate of per capita disposable incomes, and it would not be desirable to try and push this up too aggressively since the relatively high level of savings of households will continue to be needed in the future in order to step up the rate of investment. Thus, the principal responsibility for raising the level of aggregate demand, and thereby improving utilisation of existing capacities, will rest primarily on public expenditures at least in the initial years. In doing so, however, it further needs to be recognised that different components of public expenditure have very different multiplier effects

on the rest of the economy. The strongest effect is through public investment, and the weakest through subsidies and transfers. It is, therefore, necessary to ensure that the growth in public expenditure comes about mainly through increases in public investment and not through a rise in current outlays, particularly on subsidies and other transfers.

2.24 It is estimated that the growth revival function of public investment will have to continue for at least the first two years of the Plan before private investment starts growing strongly enough to take up a major portion of the growth impetus. However, it should not be thought that public investment can be curtailed sharply thereafter. It must be remembered that private investment activity is extremely sensitive to the perceived trends in aggregate demand conditions. Since public investment is an important component of aggregate demand, abrupt reductions will inevitably lead to a loss of private investor confidence and a slow-down in the overall investment activity. Moreover, it should also be emphasised that public investment needs to be made in the infrastructure sectors in order to ensure that the availability of infrastructural facilities is commensurate with the demands of the economy. As mentioned earlier, there is evidence that the infrastructural constraint to growth is a distinct possibility and, therefore, care should be taken to relax this constraint as expeditiously as possible.

2.25 In stepping up the pace of public investment, it is necessary to take into account two important facets of the role of public investment and public borrowings on the economy. On the one hand, efforts to increase the share of public expenditure in GDP through enhanced borrowings tend to reduce private investment by pre-empting investible funds and causing what is known as 'crowding out'. On the other hand, as has been argued above, private investment can be positively influenced by public investment, both through its demand-generating role and through creation of infrastructure. Thus, under certain circumstances, public investment can actually lead to 'crowding in' of private investment. An objective appraisal of the Indian economy suggests that the danger of crowding out is practically non-existent at the present time. The excess of ex ante savings over

investment demand implies that not only will public borrowing not lead to an effective reduction in resources available to the private sector, but that it may actually be necessary to absorb the excess savings and thereby prevent the emergence of deflationary pressure. Over the longer run, however, as private investment demand begins to grow strongly, the danger of "crowding out" can come into existence unless appropriate measures are taken. It is, therefore, extremely important that the increase in public investment that is being proposed during the latter half of the Plan be financed to the extent possible through corresponding increases in public savings.

2.26 The need to maintain a relatively high level of private consumption demand for non-agricultural goods and services demands that attention be paid to the growth and stability of rural incomes. Since 65 per cent of our population lives in rural areas, the potential and prospect of sustained growth in demand through enhancement of rural incomes are substantial. Mention has already been made of the growing share of non-food consumption in rural areas, and this process needs to be encouraged. In this context it needs to be pointed out that the stability of rural incomes is just as important as its growth. High variability in agricultural production has the potential of introducing large cyclical changes in the demand for industrial products, and possibly even to a relatively slow growth in consumption due to the uncertainty associated with lifestyle changes. Therefore, an important cornerstone of the growth strategy of the Tenth Plan is the need to bring about both growth and stability in rural incomes, particularly in agriculture.

GROWTH TARGETS, INVESTMENT NEEDS AND RESOURCES

2.27 Taking into account the above factors, the macroeconomic requirements for achieving the target rate of growth have been projected on the basis of the planning model that is used for such purposes. The parametric requirements of the economy are presented in Table 2.7. As can be seen, the achievement of the Tenth Plan targets hinges critically upon an expected reduction in the incremental capital output ratio from 4.53 during the Ninth Plan to 3.58 in the Tenth Plan. Although the factors, which lead to this reduction, are discussed in more detail later, it may be mentioned at this stage that the measured ICOR was even lower during the Eighth Plan period at 3.43.

2.28 It can be seen that even with this reduction in the ICOR, the investment rate will have to be stepped up by more than 4 percentage points of GDP during the Tenth Plan period, and also conditions will have to be created for further increase of nearly 8 percentage points during the Eleventh Plan. In order to finance the increased investment requirement, the domestic savings rate is targeted to increase by 3.5 percentage points of GDP, and external savings, in the form of the current account deficit, to make up the rest. It is further expected that the rate of growth of imports will average more than 17 per cent per annum during the Tenth Plan, which arises partly out of the increased demand generated by the higher growth rate and partly from the planned reduction in the average level of tariffs. A detailed analysis of import demand and other external sector issues is provided in chapter 4.

Table 2.7
Macro Parameters for the Tenth Plan (2002-2007)

	IX Plan	X Plan	Post Plan
1 Domestic Savings Rate (% of GDPmp)	23.31	26.84	33.01
2 Current Account Deficit (% of GDPmp)	0.91	1.57	3.13
3 Investment Rate(% of GDPmp)	24.23	28.41	36.14
4 ICOR	4.53	3.58	3.84
5 GDP Growth Rate (% per annum)	5.35	7.93	9.40
6 Export Growth Rate(% per annum)	6.91	12.38	*****
7 Import Growth Rate(% per annum)	9.80	17.13	*****

Fortunately, it is expected that invisibles will continue to perform strongly and, therefore, the rate of growth of exports is determined more by supply side conditions than by the need to fulfill an exogenously set balance of payments target. Therefore, exports are expected to grow at the rate of 12.4 per cent on the basis of the projections made.

2.29 The macroeconomic aggregates arising from the Tenth Plan growth target are presented in Table 2.8. As can be seen, the size of national investment is required to rise substantially from Rs.2,507 thousand crore during the Ninth Plan to Rs. 4,082 thousand crore in the Tenth Plan at constant 2001-02 prices, i.e. by over 62 per cent. For this to be realised, investments in the economy will have to increase at an annual growth rate of slightly above 14 per cent. This is a fairly daunting task, since the long-run growth rate of investment in India has averaged around 6.5 per cent per annum. Nevertheless, there have been instances when investments have grown at over 20 per cent, and hence the task is not an impossible one. Private

consumption expenditure, which is a measure of the economic well being of the population, is expected to grow at a rate of 6.9 per cent per annum, which implies a per capita consumption growth of about 5.3 per cent per annum. At this rate, the per capita consumption level in the country will double in about 13 years.

2.30 In order to appreciate the magnitude of the efforts that will be required to attain the Tenth Plan growth target, it may be more instructive to examine the macroeconomic aggregates as percentages of GDP. This information is presented in Table 2.9. As may be seen, the average investment requirement of 28.4 per cent of GDP involves a sharp acceleration in the investment rate from 24.4 per cent in the base year to 32.3 per cent in the terminal. Of this nearly 8 percentage points increase, more than five would be in the private sector and about 2.6 in the public. In order to finance an increase in the investment rate of this magnitude, domestic savings would have to rise by about 6 percentage points and the current account deficit

Table 2.8
Macro Economic Aggregates for the Tenth Plan (2002-2007)

		(Rs crore at 2001-02 prices)			
		IX Plan	2001-02	2006-07	X Plan
1	GDP at Factor Cost	9419756	2080255	3047183	13007735
2	GDP at Market Prices	10347259	2288281	3373828	14366893
3	Gross Domestic Savings	2412189	538111	992353	3856657
	of which:				
	3a. Private	2497308	577158	922174	3793027
	3b. Public	-85119	-39047	70179	63630
4	Total Consumption	8125505	1789247	2449365	10783641
	of which:				
	4a. Private	6759161	1464086	2041209	8907184
	4b. Public	1366343	325161	408156	1876458
5	Gross Capital Formation	2506658	558684	1088506	4081670
	of which:				
	5a. Private	1767214	391079	754505	2868867
	5b. Public	739445	167605	334001	1212803
6	Public Borrowings	824563	206652	263822	1149173
7	Current Account Deficit	94470	20573	96153	225012
8	Exports	912861	213964	383600	1539347
9	Imports	1145770	285742	629917	2353568

by nearly 2 percentage points of GDP. Over the course of the Tenth Plan the size of the external sector is expected to expand substantially from under 27 per cent of GDP in 2001-02 to over 35 per cent by the end of 2006-07.

2.31 One of the most significant features of the Eighth Plan period was the sharp increase that occurred in domestic private savings. In the Seventh Plan, the private savings rate was 18 per cent, and it was expected to improve to 19.6 per cent. In actuality, however, it turned out to be around 22 per cent. This upward trend in the private savings rate continued in the Ninth Plan, albeit at a slower pace, with the average for the period being 24.1 per cent. Domestic private savings can be divided into two main components: (a) savings by household sector; and (b) savings by the private corporate sector.

2.32 It may be noted that in the classification used by the Indian statistical system, the household sector comprises not only of households in the common understanding of the term, but also of all unincorporated enterprises. Thus, the savings

behaviour of the household sector is determined both by the level and growth of personal disposable income, and by the profitability and share in GDP of unregistered enterprises. Much of the increase in the savings rate of this sector during the Eighth and Ninth Plans has been the consequence of a higher growth in disposable incomes than of GDP arising out of the steady reduction in the tax/GDP ratio. In addition, during the Ninth Plan, the share in GDP of the unincorporated sector has gone up. During the Tenth Plan period, however, fiscal imperatives demand that the tax/GDP ratio be stepped up significantly, which would tend to reduce household savings. On the other hand, the rapid increase in incomes arising from higher growth will tend to raise it. On the balance, therefore, it is expected that the household savings rate will tend to decline during the Tenth Plan period.

2.33 The gross savings of the private corporate sector primarily comprises the depreciation reserve and retained earnings of corporate entities. The savings rate of this sector, therefore, depends upon its share in GDP, its profit rate and its capital intensity. This rate has registered a steady and sustained

Table 2.9
Macro Economic Aggregates for the Tenth Plan (2002-2007)

(Percent of GDPmp)

	IX Plan	2001-02	2006-07	X Plan
1 Gross Domestic Savings of which:	23.31	23.52	29.41	26.84
1a. Private	24.13	25.22	27.33	26.40
1b. Public	-0.82	-1.71	2.08	0.44
2 Total Consumption of which:	78.53	78.19	72.60	75.06
2a. Private	65.32	63.98	60.50	62.00
2b. Public	13.20	14.21	12.10	13.06
3 Gross Capital Formation of which:	24.23	24.42	32.26	28.41
3a. Private	17.08	17.09	22.36	19.97
3b. Public	7.15	7.32	9.90	8.44
4 Public Borrowings	7.97	9.03	7.82	8.00
5 Current Account Deficit	0.91	0.90	2.85	1.57
6 Exports of Goods & Non Factor Services	12.34	12.43	15.11	14.24
7 Imports of Goods & Non Factor Services	15.09	15.04	19.98	17.71

increase since the 1970s, and accelerated during the 1990s, particularly during the Eighth Plan. In the Ninth Plan, however, due to severe compression in profit rates during the later years, the savings rate of the corporate sector has shown a decline. During the Tenth Plan, as capacity utilisation in this sector increases and thereby improves both profitability and GDP share, it is expected that the savings rate of this sector will rise strongly.

2.34 The overall picture regarding the magnitude and pattern of domestic savings during the Tenth Plan is presented in Table 2.10. On the basis of the savings behaviour of households and the corporate sector as discussed above, private savings are projected to rise by just over 2 percentage points of GDP. Thus, as can be seen, in order to meet the domestic savings rate target, a fair proportion of the additional savings required will have to come from the public sector, which would be required to increase its savings rate from -0.8 per cent to 0.4 per cent, i.e. an increase of over 1.2 per cent of GDP. The required degree of correction is, however, much larger. As can be seen from Table 2.9, public savings has to rise from -1.7 per cent of GDP in the base year to nearly 2.1 per cent in the terminal - a total turn around of 3.8 per cent of GDP.

2.35 It may further be seen that the overall improvement in the public savings rate obscures the nature of the correction that is to be effected. The savings rate of public enterprises is actually expected to decline quite significantly during the Tenth Plan period. This is the result of two conflicting forces. On the one hand, the share of public enterprises in GDP is expected to decline due to the disinvestment process; and, on the other

hand, the profitability of the remaining enterprises, particularly the State Electricity Boards, is expected to improve. It should be noted, however, that it was not possible to fully take into account the impact of disinvestment on the share of public enterprises in GDP because of the uncertainties involved in the process, and therefore, these are only indicative calculations. This should not create too many problems in the macroeconomic sense since any additional disinvestment will only result in a further decline in the share of public enterprises, which is exactly balanced by an increase in the share of the private corporate sector.

2.36 The more important issue that emerges is that the government sector will be required to reduce its dissavings by nearly 2 percentage points of GDP over the Tenth Plan period in order to meet the aggregate domestic savings target. In the absence of such an improvement, it is very unlikely that the growth target for the Plan will be achieved primarily due to a resource constraint towards the latter part of the Plan.

2.37 In this context, it may be desirable to briefly touch upon the extent of foreign savings that is planned. An average CAD of 1.6 per cent of GDP may appear low in comparison to the potential of the economy to absorb larger volumes of external resources and the observed trends in external capital inflows. It may, therefore, be tempting to infer that the government savings target can be relaxed with greater recourse to external funds. This would, however, be a dangerous view to take. The Tenth Plan is based upon a gradual acceleration in the growth rate of GDP with the objective of attaining an over 9 per cent average growth during the

Table 2.10
Composition of Domestic Savings

(per cent of GDPmp)

	VIII th Plan	IXth Plan	Xth Plan
1. Public Sector Of which:	1.57	-0.82	0.44
1.1 Government Sector	-1.50	-4.29	-2.41
1.2 Public Enterprises	3.06	3.47	2.85
2. Private Corporate Sector	3.95	4.90	6.10
3. Household Sector	18.11	19.23	20.30
4. Gross Domestic Savings	23.63	23.31	26.84

Eleventh Plan period. As a result, the CAD will have to rise steadily in order to provide the necessary resources for the growth acceleration. By the end of the Tenth Plan, therefore, the CAD is likely to rise to 2.85 per cent of GDP, as can be seen from Table 2.9. Balance of payments sustainability considerations demand that at the projected rates of growth of exports, the CAD should not exceed 3 per cent of GDP for any length of time. Thus, by the end of the Plan period, the CAD will be approaching the sustainable maximum, and any further expansion of the CAD during the Plan period runs the risk of leading to a violation of prudential considerations.

2.38 The sectoral pattern of investment and the necessary resource flows arising out of the Tenth Plan target and the sectoral projections are presented in Table 2.11. It may be seen, despite the considerable fiscal correction that is envisaged in the Plan, the government will still be placing a considerable draft on private savings. The reason for this is that the "borrowings" of the government as shown in the table includes disinvestment proceeds, which for all practical purposes has the same effect on investible resources available to the private sector as public debt. Thus, it is being assumed that all disinvestment is made to domestic buyers. If, however, disinvestment is made to foreigners, there will be a decrease in this figure with a corresponding increase in the funds received from external sources. The second point to note is that the private corporate sector is expected to receive more than 1 per cent of GDP from external sources. This figure contains not only the external commercial borrowings of Indian companies, but foreign investment as well.

2.39 The most critical, and perhaps the most contentious, element of the macroeconomic projections made for the Tenth Plan is the investment requirement that has been specified. After the experience of the Ninth Plan, there may be some scepticism about the possibility of raising the growth rate of the economy by nearly 2.6 percentage points with an increase in the investment rate of just above 4 percentage points. These figures taken in isolation would appear to indicate that the incremental capital-output ratio (ICOR) being used for the additional growth is only about 1.6. Such an interpretation would, however, be completely wrong. It may, therefore, be desirable to spell out with some clarity the nature of the relationship between growth and investment that is being contemplated for the Tenth Plan.

2.40 The incremental capital-output ratio (ICOR) is a summary expression for the existing technical conditions and structural configuration of the economy which captures the relationship between investment and additional productive capacity. The first point that needs to be made is that the ICOR relates investment to capacity and not to output. The difference between the two is the level of capacity utilisation. Although ICORs are usually estimated by using output data, it is implicitly assumed that the level of capacity utilisation remains unchanged or appropriate corrections are made. Second, the ICOR is an a-priori technical construct, and not a figure that arises in an ex-post sense. It is therefore meaningless to refer to increases or decreases in the ICOR on the basis of short-

Table 2.11
Inter-Sectoral Flow of Funds

(% of GDPmp)

	Government	PublicEnterprises	PrivateCorporate	Household	Total
Gross Investment	4.64	3.80	10.37	9.60	28.41
Financed by:					
Own Savings	-2.41	2.85	6.10	20.30	26.84
Borrowings	7.05	0.95	4.27	-10.70	1.57
From:					
Households	6.55	0.95	3.20	-10.70	0.00
External Source	0.50	0.00	1.07	0.00	1.57

period changes in growth rates or investment rates. Third, the aggregate ICOR for the whole economy is a weighted average of sectoral ICORs, which can be very different from sector to sector. Indeed, for anything other than discursive purposes, it makes more sense to estimate ICORs at the sectoral level than for the GDP as a whole. Thus, the aggregate ICOR depends crucially upon the sectoral composition of growth and investment. The sectoral structure of growth, in turn, depends upon a number of factors such as pattern of demand, the nature of inter-sectoral linkages, and the possibilities offered by trade. These complexities are best handled by the use of planning models which are designed to capture the linkages and constraints.

2.41 Recent theoretical research suggests that the relationship between the investment rate and the growth rate of capacity is not constant (see Box 2.1). As a result, rates of growth that are significantly higher than experienced in the past require investment rates which are proportionately not as high. In addition, adjustment has to be made for the availability of excess capacities, which can be brought into use to raise the growth rate, which further reduces the required investment. As has already been mentioned, there is substantial excess capacity available in the Indian economy, particularly in manufacturing, in the base year of the Tenth Plan. These factors have been taken into account while working out the sectoral structure of growth during the Tenth Plan and the sectoral ICORs. This information is presented in Table 2.12. As may be seen, the implicit sectoral ICORs, which have been computed as the ratio of actual sectoral investment rates to actual sectoral growth rates, have varied significantly between the Eighth and the Ninth Plans. Neither of the two sets of ICORs represents the true underlying technical relations because in the Eighth Plan capacity utilisation went up sharply, while in the Ninth it declined in most sectors. The ICORs for the Tenth Plan, by and large, lie between these two sets, and represent a possibly more

justifiable estimate of the true ICORs, suitably corrected for the improved capacity utilisation that is expected during the Tenth Plan period.

Box 2.1
Incremental Capital Output Ratio :
An Alternative Interpretation

The Incremental Capital Output Ratio is commonly measured as the ratio of investment rate to growth rate for a particular period. Some of the standard assumptions in the traditional Harrod-Domar framework of calculating ICOR included, inter-alia, (a) the economy is on a steady growth path, (b) there is no lag between investment and setting up of additional capacity, i.e. investment instantaneously translates into additional capacity, (c) there is a continuous full capacity utilization, (d) unchanging sectoral structure of the economy.

These are rather strong assumptions and are often violated in real life situation. For the Tenth Plan, an attempt was made to overcome some of these problems by computing the investment requirement of the economy based on what has been termed as 'net ICOR'. The long-term net ICOR have been estimated taking into account the lag structure of Investment, the average capital output ratio and the depreciation of capital stocks. From this approach, it follows that the investment requirement is lower for growth rates higher than the historical growth rates and vice-versa for lower growth rates.

Net ICORs were used to compute the potential output of each sector. The difference between actual and the potential output give the slack in the system for each sector for the base year, 2001-02. It was found that the slack varied across sectors and was 8 per cent in the aggregate. Sectors with slack implied that investment has already been made and capacity had been created. This existence of excess capacity could be used to generate higher output if utilised efficiently.

Table 2.12
Sectoral Growth Rates and ICORs

SECTORS	Eighth Plan		Ninth Plan		Tenth Plan	
	Growth Rate (%)	ICOR	Growth Rate (%)	ICOR	Growth Rate (%)	ICOR
1 Agriculture & Allied activities	4.69	1.59	2.06	4.05	3.97	1.99
2 Mining & Quarrying	3.59	10.74	3.81	5.44	4.30	7.99
3 Manufacturing	9.77	6.67	3.68	18.37	9.82	7.77
4 Elect, Gas& Water Supply	5.50	18.00	6.46	15.43	7.99	14.97
5 Construction	3.56	1.74	6.82	1.00	8.34	0.99
6 Trade	9.06	0.54	5.86	1.09	9.44	0.91
7 Rail Transport	1.95	27.94	4.70	9.87	5.40	14.66
8 Other Transport	8.42	4.41	5.63	6.09	7.54	5.37
9 Communication	14.31	7.25	17.14	5.28	15.00	8.33
10 Financial Services	10.21	2.23	8.93	1.35	11.69	1.56
11 Public Administration	3.91	7.82	9.21	4.09	6.43	5.45
12 Other Services	6.22	4.19	8.19	3.70	9.26	3.53
Total GDPfc	6.54	3.43	5.35	4.53	7.93	3.58

2.42 It should perhaps be mentioned that the ICORs computed for the Tenth Plan period do not capture the significant improvement in efficiency that is sought to be brought about by policy and procedural reforms, and through better governance. It is expected, therefore, that if the policy and the governance imperatives that have been detailed in the Plan are carried out, there could be a further reduction in the ICORs.

2.43 As far as the sectoral growth rates are concerned, specific mention needs to be made of four sectors that are critical for generating the desired growth in employment with relatively low capital investment requirements. These are agriculture, construction, other transport, and other services. The targeted growth rate in agriculture is significantly higher than in the Ninth Plan, but not as high as was recorded during the Eighth Plan. The reason for this is that the public investment rate in agriculture has dropped steadily over the past two decades and, as a result, this sector continues to be sensitive to weather-related fluctuations. It is hoped that the strategy and measures detailed in the Plan will reduce the vulnerability of the sector during the course of the

Tenth Plan and set the stage for higher growth in the future. The growth rate of the construction sector has improved significantly during the Ninth Plan, and this acceleration is expected to continue into the Tenth. Even faster growth can possibly be achieved if the various land-related suggestions made in the Plan are implemented expeditiously. It is realised, however, that these are sensitive issues, and progress may not be as rapid as desired. The growth rate of other transport too is targeted to be significantly higher than in the Ninth Plan, although not as high as in the Eighth. In this case as well, even faster growth can be achieved if the requisite policy changes permitting greater involvement of the private sector are implemented. The potential of tourism has not been adequately harnessed by India, and it is expected that progress will be made in this direction during the Tenth Plan. This, coupled with expected high growth rates in the information, communication and entertainment (ICE) sectors, should lead to an acceleration in the growth of other services, of which these sectors are a part. Finally, there are segments within manufacturing which are also important as far as employment generation is concerned. Encouragement to these segments is an integral

component of the Plan, without which the target growth rate of the manufacturing sector is unlikely to be achieved.

2.44 The sectoral structure of the Indian economy that will emerge from these targeted growth rates is shown in Table 2.13. As may be seen, despite the higher growth rate targeted for agriculture, its share in GDP is expected to fall over this period. The sectors, which are expected to record an increase in the share of GDP, are manufacturing and some of the services, especially other services for reasons mentioned above.

2.45 The sectoral target growth rates and the estimated ICORs yield the investment requirements of each sector for achieving the growth targets. The main challenge facing the planning and economic administration system of the country is to devise strategies by which the investment programme envisaged in the Plan are realised. Even in the past, when there was considerable degree of governmental control over the pattern of investment through a high share of public investment, on the one hand, and industrial licensing, on the other, the sectoral pattern of investment tended to be somewhat different from the planned. With the substantial reduction in the share of public

investment in recent years and the almost complete deregulation of private investment, the uncertainties involved in determining the likely pattern of investment have increased manifold.

2.46 In the Ninth Plan, a start was made in evolving a new method of investment planning, which explicitly recognised the uncertainties involved by determining the Central Government's sectoral investments residually from the desired investment programme. It involved estimation of the likely pattern of private investment, assessing the states' desired investment pattern, and then deriving the Central investment strategy as the difference between the desired sectoral investment programme and the sum of private and State investment estimates. The advantage of this method of planning is that it first of all explicitly recognises that the Central Government bears the residual responsibility for meeting the Plan objectives since both the private sector and the State Governments may have objectives and incentive structures which may not necessarily be coincident with the national Plan. Second, it allows identification of sectors that may receive excessive or insufficient investment even after best efforts are made in suitably reorienting the Central investment structure. This information gives valuable pointers

Table 2.13
Sectoral Structure of GDP at factor cost

(percent)

SECTORS	Ninth Plan	2001-02	2006-07	Tenth Plan
1 Agriculture & Allied Activities	25.7	24.7	20.5	22.2
2 Mining & Quarrying	2.4	2.3	1.9	2.1
3 Manufacturing	15.5	15.3	16.7	16.1
4 Elect, Gas & Water Supply	2.8	2.8	2.8	2.8
5 Construction	6.0	6.0	6.1	6.1
6 Trade	12.8	12.7	13.6	13.3
7 Rail Transport	0.9	0.9	0.8	0.8
8 Other Transport	4.8	4.9	4.8	4.8
9 Communication	1.4	1.7	2.3	2.1
10 Financial Services	6.2	6.3	7.5	7.0
11 Public Administration	6.4	6.6	6.1	6.4
12 Other Services	15.0	15.8	16.8	16.4
Total	100.0	100.0	100.0	100.0

to the nature of policy changes that may be necessary to alter the investment pattern of the private sector through the market mechanism. This methodology of investment planning has been found to be very useful, and is continued in the Tenth Plan as well.

2.47 Before going into the detailed exercise, a few important limitations need to be mentioned. First, although the projection of aggregative private investment demand can be made with a certain degree of confidence, the same cannot be said of the sectoral pattern. Since projections are necessarily based on certain observed regularities in behaviour, it is difficult to make projections for sectors, which have experienced structural changes in the recent past. Since the inception of reforms, there are a number of sectors that witnessed such regime change. Moreover, there are other sectors in which the investment behaviour does not display any systematic and stable behavioural pattern even though they may not have undergone any systemic change. The problem becomes more acute when the economy has just passed through a business cycle, which affects different sectors differently. In the Ninth Plan it was found that only about 77 per cent of the total targeted private investment could be sectorally allocated on the basis of past behaviour. In the Tenth Plan the situation has improved somewhat, and it has been possible to allocate nearly 86 per cent.

2.48 Second, even the sectoral allocation of public investment is not entirely deterministic. In particular, public investment pattern is determined to a large extent by estimates of the internal resource generation of the various public enterprises, both departmental and non-departmental, and the extent to which these resources are re-deployable. These estimates are themselves contingent not only upon the performance of the enterprises, but also upon certain policy decisions being taken at the appropriate time. Both of these factors are subject to uncertainties arising partly out of market conditions and partly out of political compulsions. Moreover, much of the resources of public enterprises are not re-appropriable under law, since they form the depreciation reserve of the concerned enterprises.

2.49 Third, it must also be recognised that there are limitations to the extent that even the government's fiscal resources can be allocated. Five Year Plans are not written on a clean slate, and each Plan has to take into account the committed expenditure legacies left by earlier Plans. As a consequence, only a minor part of the gross budgetary support (GBS) allotted to a particular Plan can be used flexibly to bridge the gaps left by private and State Government investments.

2.50 Despite these limitations, the exercise is a useful one, and its results are presented in Table 2.14. As may be seen, given the limitations mentioned above, it has not been possible to arrive at an exact balance between the sectoral investment requirements as emanating from the Plan model and the deployment of the resources available with the public and private sectors, despite the overall resource balance that has been assumed. For most sectors, the discrepancies are not large and are within statistically acceptable limits.

2.51 There are, however, a few areas of significant mismatch, which need to be noted and discussed. First and foremost, there are three sectors - Agriculture and Allied activities, Mining and Quarrying, and Construction - which apparently are likely to receive excess investments. Such an interpretation needs to be made with a great deal of caution, since they may reflect more the inherent limitations of the formal planning model than anything else. There are two main limitations. First, the inter-sectoral balancing is done mainly on the basis of past experience. As a result, sectors which have been under-emphasised in the past, tend also to receive less emphasis in the future projections. Although some corrections are made in the light of the objectives of the Plan, these are based on heuristics and can seriously underestimate the true level of correction required. This is probably the case with both Mining and Quarrying and Other Transport. Second, the ICORs used to estimate the investment requirements are based on the investments made in the recent past, and may not fully reflect the needs of the future. This is probably true in the case of Agriculture, where the bulk of the investment in the recent past has been by the private sector in low capital intensive, short gestation investments, particularly in irrigation and

Table 2.14
Investment Requirements and Projected Sources

(Rs. '000 crore at 2001-02 prices)

Sectors	Investment Required	Projected Private	Public		Additional Requirement
			Centre	State	
1.Agriculture & Allied	219.6	174.0	34.0	98.2	-86.6
2. Mining & Quarrying	89.4		103.0	3.4	-17.0
3.Manufacturing	1476.9	1330.7	80.4	16.8	49.0
4.Electricity ,Gas & Water Supply	412.5	68.0	149.9	101.7	92.9
5.Construction	61.0	38.9	59.9	11.5	-49.4
6.Trade	136.6	106.0	4.5	14.4	11.6
7.Rail Transport	81.9		60.6	0.0	21.3
8.Other Transport	237.6	184.3	24.4	56.3	-27.4
9.Communications	296.4	74.1	91.0	0.0	131.3
10.Financial Services	151.2		26.5	0.0	124.7
11.Public Administration	273.1		30.6	125.7	116.8
12.Other Services	645.3	499.9	79.3	40.5	25.6
Total	4081.7	2476.1	744.1	468.7	392.8

Note : -ve sign indicates an excess of projected investment over the required

mechanisation. The irrigation technologies have been mainly extractive, such as tube-wells, and are not sustainable unless appropriate public investments are made in rain-water harvesting and recharging of ground-water sources. Moreover, the remaining potential of major and medium irrigation has been untapped due to inadequacy of public investment. On the whole, therefore, it is felt that the "excess" investment that these sectors may receive is probably desirable to meet the Plan objectives.

2.52 As far as major shortfalls are concerned, there are four sectors, which need to be considered - the utilities sector of Electricity, Gas and Water Supply, Communications, Financial Services, and Public Administration and Community Services. In the first, although public investment, both by the Centre and the States, is proposed to be stepped up sharply as compared to the Ninth Plan, resource constraints place a limitation to what is possible. The gap will, therefore, have to be filled through greater private participation than has been estimated. In the Ninth Plan, there was high expectation that the private sector would come in

to generation in a big way, which was belied. In the Tenth Plan, however, the focus has shifted to privatisation of distribution, which holds out better hope for higher private investment.

2.53 As far as communication is concerned, the estimates made for private investment is probably on the lower side due to the fact that private participation in this field is of relatively recent origin, and there have been a number of teething problems in the policy framework. Most of these have been ironed out, and there are expectations that private investment will accelerate sharply during the Tenth Plan and thereby bridge the differential. A similar situation obtains in the financial sector as well, and private participation in insurance should improve the investment level. It should, however, be mentioned that although the bulk of the financial sector is in the public sector, it does not fall under the purview of the public sector plan. There is some concern that unless the ability of the public sector banks to increase their capital base is enhanced, there could be a problem for them to enhance their lending ability due to capital adequacy constraints. This can be done in two ways - either through the

government increasing its equity contribution or by greater private participation in ownership. In principle, it has been decided to lower the government's share-holding to 33 per cent, but little progress has been seen in this regard in recent years. In view of the acceleration in the growth rate that is being proposed for the Tenth Plan, there is considerable urgency in taking the necessary steps.

2.54 The investment requirement for Public Administration and Community Services tends to be somewhat understated by the conventional planning methodology since the planning model does not adequately capture the non-economic benefits of public health and education expenditure and entirely misses both the economic and non-economic contribution of law and order and justice. It is quite clear that the transition to a fully functioning market economy will be retarded unless adequate provision is made for these functions of the State. Unfortunately, fiscal constraints prevent further allocations in these areas, and every effort will need to be made by both the centre and the states to find additional resources for investment, since these are functions which cannot be taken up in the private sector.

2.55 Finally, mention must be made of Rail Transport, which too is likely to receive less than adequate investment during the Tenth Plan. The main problem here is the inability of the Indian Railways to raise sufficient internal resources to fund its investment needs, despite the existence of potential. Further subventions from the government will not be possible, given the competing claims, and every effort will need to be made by the railways to improve internal resource generation through the measures that have been proposed in the appropriate section of this Plan document.

REGIONAL BALANCE AND POVERTY

2.56 An important objective of the various Plans in the past has been balanced regional development. However, the Tenth Plan differs from the earlier Plans in one major respect and that is that it specifies targets for the growth rate for each State in consultation with the state governments. As has already been mentioned, such a break-

down is necessary to ensure that there is non-trivial consistency between the national target and the State-wise growth rates.

2.57 During the Eighth and Ninth Plan periods the rate of growth in the better off States (i.e. States with higher per capita SDP), viz. Gujarat, Maharashtra, etc., have generally been higher than the States with lower level of per capita income like Bihar, Orissa and Uttar Pradesh. Such a phenomenon has resulted in higher income differences in the States. According to some studies, the regional disparities tended to increase gradually in the 1980s followed by a relatively steep increase in the early years after the reforms were launched, and a gradual increase through the 1990s. That different States have performed differently, despite the 'regionally unbiased' nature of economic reforms that have been pursued, can perhaps be attributed to the fact that some of the better off States have generally had better governance and followed growth-enhancing policies more effectively than others. The poorer States would have to raise their rates of growth to bridge this gap.

2.58 The achievement of rate of a growth of 8 per cent during the Tenth Five Year Plan will critically hinge on the achievement of higher rates of growth in the GSDP vis-à-vis the growth rates achieved during the Eighth and the Ninth Plans. It may, however, be mentioned that even if all the States perform as targeted, the inter-State income disparities are unlikely to decline. The Tenth Plan aims at reversing the pace of increase in inequality, and creating the necessary pre-conditions to help the worse-off States to catch up. The reduction in regional disparities could perhaps follow in the subsequent plans. Raising the growth rates is also important from the point of view of reducing the poverty levels prevailing in the country.

2.59 As against the overall growth rate of 6.7 and 5.4 per cent respectively in the Eighth and the Ninth Plans for the economy as a whole, the growth rates in the Gross State Domestic Product (GSDP) of different States are given in Table 2.15. The targets for the Tenth Plan are also placed alongside for ease of comparison, and for giving a feel for the magnitude of efforts that will be needed in the different States.

Table 2.15
Growth Rates in State Domestic Product in Different Plans

(percent per annum)

SI. No.	State/UT	Eighth Plan	Ninth Plan	Tenth Plan
1.	Andhra Pradesh	5.4	4.6	6.8
2.	Arunachal Pradesh	5.1	4.4	8.0
3.	Assam	2.8	2.1	6.2
4.	Bihar	2.2	4.0	6.2
5.	Goa	8.9	5.5	9.2
6.	Gujarat	12.4	4.0	10.2
7.	Haryana	5.2	4.1	7.9
8.	Himachal Pradesh	6.5	5.9	8.9
9.	Jammu & Kashmir	5.0	5.2	6.3
10.	Karnataka	6.2	7.2	10.1
11.	Kerala	6.5	5.7	6.5
12.	Madhya Pradesh	6.3	4.0	7.0
13.	Maharashtra	8.9	4.7	7.4
14.	Manipur	4.6	6.4	6.5
15.	Meghalaya	3.8	6.2	6.3
16.	Mizoram			5.3
17.	Nagaland	8.9	2.6	5.6
18.	Orissa	2.1	5.1	6.2
19.	Punjab	4.7	4.4	6.4
20.	Rajasthan	7.5	3.5	8.3
21.	Sikkim	5.3	8.3	7.9
22.	Tamil Nadu	7.0	6.3	8.0
23.	Tripura	6.6	7.4	7.3
24.	Uttar Pradesh	4.9	4.0	7.6
25.	West Bengal	6.3	6.9	8.8
26.	A & N Islands	10.3	3.7	6.6
27.	Chandigarh		9.5	10.6
28.	Delhi	4.3	9.4	10.6
29.	Pondicherry	7.7	12.5	10.7
30.	Chhattisgarh			6.1
31.	Jharkhand			6.9
32.	Uttaranchal			6.8

Note : The growth rate for the Tenth Plan in respect of Bihar, Madhya Pradesh and Uttar Pradesh do not include Jharkhand, Chhattisgarh and Uttaranchal respectively.

2.60 Although the aggregate growth rates are no doubt important, the real value of such an exercise lies in the broad sectoral break-up of the state-wise growth rates. Such a sectoral break-up necessarily has to be based on an appraisal of the potential of each State in terms of the different sectors on the basis of the conditions that prevail at the beginning

of the Plan. As a result, it focuses attention on the difference between the actual performance of the sector and its assessed potential. This comparison can lead to an understanding of the measures that are necessary to bridge the gap. The state-wise sectoral break-down of the growth targets is presented in Table 2.16.

Table 2.16
Statewise Growth Target for the Tenth Five Year Plan

(Annual Average in %)

	States/UTs	Statewise Growth Target			GSDPGrowth
		Agriculture	Industry	Services	
1	A&N island	1.00	10.41	7.97	6.6
2	Andhra Pradesh	3.05	8.01	8.39	6.8
3	Arunachal Pradesh	4.00	8.90	10.50	8.0
4	Assam	3.82	5.00	9.00	6.2
5	Bihar	3.75	6.00	8.00	6.2
6	Chandigarh	-2.00	10.41	10.96	10.6
7	Chhattisgarh	3.00	7.50	7.00	6.1
8	Delhi	-12.21	6.90	12.01	10.6
9	Goa	-0.90	6.25	12.36	9.2
10	Gujarat	4.03	12.23	10.44	10.2
12	Haryana	4.07	9.56	10.33	7.9
13	Himachal Pradesh	4.55	12.49	8.26	8.9
14	J&K	4.20	5.21	8.00	6.3
11	Jharkhand	3.00	7.44	8.00	6.9
15	Karnataka	4.99	11.34	12.51	10.1
16	Kerala	3.05	5.89	8.17	6.5
17	Madhya Pradesh	4.00	7.75	9.00	7.0
18	Maharashtra	3.56	8.22	8.09	7.4
19	Manipur	3.59	8.33	7.39	6.5
20	Meghalay	4.00	6.87	7.05	6.3
21	Mizoram	2.00	4.16	6.84	5.3
22	Nagaland	4.00	7.29	5.78	5.6
23	Orissa	4.07	4.88	8.73	6.2
24	Pondicherry	1.10	13.01	9.19	10.7
25	Punjab	4.07	8.06	8.00	6.4
26	Rajasthan	4.50	10.06	9.63	8.3
27	Sikkim	5.00	5.21	10.36	7.9
28	Tamil Nadu	3.54	7.37	9.77	8.0
29	Tripura	3.90	9.37	8.43	7.3
30	Uttaranchal	3.50	7.00	8.70	6.8
31	U.P	4.67	11.05	7.92	7.6
32	W.B.	5.09	9.15	10.76	8.8
	All India	4.0	8.9	9.4	8.0

2.61 Given the vast variations that exist in the country, the incidence of poverty has to be treated as a region-specific issue. The overall growth of the economy cannot and should not be directly related to poverty, since it is entirely possible that the growth process may pass those regions in which the poor are concentrated. Therefore, the methodology of poverty assessment in the country focuses on the State-level incidence, and builds up the national aggregates from these. The projections for poverty, therefore, also need to take into account the likely growth rates of the different States of the country.

2.62 Consistent with the target for the growth rate of GSDP during the Tenth Five Year Plan, the State-wise incidence of poverty by the end of the Plan, i.e. 2007, has been projected, keeping in view the trajectory that the following variables are likely to take.

- Per capita income of the State;
- Agriculture yield (output per hectare of food-grains) in the State;
- Per capita plan expenditure incurred by the State; and
- Poverty line of the State.

2.63 The per capita income represents the amount of resources available for consumption and is expected to be inversely related to the poverty ratio. Poverty line is a summary statement of the level of prices in the State for a given basket of goods and services. Higher poverty line would be associated with a higher poverty ratio. Thus, a high per capita income may not necessarily translate to low poverty, if the poverty line is also high. Agriculture productivity affects poverty in a number of ways. First, since poverty in India is predominantly a rural phenomenon, this variable captures rural incomes. Furthermore, since the rural areas are an important source of demand for urban products, an increase in rural incomes would have an impact both on rural and urban poverty. Second, it is not just the level of rural incomes, which is important for the incidence of poverty, but its potential distribution as well. Third, in the Indian context, consumer prices, both in rural and urban

areas, are driven predominantly by the price of food, which is determined by agricultural performance. Of course, the poverty line would reflect to some extent this effect, but the latter is also sensitive to government actions in the field of food security and therefore captures an additional effect. It is expected that agricultural productivity will be inversely related to poverty.

2.64 One measure to capture the effect of government actions is the per capita State plan expenditure. It is expected that this variable will be inversely related to the incidence of poverty. It has been observed that the per capita GSDP growth is extremely important for poverty reduction and every Rs.1,000 increase in annual real per capita GSDP results in 1.6 percentage point reduction in the poverty ratio in the rural areas and 2 percentage points in the urban areas.

2.65 Based on econometric exercises, it is observed that every 5 percentage point increase in real GSDP, resulted in about 3 per cent increase in per capita terms, which would further reduce the poverty ratios by 0.33 and 0.42 percentage points in rural and urban areas respectively. However, if the inflation rate for the basket of goods and services consumed by the poor is 2.5 and 0.5 percentage points higher in the rural and urban areas respectively than the general inflation rate, then the income growth effect will be neutralised and there will be no decrease in the poverty ratio. Another point to be noted is that the per capita State plan expenditure tends to affect poverty in both rural and urban areas and in almost equal measure. Reduction in such expenditures may seriously affect the process of poverty eradication. Agricultural productivity, as expected, does reduce poverty both in rural and urban areas, with an obviously larger effect in rural areas, and therefore, must form a central focus of our development strategy.

2.66 Based on these exercises and certain assumptions regarding the likely growth path for these variables during the Tenth Five Year Plan, the incidence of poverty for the year 2007 was projected.

- per capita gross State domestic product for the year 2007 is estimated applying State-specific growth targets.

- the growth in the agriculture sector would be due only to the growth in yield.
- Per capita plan expenditure in the State for the year 2007 has been kept fixed at 1999-2000 level.
- Poverty line is kept fixed in real terms.

2.67 The number and proportion of people living below poverty is reported in Table 2.17. Given that the targeted macroeconomic and sectoral projections of the rate of growth during the Tenth Plan are achieved, the poverty ratio in India is expected to decline to about 19.2 per cent in 2006-07 as compared to 36 per cent in 1993-94. However, most of the poor would be concentrated in only a few States - Bihar, Madhya Pradesh, Orissa, Uttar Pradesh, West Bengal and the North-Eastern States. Some pockets of poverty will also remain in Andhra Pradesh, Karnataka, Maharashtra and Rajasthan. With the overall growth target of around 8 per cent accompanied by a high growth in agriculture in some of the States, the States of Haryana, Himachal Pradesh, Goa, Gujarat, Punjab, Chandigarh, Dadra and Nagar Haveli, Daman and Diu and Delhi, are likely to register negligible levels of poverty ratio. To take into account the migration factor from the relatively poorer States to these better-off states, the poverty level in some States has been kept at 2 per cent.

2.68 Finally, it should be noted that these projections are based on two key assumptions, other than the growth projections. First, it has implicitly been assumed that the inflation rates applicable to the GSDP and the poverty line will be the same. Historical experience, however, suggests that this assumption is unlikely to be valid and the inflation rate applicable to the poor is likely to be higher than that applicable to the general income. In such a situation, given the parameter estimates on these two variables, the rate of decline of poverty will be less than projected. Second, per capita State plan expenditures have been held constant in real terms, which implies that the share of the State plan expenditure in GSDP will decline rapidly over the Tenth Plan period. It is quite likely that the real per capita State plan expenditure will increase for most States. This

should lead to a faster decline in poverty in these States than projected.

ISSUES IN AGGREGATE DEMAND MANAGEMENT

2.69 As has already been mentioned, one of the key differences between the Tenth Plan and earlier Plans is the attention that needs to be brought to bear on issues of demand management, which had earlier been neglected by the planning process. The Tenth Plan, however, requires a careful balancing between the demand and supply processes of the economy if the desired pace of acceleration of growth is to be achieved and the growth target met. There are a number of uncertainties regarding the generation of adequate aggregate demand, which need to be explicitly addressed if proper corrective measures are to be taken.

2.70 First, as far as private consumption demand is concerned, by and large there is little cause for concern since it has behaved fairly predictably in the past and there is reason to believe that any major change will occur in the future. There is, however, one aspect, which needs to be highlighted. As has been mentioned, the role of the agricultural incomes in supporting the growth and diversification of non-agricultural goods and services has been increasing and is expected to continue to do so in the future as the average income growth in this sector will be spent mainly on non-food consumption expenditure. Nevertheless, it must be borne in mind that increased consumption of industrial products frequently involves life-style changes, and that such change may not be undertaken if there are large uncertainties regarding the possibility of maintaining the altered life-style in the future. It is, therefore, imperative that steps be taken to bring about greater stability to agricultural incomes. Indeed, in one sense, stability may be more important than the growth rate of agricultural incomes. In order to do so, emphasis must be placed on reducing the vulnerability of Indian agriculture to weather-related shocks through a much more intensive effort at drought-proofing, especially the rain-fed areas.

Table 2.17
Poverty Projection for 2006-07

S.No.	States/UTs	Rural		Urban		Combined	
		%age of Poor	No. of Poor (lakh)	%age of Poor	No. of Poor (lakh)	%age of Poor	No. of Poor (lakh)
1.	Andhra Pradesh	4.58	26.97	18.99	41.75	8.49	68.72
2.	Arunachal Pradesh	37.89	3.54	4.48	0.14	29.33	3.68
3.	Assam	37.89	95.36	4.48	1.78	33.33	97.14
4.	Bihar	44.81	482.16	32.69	54.74	43.18	536.91
5.	Goa	2.00	0.13	2.00	0.16	2.00	0.29
6.	Gujarat	2.00	6.88	2.00	4.38	2.00	11.25
7.	Haryana	2.00	3.30	2.00	1.51	2.00	4.81
8.	Himachal Pradesh	2.00	1.18	2.00	0.14	2.00	1.32
9.	Jammu & Kashmir	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
10.	Karnataka	7.77	28.66	8.00	16.34	7.85	45.00
11.	Kerala	1.63	4.03	9.34	8.01	3.61	12.04
12.	Madhya Pradesh	28.73	192.07	31.77	74.46	29.52	266.54
13.	Maharashtra	16.96	101.61	15.20	72.68	16.18	174.30
14.	Manipur	37.89	8.10	4.48	0.27	30.52	8.37
15.	Meghalaya	37.89	7.99	4.48	0.24	31.14	8.23
16.	Mizoram	37.89	1.88	4.48	0.23	20.76	2.12
17.	Nagaland	37.89	8.01	4.48	0.21	31.86	8.22
18.	Orissa	41.72	139.12	37.46	23.57	41.04	162.69
19.	Punjab	2.00	3.40	2.00	1.95	2.00	5.35
20.	Rajasthan	11.09	54.41	15.42	23.44	12.11	77.86
21.	Sikkim	37.89	2.08	4.48	0.03	33.78	2.12
22.	Tamil Nadu	3.68	12.46	9.64	31.61	6.61	44.07
23.	Tripura	37.89	10.70	4.48	0.28	31.88	10.98
24.	Uttar Pradesh	24.25	373.16	26.17	111.25	24.67	484.41
25.	West Bengal	21.98	137.53	8.98	22.21	18.30	159.73
26.	A & N Island	3.68	0.10	9.64	0.14	5.82	0.24
27.	Chandigarh	2.00	0.02	2.00	0.19	2.00	0.21
28.	Dadra & Nagar Haveli	2.00	0.04	2.00	0.02	2.00	0.06
29.	Daman & Diu	2.00	0.03	2.00	0.01	2.00	0.04
30.	Delhi	2.00	0.19	2.00	3.18	2.00	3.38
31.	Lakshadweep	1.63	0.01	9.34	0.02	4.59	0.03
32.	Pondicherry	3.68	0.13	9.64	0.70	7.72	0.83
	All India	21.07	1705.26	15.06	495.67	19.34	2200.94

2.71 Strong and sustained growth of private investment is at the heart of the Tenth Plan strategy, and there are a number of issues that have to be addressed in this regard. The first point that needs to be recognised is that the Indian policy and procedural framework continues to be excessively investor-unfriendly. This is applicable as much to informal activities as to the corporate. There are too many hurdles that an entrepreneur has to clear before undertaking any productive activity. Even after doing so, he is not immune to further harassment by various public functionaries. While there is good reason to enforce the laws of the land, this duality of control, which is exercised both at the point of entry and during operations, is completely unnecessary in most instances. Therefore, it is suggested that most rules, regulations and procedures which have to be complied with prior to investment or the entry point, should be scrapped, and greater emphasis placed on post-operation enforcement.

2.72 The corporate sector in India has not shown the kind of dynamism that had been expected of it at the start of the reform process. No doubt the policy and procedural rigidities mentioned above have contributed to this, but it is not a sufficient explanation. The growth dynamics of private corporate investment in India, as assessed by the Planning Commission, suggests that it is driven more by internal resource accruals than by any other factor. Perhaps this is a reflection of the desire of Indian corporate promoters not to dilute ownership control, even if it involves loss of opportunities. This lack of entrepreneurial dynamism is most disturbing, especially at a time when the government is in the process of privatising most public sector enterprises. It should be remembered that in many of the areas where the public sector dominated, non-corporate entities will simply not be able to shoulder the burden of creating new capacities, and the onus will have to be on the corporates. If the corporate sector does not fill the breach adequately, the economy runs the risk of serious imbalances emerging in certain key industries. Of course, with greater trade openness, this will not necessarily impede the growth of down-stream industries, since imports can bridge the difference between supply and demand, but valuable opportunities may be lost.

2.73 The projections made for the Tenth Plan on the basis of the past behaviour of the corporate sector suggest that unless steps are taken, private investment demand will fall significantly short of the target requirements. Removal of hurdles to the investment activity is clearly a crucial step, and this would have to be done within the first two years of the Tenth Plan, if it is to have the desired effect within the Plan period. Changes in labour laws too are likely to help in imparting more dynamism to this sector. It is equally important to realise that some of the lack of corporate dynamism, especially in recent years, can be traced to the huge excess capacities that exist in a number of industries. The principal responsibility for reducing this excess capacity through increased aggregate demand during the first two years of the Plan rests with the government, which will have to engage in an aggressive fiscal policy stance.

2.74 Another method of overcoming the weaknesses observed in corporate investment behaviour, primarily as a complementary measure, would be to encourage foreign direct investment (FDI), especially in those areas for which Indian corporates have shown little appetite. Indeed, it is suggested that, in the current context, the role of FDI in boosting corporate investment demand is probably far more important than its role as a support to balance of payments. This change should get reflected in the approach taken to FDI.

2.75 As far as the private unincorporated sector is concerned, there is fortunately no lack of entrepreneurial dynamism. This sector has played a key role in keeping the growth rate of the economy up when both public and corporate investments were stagnating. There are two important points that need to be made in the context of encouraging this sector to grow even faster, other than the general point made regarding policy and procedural barriers to entry. First, the principal hurdle in expansion of the investment activity in this sector lies in its access to investible resources, especially from the formal financial sector institutions. The availability of long-term funds has always been a problem, and recourse has been taken to funds raised from the informal financial institutions. In recent years, even access to short-term bank finance has become problematic as commercial

banks have turned excessively risk-sensitive and the brunt of this has fallen on the non-corporates. The approach proposed to address this problem has been given in some detail later in this chapter.

2.76 The second issue relates to the nature of competition faced by this sector. There is a common perception that the main threat to the non-corporate sector comes from the corporates. While this may be true in some cases, it is equally true that a major vehicle for expanding the small-scale sector is ancillarisation by the corporates. There are policy hurdles in expanding the scope of ancillarisation, which have been mentioned before. These need to be corrected expeditiously. More importantly, it is suggested that the real barriers to entry for new small-scale entrepreneurs are the existing small-scale producers. Since the small-scale units generally address a relatively small localised market, they are much more sensitive to the emergence of new competitors than the corporates. As a result, incumbent small firms tend to protect their turfs much more aggressively. The solution to this problem would be through an evolutionary process, whereby existing small firms grow into medium and eventually large firms, vacating space for new entrepreneurs. Unfortunately, in India this process is severely retarded because of the nature of policy protection given to small units, which prevents them from graduating without incurring heavy costs. This is one of the main reasons why it is proposed that the entire policy framework for small units should be thoroughly overhauled. The policy must recognise that dynamism involves both the growth of existing firms and emergence of new ones.

2.77 The importance of public investment, both as a component of aggregate demand and as a facilitator of private investment, has already been discussed. There are, however, serious concerns regarding the ability of the government to carry out public investment in the manner envisaged in the Tenth Plan. Insofar as the Centre is concerned, the principal vehicles for undertaking public investment were the central public sector enterprises. These not only generated their own resources through internal accruals and market borrowings, but were also conduits through which budgetary resources were transformed into

investment. With the commencement of the disinvestment and privatisation process, both the ability and the willingness of these enterprises to undertake investment activities has reduced considerably. The net result is a situation where not only are budgetary resources not utilised to create new capacity, even the internal accruals are being kept in liquid form and not put into productive use. This is an inevitable consequence of the disinvestment process, and should not be taken to imply that the process should be either stopped or retarded. On the contrary, the logic of the reform process demands that the pace of disinvestment be stepped up so that the currently idle resources can be used to create productive capacities, even if it is by the new private ownership.

2.78 The main problem, however, lies in the fact that the Central Government has not yet created sufficient alternative institutions through which public investment can be made, especially in the infrastructure sectors. The existing central public institutions, which are actively carrying out investment, have physical limitations on their ability to expand their investment programmes. It is apprehended that unless new institutional capacities are created in the appropriate areas, it may not be possible for the Centre to carry out the public investment programme even if the financial resources for doing so are available.

2.79 By and large, the institutional capacity of State Governments to undertake public investment today is better than that of the Centre. Although many of these institutions can improve their functioning quite significantly through better governance systems, most of them are limited in their activities by the availability of resources. As a result, the overall level of public investment in the country may be held back by a mismatch between the availability of resources and the availability of institutional capacity. The Central Government is likely to have a sufficiency of resources and a lack of institutions, whereas the position of the State Governments would be exactly the reverse. In recognition of this reality, the nature of the relationship between the Centre and States will have to undergo a change, with the Centre playing a progressively more important role in the funding of what are essentially State level public investments.

The modalities of this change would need to be worked out expeditiously so that unnecessary friction between these two arms of the Government does not take place.

2.80 There is, however, one particular area of the institutional capacity of the State Governments which is a cause for worry. The Tenth Plan envisages not only the use of its financial resources but also its food stocks for augmenting investment in rural infrastructure. The Food for Work Programme is, therefore, being viewed not only as a device for bringing relief to disaster affected areas, but also as a major instrument of public investment. It is also central to the Plan for generating additional employment, especially for landless labour. Unfortunately, the public work structure in many State Governments have more or less ceased to undertake public work programmes directly. Most of them are today no better than contract awarding organisations. The success of the Food for Work Programme and of the Rural Employment Generation Programmes hinge critically upon revitalising the public work systems at the State level so that its traditional functions of design and implementing rural public works directly is restored. Without this, it is feared that the desired level of public investment may not materialise since it would get confined only to financial resources available with the Government.

2.81 Finally, in view of the importance of public investment in attaining the Tenth Plan growth target, some mention needs to be made of the conduct of macroeconomic policy, particularly as it relates to the expenditure side. It must be realised that public expenditure on goods and services, especially public investment, is the only component of aggregate demand that is not behaviourally linked to the macroeconomic variables. These are policy decisions, and are therefore based on an appreciation of the role that such expenditures play in generating and maintaining the growth momentum of the economy. It therefore provides a degree of stability to the economic system and forms an important component of generating the required degree of confidence among private investors. It is, thus, essential that the public investment programme, once determined, should be adhered to unless there are compelling reasons

to do otherwise. The Five Year Plans were designed essentially to subserve this objective, but over the years the significant changes that are brought about through the Annual Plans has made the process much less effective. In view of the proposed acceleration in growth during the Tenth Plan, and the importance of public investment in the process, a greater degree of commitment in maintaining the required levels of public investment is essential. For this reason, a detailed analysis of the likely fiscal position of the government during the Tenth Plan period is carried out in the next section in order to ensure that the public investment needs can be met with fiscal sustainability.

FISCAL BALANCES AND SUSTAINABILITY

2.82 Attainment of the projected growth target of such a high magnitude, which technically rests on an investment parameter of 28.4 percent, would require an equally high level of public investment, comprising investment by Central government, State governments and Public Sector Undertakings (PSUs). The declining trend in the share of public sector in Gross Domestic Capital Formation, as experienced in the past decade, would have to be reversed to reach a level of 9.9 per cent of GDP by end of the tenth plan from the present level of about 7.3 per cent. While the magnitude of public investment is crucial in bringing the desirable acceleration in the economic growth, the macro economic impact of these investments would depend on the structural pattern of public investment, the extent of utilisation of capacity created through such investment, and reaction of private sector to the fiscal position of the government in terms its expenditure management and revenue collection effort.

2.83 Prudent fiscal management in this context would be to increase the public investment by increasing government savings and internal resources of the public sector. This would imply compression of the consumption expenditure of government and PSUs both at the Centre and the State level, in addition to mobilisation of additional revenue resources. But if the investment is to be resourced by borrowing, i.e. by increased fiscal deficit and extra budgetary resources of the PSUs, then the public sectors' draft on private savings is

going to be substantial, which could result in crowding out of investible resources from more productive use by the private sector. It is possible to offset the crowding out effect of public investment by allocating the resources to more productive use like infrastructure development and capacity building, which would be instrumental in promoting and sustaining private investment at the desirable level. More important than the crowding out effect of government borrowing is its fiscal implication in terms of the outstanding debt position of the Government. The Ninth plan experienced a phenomenal increase in the Government Debt to GDP ratio, despite a decline in the public sector share in aggregate investment. The combined debt to GDP ratio of the Centre and State governments increased to 72.5 per cent in 2002, from a little above 56 per cent in 1997. A fresh effort to provide a substantial step up to the public investment could negate the very rationale of fiscal consolidation. This needs to be considered carefully in the context of an accelerated growth target for the Tenth plan.

2.84 At present, the public sector claims a substantial proportion of private savings to finance not only its investment requirement, but a sizable part of its consumption expenditure. To understand the nature and extent of the public sectors' draft

on private savings during the Ninth plan, it would be useful to examine the nature and composition of the gross fiscal deficit of government, which is the single major component of such draft, extra budgetary resources (EBR) of PSUs and Government's disinvestments being the other two constituents of the public sector draft. Table 2.18 presents different measures of fiscal deficit realised during the Ninth plan. As can be seen, gross fiscal deficit of both the Centre and the States have deteriorated substantially during this period with a 3 percentage point increase in the combined fiscal deficit. The difference between the fiscal deficit and the revenue deficit is the approximate measure of government investment, which remained at an annual average of 3 per cent of GDP during the Ninth plan, despite 3 percentage point increase in the fiscal deficit of both Centre and States. The entire increase in the government borrowing as reflected in the burgeoning fiscal deficit, is explained by the increase in revenue deficit of the same magnitude, which has catered to the consumption requirement of the Government.

2.85 As may be observed, both the Centre and the States have witnessed significant increase in their revenue deficit during the Ninth plan. The impact of the fiscal consolidation effort, initiated in

Table 2.18
Measures of Deficit of the Government

(as percent of GDP)

	1996-97	1997-98	1998-99	1999-2000	2000-01*	2001-02**
1 Combined Centre and States:						
(a) Gross Fiscal Deficit	6.8	7.7	9.3	10.1	10.2	10.0
(b) Net Fiscal Deficit	5.8	6.7	8.4	9.0	9.1	9.1
(b) Revenue Deficit	3.6	4.1	6.4	6.3	6.4	6.3
2 Centre:						
(a) Gross Fiscal Deficit	4.1	4.8	5.1	5.4	5.7	5.9
(b) Revenue Deficit	2.4	3.1	3.8	3.5	3.9	4.2
3 States:						
(a) Gross Fiscal Deficit	2.7	2.8	4.2	4.7	4.5	4.1
(b) Revenue Deficit	1.2	1.1	2.5	2.8	2.5	2.1

Note : Net Fiscal Deficit is calculated by adding gross fiscal deficit of both Centre and States and subtracting there from the gross loans from centre to States and UTs

* RE for States, provisional Accounts for Centre

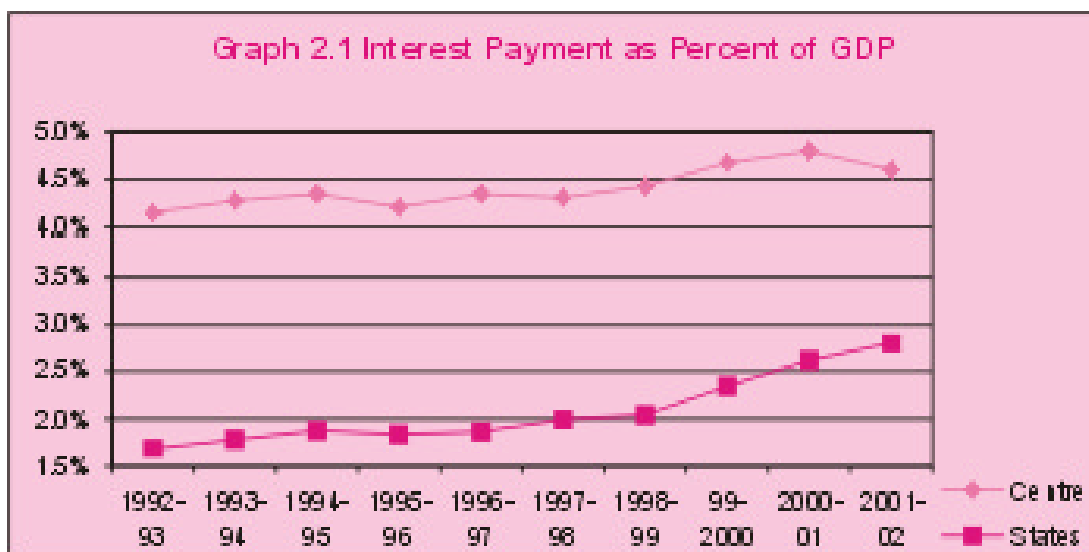
** BE for States and provisional Accounts for Centre

the early 1990s, was reflected in compression of public investment rather than improving the deficit position as was expected. The initiatives to curtail Government expenditure led to a shortfall in public sectors' contribution to gross domestic capital formation, since the compulsion to maintain the publicly provided services in the social sector made the Government consumption expenditure rigid downward. The position got further accentuated due to absence of the revenue neutral impact of tax reform measures introduced during the last decade. It needs to be emphasised that the implementation of the Fifth Central Pay Commission (FCPC) award in the first three years of the Ninth Plan and its implications in terms of higher fiscal deficit and resultant higher interest burden on the government in the subsequent years, contributed significantly to this sudden upsurge in the revenue deficit from the base year level of the plan.

2.86 The interest burden, estimated as percentage of GDP, has increased steadily during the Eighth Plan and the first four years of the Ninth plan for the Centre. In the terminal year of the Ninth Plan, the positive impact of the reduction in interest rate is evidenced for the Centre as shown in Graph 2.1. The interest liability of the Centre has increased at an annual average rate of about 12 per cent during the Ninth plan against a 17.5 per cent annual increase during the Eighth plan. Thus, interest payment to GDP ratio for the Centre moved up from 4.3 per cent by the end of Eighth Plan to 4.6 per cent by end of Ninth Plan, reaching the peak at 4.8 per cent in the year 2000-01. All the States together

seem to have suffered much more on account of interest payment liability, which has increased at an annual average rate of about 15 per cent and 20 per cent during the Eighth and Ninth Five Year Plans respectively. The interest burden has steadily increased for the States from about 1.7 per cent of GDP in the beginning of the Eighth Plan to 2.8 per cent by the end of the Ninth plan. In fact, the maximum increase in the interest burden for the States is evidenced during the Ninth plan.

2.87 The increase in the interest liability of the government in the past decade can be explained by the existence of high rates of interest as well as huge debt stock of the government in the past, caused by an uninterrupted increase in the fiscal deficit. The impact of successive reduction in the nominal interest rate during the last two years of the Ninth Plan has started showing results for the Centre, but has been more than offset by the accumulated high cost debt of the past for the States. To understand this problem better, it may be interesting to examine the average rate of interest paid on Government outstanding liability measured by the implicit interest rate, which is different from the prevailing rate of interest. Graph 2.2 presents the implicit rate of interest for the Centre and the States. For the Centre, the rate has increased from 8.8 per cent in the year 1992-93 to 9.8 per cent in the year 1996-97. The increasing trend in the implicit interest rate continues for the Centre during the first three years of the Ninth Plan and crosses 10 per cent. The last two years of the Plan witnesses a downtrend in the implicit interest rate for the

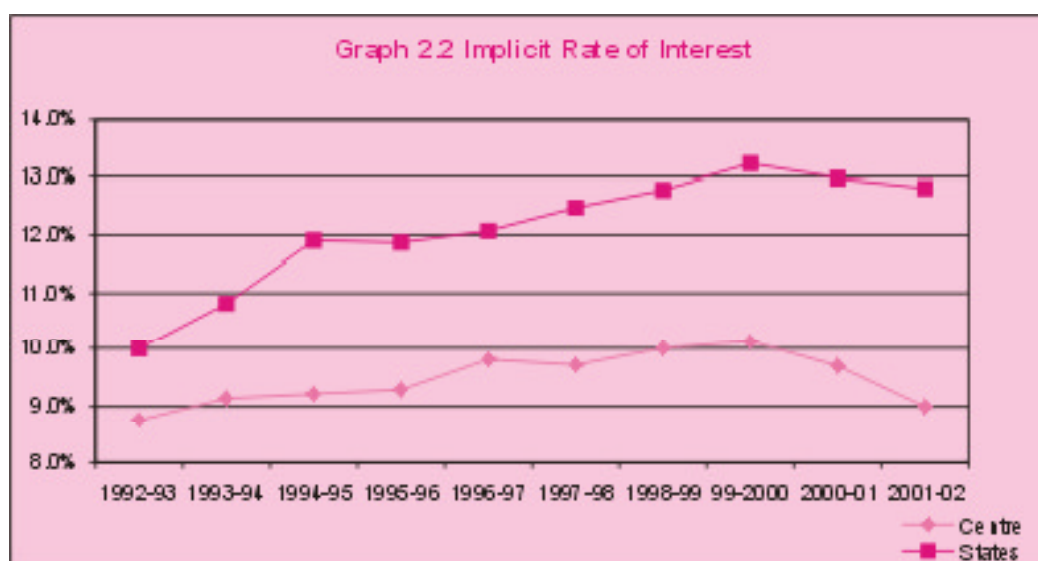


Centre, reflecting the impact of the reduction in the nominal interest rate, which is market determined at present and has come down substantially. However, it is evident that the increase in the implicit interest rate has been phenomenal for the States during this period. Starting from a figure of about 10 per cent in the beginning of the Eighth Plan, the average rate of interest paid by the States on their outstanding liability reached a level of more than 13 per cent during the Ninth Plan. The rate has come down to marginally less than 13 per cent for the States in the last year of the Ninth Plan.

2.88 One interesting point to be noted here is the difference between the implicit interest rates applied to Centre and the States. It is evident that the States are borrowing at an interest rate, which is much higher than the interest rate paid by the Centre. The reasons for this differential interest rate payment by the two agencies of government could be: (a) the varying conditions of borrowing by two levels of government, (b) the exchange risk coverage by the Central government and (c) difference in the composition of the debt stock. Although the premise under which the differential interest rate operates is appreciated, the magnitude of this difference merits consideration. As can be seen, the gap between implicit interest rate paid by the Centre and the States is quite high and has steadily increased to reach about 3.8 percentage points by the end of Ninth Plan, from a level of about 1.2 percentage points in the beginning of the Eighth Plan. This would have implications for future

interest liability of the States. Given the requirement of meeting investment obligations in the Tenth Plan, interest liability of the States would be influenced by: (a) the future interest rate; (b) capacity of State Governments to contain fiscal deficit at a manageable level; (c) the structure and composition of the State Governments' new borrowings; and (d) the extent to which the State Governments would be in a position to swap the past high cost debt with the currently available low cost borrowing from market. Going by the current trend in the financial sector reforms, it is not likely that the downturn in interest rate would be reversed. This is one aspect, which would influence the government fiscal position positively, and would contribute towards gradual convergence of the deficit to a level which is sustainable.

2.89 Before detailing on the issue of fiscal corrections that would be required during the Tenth Plan, it would be appropriate to assess the resource requirements of the government to finance the Plan. The size of plan has to be determined by two compelling factors: (a) the necessity to provide substantial step-up to public investment, which is essential for maintaining the macroeconomic balance between the government fiscal actions and target growth rate of the economy; and (b) the need to carry out fiscal correction by compressing governments' unproductive consumption expenditure and increasing its revenue earnings, in order to contain the revenue deficit at a level at which the government can generate savings to



finance a portion of its investment demand. The resource flows required to meet the desired level of investment and the allocation of investment responsibilities between various agents of the governments are presented in Table 2.19. It may be observed that the governments' commitment to meet the public investment target would be significant.

2.90 State Governments would require to bear about 29 per cent of the total public investment, the

Centre having only a 15 per cent share on the investment outlay of the public sector. The inclusion of Central Government support to PSUs would increase the central share in public investment to 21 per cent. The public sector undertakings as a whole would have a lower share than in the past due to ongoing disinvestments and privatisation in this sector. Since State governments have to play a predominant role in making investment decisions,

Table 2.19
Structure of Outlays and Resources of the Public Sector

(Tenth Plan target at 2001-02 prices)

	Rs. Crore	Per cent of GDP
Centre		
Central Plan Outlay	706000	4.92
of which		
(a) Support to State Plans	300265	2.09
(b) Support to CPSEs	76250	0.53
(c) Support to Ministries	329485	2.29
(l) Investment	181217	1.26
(ii) Current Outlay	148268	1.03
Financed by:		
(a) Borrowings	678574	4.72
(b) Other Resources	27426	0.19
States		
State Plan Outlay	588325	4.10
of which		
(l) Investment	357096	2.49
(ii) Current Outlay	231229	1.61
Financed by:		
(a) Central Support	300265	2.09
(b) Borrowings	300951	2.10
(c) Other Resources	-12891	-0.09
PSEs:		
Outlay/Investment	674490	4.70
Financed by:		
(a) Central Support	76250	0.53
(b) Savings (IR)	401240	2.79
(c) Borrowings (EBR)	197000	1.37
Total Budgetary Resources	994060	6.92
Total Investment : Centre + State + PSEs	1212802	8.44

Notes:

- (1) All Union Territories (UTs) are clubbed with the States.
- (2) A part of the investment outlay of the States will be towards budgetary support to State PSEs for investment purposes. Since this quantum is not yet known, it is being carried in the State budgets.
- (3) The 'borrowings' of PSEs include all market related funds including new equity issues, if any.
- (4) 'Other resources' of the Centre and the States include balance on current revenues (BCR), miscellaneous capital receipts (MCR) and external grants, less non-Plan capital expenditures
- (5) PSEs includes both Central PSEs and State PSEs

particularly in infrastructure development, it is important to ensure that the States attain sufficient efficiency gains from investment.

2.91 The budgetary resources required to support the public investment plan, estimated at Rs. 9,94,060 crore at constant 2001-02 prices, are to be financed almost entirely by borrowing. The net borrowing requirement of the Centre is estimated to be Rs.6,78,574 crore during the five-year period, implying an average borrowing of Rs.1,35,715 crore annually. This compares well with the Centre's base year borrowing of Rs.1,36,211 crore. States' own borrowings requirements are estimated at Rs.60,190 crore on an average per year at 2001-02 prices, in addition to loan from the Centre obtained by States as a part of Central support to States for Plans. It has been envisaged that during the Tenth Plan, budgetary support to States' Plan from the Centre would constitute about 42.5 per cent of the Gross Budgetary Support to Central Plan, estimated at Rs.7,06,000 crore at 2001-02 prices. The grant and loan component of the Central support to States' plan are contemplated to be in the ratio of 50:50. After netting out the borrowing of States from Centre, the government as a whole would need to raise about 6.8 per cent of GDP as borrowing during the Tenth Plan, as compared to 9.1 per cent in the year 2001-02. This projection of Government borrowing is based on the premise that there would be considerable improvement in the fiscal discipline to be followed by all the government agencies. The borrowings may exceed the target level, unless there is significant improvement in the government savings.

2.92 Throughout the Ninth Plan, government savings have not only remained negative but also exhibited a declining trend. The measures to bring about fiscal discipline during the Tenth Plan would primarily aim at arresting the declining trend in government savings by containing the revenue deficit. The government savings, theoretically, are directly linked to the combined revenue deficit of the Central and State Governments, although the correspondence is not exact. The reason for the discrepancy between the two being the non-uniformity in classification and definition used by the two authorities namely Central Statistical Organisation, which measures the government

savings by using an economic classification of government expenditure, and the government budget departments which provide the measure for revenue deficit by using an accounting classification. In the absence of an exact relationship between revenue deficit and Government savings, it is possible to derive the measure for government savings from the revenue deficit through the observed relationship between the two.

2.93 It need hardly be reiterated that the ideal fiscal position would be to finance government investment by increasing government savings to the maximum possible extent. But going by the past trend, it does not seem likely in the medium term, to have surplus realisation on the revenue account of the government. Hence, investment has to primarily rely on borrowing, a sizeable part of which would still continue to finance Government consumption expenditure. It is important in this context to understand the long-term implications of continued dependence on borrowing. Conventional wisdom justifies the borrowing so long as the return from investment financed by such borrowing exceeds the cost of borrowing. But, India's public finance inherits the consequence of fiscal mismanagement in the past, as reflected in the already existing high debt/GDP ratio. Table 2.20 presents outstanding debt position of the Centre and the States since the year 1992-93.

2.94 As may be seen, both the Centre and the States experienced a declining trend in the outstanding debt to GDP ratio during the Eighth Five Year Plan. However, during the Ninth Plan the debt to GDP ratio increased very sharply by more than 8 percentage points for the Centre and by the same magnitude for the States. The combined outstanding liability of the Centre and the States during the Ninth Plan increased from 56.3 per cent of GDP to 72.6 per cent of GDP. An analysis of the debt position of the Centre highlights an increasing dependence of the Central Government on domestic borrowing, which constitutes more than 95 per cent of the total debt liability of the Centre. The share of external debt in the total Central Government borrowing seems to have been declining over time, from 5.6 per cent of GDP in the year 1992-93 to 2.6 per cent in the year 2001-02.

Table 2.20
DEBT POSITION OF THE CENTRE AND THE STATES

(Rs. Crore)

	Amount outstanding at the end of March									
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	99-2000	2000-01 (RE)	2001-02 (BE)
A. Centre (1+2)	401924	477968	538610	606232	675676	778294	891806	1021029	1163635	1315949
(as % of GDP)	53.7	55.6	53.2	51.0	49.4	51.1	50.7	52.9	55.7	57.5
1. Internal liabilities (a+b)	359655	430623	487682	554983	621437	722962	834552	962592	1105207	1256356
(as % of GDP)	48.1	50.1	48.2	46.7	45.4	47.5	47.5	49.9	52.9	54.9
2. External debt*	42269	47345	50928	51249	54239	55332	57254	58437	58428	59593
(as % of GDP)	5.6	5.5	5.0	4.3	4.0	3.6	3.3	3.0	2.8	2.6
B. States (1+2)	142178	160076	184528	212227	243526	281207	341978	420133	504247	591831
(as % of GDP)	19.0	18.6	18.2	17.9	17.8	18.5	19.4	21.8	24.1	25.9
1. Loans from Central Govt	92412	101945	116705	131506	149053	172729	203786	216194	230195	247030
(as % of GDP)	12.3	11.9	11.5	11.1	10.9	11.3	11.6	11.2	11.0	10.8
2. Other Loans	49766	58131	67823	80721	94473	108478	138192	203939	274052	344801
(as % of GDP)	6.6	6.8	6.7	6.8	6.9	7.1	7.9	10.6	13.1	15.1
of which NSSF								26416	59229	92870
(as % of GDP)								1.4	2.8	4.1
Combined Liability	451690	536099	606433	686953	770149	886772	1029998	1224968	1437687	1660750
(as % of GDP)	60.4	62.4	59.9	57.8	56.3	58.2	58.6	63.5	68.9	72.6

Note : 1. Outstanding external debt has been converted into rupees at historical exchange rate
2. Combined liability is net of inter-governmental loan.

Source : Indian Public Finance Statistics, Ministry of Finance, Government of India

It is worth mentioning here that the external debt component of the Government's borrowing has been understated to some extent, since the conversion of the past debt stock under this head from million dollars to rupees crore has been based on the historical exchange rate. However, the repayment of such debt would have to be made after conversion at the current exchange rate. It would, therefore, be appropriate to assess the external borrowing liability of the Government at the current exchange rate. Thus, a realistic assessment of the external debt component of the total government liability evaluated at current exchange rate, would push up the ratio to more than 8.5 per cent of GDP, instead of 2.6 percent as reported in the table. The overall debt position of the Central Government would also be pushed up by an equal magnitude.

2.95 Composition of the past debt stock of the State Governments indicates a gradual reduction in the dependency of the States on the Centre for their borrowing requirements during the Eighth Plan. During the Ninth Plan, the share of the Centre in the total debt stock of the States had increased in the first two years and started declining thereafter. This decline during the last three years of the Ninth Plan could be explained by the exclusion of the States' borrowing against small savings from the non-plan account of the Central Government budget. Since the year 1999-2000 the States borrowings from the Centre mostly constitutes the loan component of the normal Central assistance to States under Plan. It is evident that the Central Government still remains the major creditor for the States, accounting for a share of more than 40 per cent of the total debt stock of the State Governments.

2.96 The issue of long-term fiscal sustainability has been examined against the backdrop of the existing high debt to GDP ratio. Fiscal sustainability, which measures the capacity of the Government to service and sustain its debt burden comprising the debt stock of the past and the new borrowings, has been estimated by drawing upon the standard formulation of Joshi & Little. The approach aims at deriving the level of fiscal deficit as a percentage of GDP, which would stabilise the government debt to GDP ratio at the existing level. The modification applied to the standard formulation relates to the assumption on interest rate. It is generally assumed that the interest rate applied to the Government borrowing remains stable in the medium term, so that no distinction is made between past debt stock and new borrowings of Government, so far as interest payment is concerned. In India, however, there has been a significant difference between the average interest rate paid on existing Government debt, which was about 9.9 per cent in 2000-01 for the Central Government and has come down to 9 per cent in the year 2001-02, which is the maximum rate of interest that the Centre would

pay on new borrowing. The average interest rate paid by the State Governments on existing debt is about 12.8 per cent in the year 2001-02. As regards new borrowings, the rate of interest applicable to borrowings of States from the Centre is 11.5 per cent in the year 2002-03, and the cost of borrowing from the market is even lower.

2.97 Table 2.21 presents the estimates of sustainable fiscal deficit for the Centre and States during the Tenth Five Year Plan. In deriving the values of sustainable fiscal deficit of Government, the following assumptions have been made. First, the nominal interest rate on the new debt of the Central Government has been assumed to be in the range of 8.5 per cent to 9.0 per cent during the Tenth Plan. This would imply a real interest rate of 3.5 to 4 per cent, if the rate of inflation can be contained at 5 per cent on an average annually. Second, the nominal interest rate for States have been assumed to be about 2 percentage points higher than that for the Centre. Third, the annual rate of repayment of the existing debt has been assumed to be 14.3 per cent for the Centre and 8.3 per cent for the States.

Table 2.21
Fiscal Sustainability of the Tenth Plan

(Gross Fiscal Deficit (GFD) as percentage of GDP)

Sustainable Fiscal Deficit	Combined	Centre	States
1. Scenario 1	8.6	5.2 (7.1)	3.4
2. Scenario 2	7.4	4.4 (6.2)	3.0
Fiscal Deficit (2001-02)	9.3	4.9 (5.9)	4.5
<p>NOTES: (1) The standard analysis defines fiscal sustainability as the level of fiscal deficit at which the Debt/GDP ratio remains constant. The relevant formula is:</p> $f = b.(g + I - r_n - a.(r_n - r_e)) + \text{int}$, where: f = fiscal deficit/GDP ratio b = total government debt/GDP ratio g = growth rate of GDP I = inflation rate a = rate of repayment of existing debt r_e = interest rate on existing debt r_n = interest rate on new debt int = interest payment on public debt/GDP ratio <p>(2) Scenario 1 assumes GDP growth rate at the Tenth Plan target of 8 per cent Scenario 2 assumes GDP growth rate of 6.5 per cent</p> <p>(3) The GFD of the Centre is defined as net of the loans and advances to the States. Figures in brackets are the corresponding Gross Fiscal Deficits.</p>			

2.98 The sustainable fiscal deficit, as presented in the table, has a direct relationship with the country's economic growth, and inverse relationship with the rate of interest. In other words, higher growth rate in the gross domestic product would sustain higher fiscal deficit *ceteris paribus*. It can be noted that the Centre and States together are experiencing a level of fiscal deficit at present, which is not at all sustainable even under an accelerated growth scenario. While the fiscal deficit position of the Centre seems to be within the sustainable limit, the States are operating at a level of fiscal deficit, which is about 1 percentage point higher than the sustainable limit. Thus, it is apparent from the fiscal sustainability analysis that the fiscal correction effort would need to be much more intense at the State level than that at the Centre. It is worth mentioning here that a lower than targeted growth would put higher pressure on the Government finances, since the sustainable fiscal deficit would be much lower as indicated under Scenario-2.

2.99 There are two issues worth mentioning in the context of the study on fiscal sustainability. First, The estimation of sustainable fiscal deficit is based on the assumption of a steady state growth path for the economy. But, the growth target contemplated for the Tenth Five Year Plan is not based on a steady state path. The implicit assumption in the growth projection, as has been discussed earlier, is that the growth rate would gradually accelerate, and would reach more than 9 per cent by the end of Tenth Plan. It may, therefore, be possible that even if the sustainable fiscal deficit is maintained, the debt to GDP ratio would go up in the first three years of the Tenth Plan and then would start converging to the base level ratio. Second, maintaining the debt liability of the Government at the base year level, which has already reached a very high proportion, is not a desirable fiscal position. Although a normative assessment of the optimum debt to GDP ratio has not been attempted, it would be ideal to bring down the ratio to 50 per cent for the Centre and 25 per cent for the States. The effort of the Government in the long run should therefore be to contain the fiscal deficit at a level which is below the ceiling imposed by the

sustainability criteria for the Tenth Plan. It may be argued that the need to reduce the fiscal numbers to less than the prescribed ceiling may hinder the attainment of the target growth by disturbing the saving-investment balance. In this context it would be useful to examine the projected fiscal balance position of both the Centre and the State Governments, which have been arrived at under the macroeconomic consistency framework.

2.100 Table 2.22 presents the combined deficit position of the Centre and the States for the Tenth Five Year Plan. The fiscal compulsion of supporting higher public investment during the Tenth Plan is revealed by an overall fiscal deficit position of 6.8 per cent of GDP for the Centre and the States combined. The gross fiscal deficits, separately for the Centre and the States,

Table 2.22
Tenth Plan Deficits and Savings of States and Centre

(as a % of GDP)

	Base Year 2001-02	Terminal Year 2006-07	Tenth Plan Average
States			
Gross Fiscal Deficit	4.5	2.2	3.2
Revenue Deficit	2.5	0.2	1.3
Centre			
Gross Fiscal Deficit	5.9	4.3	4.7
Revenue Deficit	4.2	2.2	2.9
Combined Centre and States			
Gross Fiscal Deficit	10.4	6.5	7.9
Net Fiscal Deficit	9.3	5.4	6.8
Revenue Deficit	6.7	2.4	4.2
Government Savings	-4.7	-0.5	-2.4
IR (CPSUs & SLPEs)	3.0	2.6	2.8
Pub. Savings	-1.7	2.1	0.4

Note : Net Fiscal Deficit is calculated by adding gross fiscal deficit of both Centre and States and subtracting there from the gross loan from Centre to states.

The measures of deficit for the year 2001-02 for Centre is provisional and for states, estimated by the Planning Commission.

are estimated at 4.7 per cent and 3.2 per cent of GDP on an average respectively. All these projected fiscal numbers are within the sustainable limit. It is important to examine the degree of fiscal correction required by each level of government to achieve the desired fiscal position. The Centre and all the States together would have to cut down their combined fiscal deficits to GDP ratio by more than 4 percentage points during the Tenth Plan. The States would be under pressure to achieve the fiscal consolidation by reducing their fiscal deficit from 4.5 per cent of GDP in the base year to 2.2 per cent in the terminal year of the Tenth Plan, necessitating a 2.3 percentage point decline. The Central Government would require to bring down its fiscal deficit by 1.5 percentage points during the Plan.

2.101 The gross fiscal deficit position of the Government reflects their net borrowing requirement for the Tenth Plan. The entire borrowing does not get translated to investment due to a sizeable deficit on the revenue account. During the Tenth Plan it would be necessary to reduce the revenue deficit of the Government substantially so as to ensure a larger flow of borrowed funds to the Governments' investment expenditure. Accordingly, the combined revenue deficit would need to come down by 4 percentage points from the present level of 6.5 per cent to 2.4 per cent by the end of Tenth Plan. This would ensure substantial improvement in Government savings, which would still remain negative during the Tenth Plan, averaging at about (-) 2.4 percent of GDP. In brief, any effort to realise the desired level of government savings will require tremendous pressure on the government to compress the revenue expenditure to the bare minimum level.

2.102 However, the Central Government has instruments available to it, which have not been taken into account in making the above calculations on fiscal sustainability. These instruments lie in the domain of monetary policy, and need to be considered and applied cautiously. Nevertheless, under plausible assumptions of future needs of sterilizing inflows of foreign exchange to prevent exchange rate appreciation, an 8 per cent GDP growth target, and without adverse impact on the expected level of inflation, it is likely that around 1.5 per cent of GDP would be available annually in the later years of the Tenth Five Year Plan through monetary measures. To the extent that such

monetary resources would actually be accessed, needs of borrowing would be reduced.

2.103 A comparison of the projected deficits of the government with the fiscal sustainability analysis places the Central Government at a comfortable position. The Central Government would be in a position to bring down its indebtedness by the end of Tenth Plan to a manageable level by containing the fiscal deficit at the target level. However, the targeted fiscal deficit for States is only marginally lower than the sustainable limit. Thus, even if all the States together contain the deficit at the target level, their outstanding liability would be lowered only marginally, which may still be unmanageable. Further, the States together, have accumulated a debt stock of more than 25 per cent of GDP by the end of the Ninth plan, with wide variation of this ratio across the States. Hence, any improvement in the overall fiscal position of all the States taken together would only be a partial success story. It is important to note here that the fiscal position of all the States assessed together conceals more than what it reveals. The inter-State variation in the governments' fiscal position is enormous. Therefore, it would be useful to look into the fiscal sustainability position of individual States separately.

2.104 The State-wise sustainable fiscal deficit, as indicated in Table 2.23, ranges from about 1.7 per cent of Gross State Domestic Product for Delhi to more than 10 per cent for Sikkim. It is interesting to note here that higher level of sustainable fiscal deficit for a State is associated with higher indebtedness of that State in the base year. Thus, the State's future fiscal consolidation effort would be influenced to a great extent by their present indebtedness. States with very high debt/GSDP ratio would have to contain their fiscal deficit at a level much below their prescribed sustainable limit, so as to bring down their respective outstanding liability to a manageable level. In the earlier paragraph a manageable debt to GDP ratio for the States has been referred to be around 25 per cent. It would, therefore, be essential to look into the extent to which the existing debt to GSDP ratio of individual States exceeds the benchmark of 25 per cent or falls short of it. In case of States where the existing debt ratio is substantially higher than the benchmark, the gross fiscal deficit of those States would require to be reduced by equal proportion. The States enjoying a debt ratio lower than the

Table 2.23
State-wise Sustainable Fiscal deficit for Tenth Plan
 (as % of GSDP)

	Debt/ GSDP 2001-02	Sustainable Fiscal Deficit	GFD 2001-02
1 Andhra Pradesh	30.7	3.8	6.0
2 Arunachal Pradesh	69.8	8.1	8.2
3 Assam	36.9	4.3	7.9
4 Bihar	46.8	4.7	5.5
5 Delhi	11.9	1.9	1.2
6 Goa	28.1	3.8	4.4
7 Gujarat	30.6	4.5	7.5
8 Haryana	27.1	3.7	4.1
9 H. P.	75.5	11.0	14.5
10 J&K	58.5	6.1	4.6
11 Karnataka	23.7	3.5	4.3
12 Kerala	34.1	3.2	4.2
13 M.P.	27.2	3.2	4.0
14 Maharashtra	18.3	2.6	2.3
15 Manipur	48.3	4.8	7.8
16 Meghalaya	34.2	4.3	9.3
17 Mizoram	83.6	8.3	11.9
18 Nagaland	76.7	7.4	10.1
19 Orissa	58.7	7.5	7.7
20 Punjab	44.2	4.0	6.0
21 Rajasthan	41.4	5.6	5.7
22 Sikkim	76.2	10.5	3.0
23 Tamil Nadu	22.6	2.6	4.0
24 Tripura	53.9	5.3	13.7
25 U.P	36.4	6.9	4.9
26 W.B.	35.7	5.4	6.6

Note: Debt/GSDP ratio stands for the Outstanding liability of State as percent of respective GSDP, which has been estimated for the year 2001-02.

benchmark would have some scope to operate at a level of fiscal deficit higher than the target fixed by the sustainability criteria. However, it would be advisable for these States to contain the deficit at the prescribed sustainable limit for reasons of prudence.

2.105 It is important to mention here that the debt ratio of individual States are over-estimated to some extent due to a data gap in the estimates of GSDP, which is used as denominators for estimating such ratios. The GSDP of individual

States, which are estimated by concerned State Directorates of Economics and Statistics, do not add up to the all India GDP, which is estimated by the CSO. The gap between the two at present is more than 9 per cent of GDP. If this gap is prorated to adjust the GSDP of the individual States, then debt to GSDP ratio of the individual State could come down from the present level.

2.106 The examination of government's fiscal sustainability position as explained highlights the extent of fiscal discipline that would have to be followed by both Centre and the States during the Tenth Plan. After examining the magnitude of fiscal correction required to be undertaken by the Centre and the States, it would be important to analyse the component-wise projection of Government finances for the Tenth Plan and the emerging policy implications. Table 2.24 indicates such projection for the Central Government. As is observed, the budgetary support for Plan under Central government finances increases to 5.4 percent of GDP in the terminal year of the Tenth Plan, the average for the Tenth Plan being estimated at 4.9 per cent of GDP, compared to the base year level of 4.4 percent. This step-up in the gross budget support to Plan under Central Government finances is necessary to support the required government investment expenditure, which is covered under plan finance. To sustain this plan size, it would be essential to cut down the growth of non-plan expenditure of the government, which mostly constitutes the committed liability of the government.

2.107 The single largest component of this committed liability is the interest payment by the government, which is determined by the past debt stock, the fiscal deficit of the previous year, and the past and prevailing interest rates. Following financial sector reform, the interest rate is now market determined and has reached a comfortable level of about 9 per cent for the Central Government. Cost of borrowing in future is expected to decline further, at least by 0.5 percentage point. This is consistent with the steady reduction in government borrowings that is being projected. It is also believed that the rate of growth of private investment, necessary to support 8 per cent growth of GDP, will not put significant upward pressure on interest rates. Containing the interest liability of the government at a sustainable level would, therefore, depend upon the attainment of a manageable fiscal deficit. It

should further be pointed out that, if the assumption of a lower interest rate regime in the Tenth Plan period is realised, then the actual growth of interest payments is likely to be even lower than projected, since some of the relatively high-cost past debts will be replaced by lower-cost borrowings in the future.

2.108 Expenditure to be incurred on defence services has been projected to be maintained at little over 2.5 per cent of the GDP. In the past, this component of expenditure has shown a gradual decline both as a share of non-plan expenditure and as per cent of GDP. Another major component of non-plan expenditure is the pay and allowances of government employees, which has become the central point for discussion in the context of administrative and public expenditure reforms. The estimation of Central Government finances for the Tenth Plan assumes a 5 per cent annual increase in salary head. The implicit assumptions, having policy implications, are: (a) reduction in the strength of Central Government employees by 2 per cent

annually; and (b) not more than 2 per cent annual increase in average basic salary of government employees.

2.109 Other non-plan (ONP) expenditure needs to be contained at the base year level in real terms. The other non-plan expenditure constitutes pension, subsidy, administrative overheads, law, order and justice among others. Within this group it would be necessary to provide importance to law, order and justice. Hence, the Tenth Plan would contemplate some increase in this expenditure in real terms. Our projection indicates that the pension liability of the Central Government would increase faster than 6 per cent per year during the Tenth Plan. Therefore, adjustments would have to be made in the other two components of ONP. Particularly, the expenditure on subsidies has to be reduced substantially. Inclusion of the pension bill of the Central Government employees and expenditure on maintenance of law and order in the ONP head may push this component up marginally. But the

Table 2.24
Tenth Plan- Central Government Finances

(as a % of GDP at current prices)

	Base year 2001-02	Terminal year 2006-07	Average Tenth Plan
Budget Support to Plan	4.4	5.4	4.9
Total Non-Plan	11.3	9.9	10.7
Of which			
Interest payments	4.6	4.0	4.3
Defence	2.5	2.5	2.5
Pay & Allowances	1.3	0.9	1.0
Other Non-Plan	2.9	2.5	2.8
Total Expenditure	15.7	15.3	15.6
Gross Tax (excluding Cess)	8.2	9.9	9.4
Less: Share of States	2.4	2.9	2.7
Net Tax to Centre	5.8	7.4	7.1
Non-tax Revenue	3.0	2.6	2.7
Disinvestment	0.2	0.3	0.4
Total Non-debt receipts	9.7	11.0	10.9
Fiscal Deficit (new method)	5.9	4.3	4.7
Revenue deficit	4.2	2.2	2.9

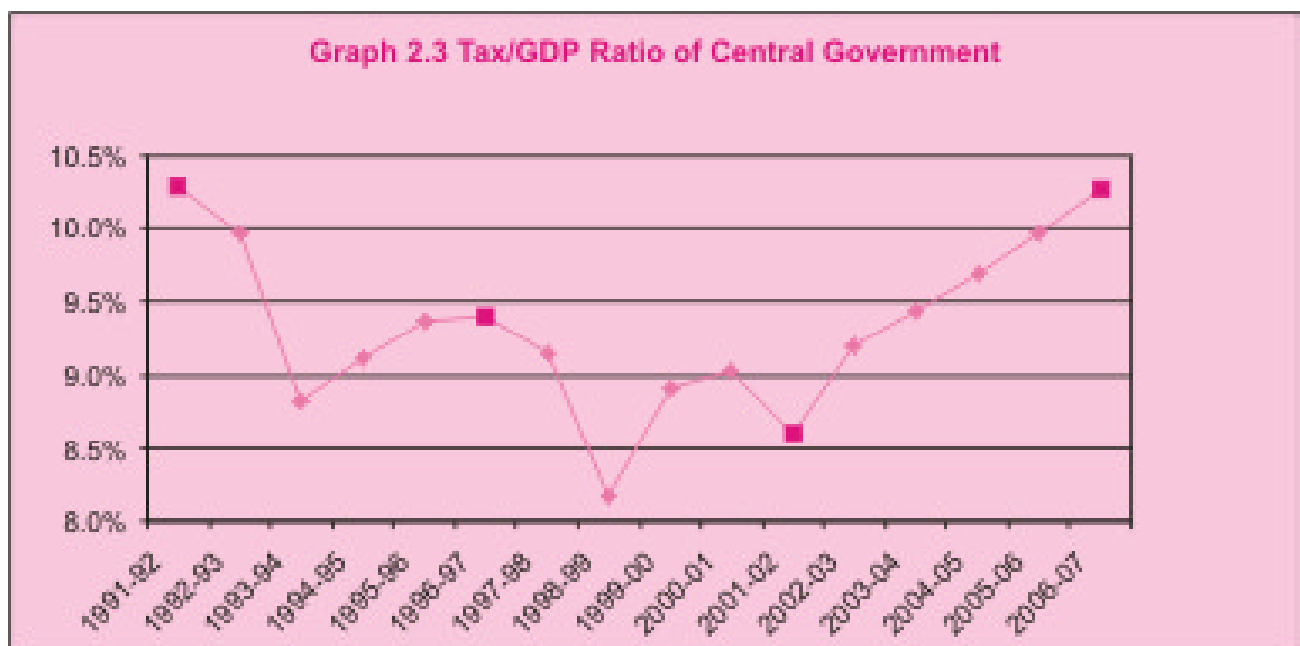
Note : Net tax revenue includes cess on diesel and petroleum surcharge, which are not part of the divisible pool. Inclusion of cess and surcharge to the gross tax would raise the ratio to 8.6 per cent, 10.3 per cent and 9.8 per cent respectively for the base year, terminal year and average of the Tenth Plan.

annual rate, at which the non-plan expenditure other than interest payment, defence and governments' wage bill is expected to grow during the Tenth Plan, does not exceed 6 per cent.

2.110 Mobilisation of adequate revenue resources is crucial to any fiscal reforms initiative. The fiscal reforms initiated during the early 1990s have led to a broad-based direct tax structure, with scaling down of the peak rate and introduction of reforms in tax administration. The reforms in indirect tax structure included reduction in the tax rates, reduction in number of slabs and introduction of Modified Value Added Tax (MODVAT)/ Central Value Added Tax (CENVAT). The overall impact has been revenue loss to the government during the decade of reforms. The gross tax revenue of the Central Government as per cent of GDP has dropped from 10.3 per cent in 1991-92 to 9.5 per cent in 1996-97, and further to 8.6 per cent in the year 2001-02. The past trend and future projection of the gross tax to GDP ratio of the Central Government is presented in Graph 2.3, which reveals a secular decline in the gross tax revenue collection of the Central Government during the Eighth and the Ninth Five Year Plans. Against this backdrop, it is envisaged to increase the tax revenue collection of the Central Government to 10.3 per cent of GDP by the end of the Tenth plan.

2.111 An analysis of the Central tax revenue collection in the last decade reveals a substantial improvement in direct tax revenues. As per cent of GDP, direct tax collection of the Centre increased from 2.4 in the base year of the Eighth plan to 2.8 in the base year of the Ninth Plan, and then to 3.2 in the terminal year of the Ninth plan. However, improvement in direct tax revenue has been more than offset by a steep fall in the collection of indirect tax during the same period. The gross tax revenue under indirect tax has declined from 7.5 per cent of GDP in 1991-92 to 6.6 per cent in 1996-97 and further to 5.4 per cent in 2001-02 (Revised Estimate), a reduction by 2.8 percentage points. The declining trend in the collection of indirect tax is accounted for by a fall in both excise and customs revenue.

2.112 Table 2.25 indicates the implicit buoyancy of Central tax revenue for direct tax, indirect tax, Custom revenue and Excise revenue. As can be seen, reforms and innovation in tax structure have kept direct tax buoyancy at a level around 1.3. However, tax reforms under customs and excise, which have lowered both the tax rates and the number of slabs, have affected the tax buoyancy adversely. The buoyancy has come down to 0.7 and 0.6 during the Eighth and the Ninth Plans from a level of 1.2 during the



Eighties. The buoyancy of custom revenue has been worst affected.

Table 2.25
Buoyancy of Central Tax Revenue

	Direct Tax	Indirect Tax	Custom Revenue	Excise Revenue	Total
Eighth Plan	1.3	0.7	0.9	0.6	0.9
Ninth Plan	1.3	0.6	0.1	1.0	0.8
Tenth Plan	1.5	1.1	0.96	1.16	1.26

2.113 The reasons for this steep fall in the indirect tax revenue are obvious. The structural and administrative reforms in the Indian tax system during the Nineties characterised by scaling down of the tax rate, reduction in number of slabs, introduction of modified value added tax system, etc, among others, were not necessarily aimed at raising revenue productivity. Rather, the purpose was to improve efficiency in production and trade by removing market distortion. The analysis of data in the post-reform period exposes several issues worth mentioning. First, the value of imports has not responded to tariff reduction in equal proportion, i.e. import elasticity with respect to tariff has not been very high. Second, a host of tariff exemptions still exists on substantial proportion of imports ranging from 60 per cent to 80 per cent. Third, the excise duty has not been structured to lead to a revenue-neutral tax system under MODVAT/CENVAT. Fourth, the tax base for excise revenue (manufacturing sector) is gradually shrinking as a proportion of GDP. Our projections of the tax buoyancy for the Tenth plan have considered all these issues.

2.114 The improvement in direct tax collection which has been experienced despite the scaling back of income tax rates in India during the post-reform period, could be attributed to expansion in the tax base through introduction of innovative schemes, extension of the base for tax deduction at source and improvement in direct tax administration etc. Continuous efforts towards improvement in the direct tax administration and its re-structuring, and introduction of information technology on a large scale to facilitate tax administration are expected to further enhance revenue collection under direct tax. Thus, attaining a buoyancy of 1.5 under direct tax appears to be

feasible. However, the target of increasing the tax to GDP ratio of the Central Government by more than 1.5 percentage points would require substantial improvement in the excise revenue and the custom revenue collection. It needs to be reiterated that the process of liberalisation would be irreversible in the near future and would continue to be so during the Tenth Plan to scale down the import tariff. Chapter 4 on External Sector elaborates upon the possible import tariff regime and the corresponding import implications during the Tenth Plan. The projection of buoyancy under custom revenue is based on the premise of (a) gradual reduction in the average import tariff to about 18 per cent and (b) complete withdrawal of tariff exemptions, except on strategic imports which are assumed to account for about 25 percent of such exemptions.

2.115 Equal emphasis needs to be given on the improvement of the Central tax revenue on account of Central excise. Introduction of CENVAT, scaling down of excise duties and the gradual shrinking of the share of manufacturing sector in GDP have all contributed to the decline in excise revenue. Exclusive dependence on the manufacturing sector for raising indirect tax revenue would not be desirable in the long run. The future growth pattern envisages a faster expansion of the services sector than any other sector. It could be necessary to expand and extend the tax base to the services sector on a large scale, in order to attain a tax buoyancy of 1.16 as projected.

2.116 It has been realised that the States have to undergo the exercises of fiscal correction with higher intensity. In this context, it would be necessary to examine the implications of the projection of State Government finances during the Tenth Plan. Table 2.26 highlights the projection of the major components of State Government finances during the Tenth Plan. As can be seen, the budget support for Plan under State finances is contemplated to be stepped up to 4.2 per cent of GDP by the end of the Tenth Plan from a base year figure of 3.8 per cent. This is consistent with the requirement of higher public investment, envisaged to come from the States sector during the Tenth Plan. It would be essential on the part of the States to support this Plan size through increased dependence on their own resources, the details of

which are discussed in the next chapter. However, it is important to note that the States would be under tremendous pressure to compress their non-plan expenditure so as to generate more resources for financing Plan.

2.117 A component-wise break up of the non-plan expenditure of the States indicates that the interest liability of the States would be increasing for the initial years of the Tenth Plan and come down to the base year level of 2.9 per cent of GDP by the end of Tenth Plan. However, the average interest payment to GDP ratio for the States would remain at 3 per cent. This is due to the fact that the cost of borrowing by the States is still higher. The lending rate of the Centre, which is the major creditor of States, is still 2.5 per cent higher at 11.5 per cent. In addition, States have accumulated a large stock of past debt with higher rate of interest. It would be almost impossible for the States, in the medium term, to reduce the interest burden to the base year level, even with the optimistic fiscal deficit position as targeted.

2.118 The next single major item under non-plan head is the salary and wage bill of the government. It does not seem feasible for the States in the near future to succeed in compressing this expenditure in real terms. States, the major public service provider, would be liable to expand their social infrastructure base; which would necessitate expansion of public service network and hence hike in the salary bill of the Government by more than that caused by inflation. It is envisaged that there would be a net addition to the employees' strength of the State Governments at an annual rate of 2 per cent during the Tenth Plan. This along with an assumed annual inflation of 5 per cent and annual increase in the average salary amounting to 2 per cent, would compel the salary bill of the State Government finances to increase at an annual rate of 9 per cent during the Tenth Plan. This is a very optimistic estimate so far as State Government finances is concerned. The State Governments have to maintain utmost restraint in recruiting manpower, which need to be guided by the condition of governance in the individual State. It is needless to reiterate that inter-State variation should be the highest guiding principle in recruiting additional employees. However, the rate of increase in

average salary bill of all States taken together, being less than the target rate of growth in nominal terms, the salary bill as percentage of GDP would come down from 3.6 per cent to 3 per cent of GDP by the end of the Tenth Plan.

2.119 It would be equally important for the States to raise their revenue base substantially during the Tenth Five Year Plan. The projection of Central Government finances envisages a 0.5 percentage point increase in the share of States from the gross tax revenue of the Centre as percentage of GDP. States' own tax revenue collection would also need to be raised from the base year figure of 5.9 per cent of GDP to 6.6 per cent of GDP by the terminal year of the plan. In this context, a move to a unified value-added tax (VAT) covering all goods and services takes the highest urgency.

ISSUES IN FINANCIAL INTERMEDIATION

2.120 The Tenth Plan recognises that the financial system continues to play a crucial role in mobilization of the available savings and allocating them to the most productive uses. An efficient and market oriented financial system is thus a complement to market based decision-making in the real sector. The extent of transformation of desired savings into investments is largely determined by the process of financial intermediation and the ability of the financial sector to not only mobilise resources but also to channelise them in a manner desired by the investors. This function becomes increasingly more important and demanding as an economy grows in complexity. In addition, the efficiency of the financial intermediation process can also affect the desired level of savings in the economy by altering the expected returns to savings. The allocation of scarce capital between competing sectors is a crucial function that has to be performed in the economy. When the financial sector performs the allocative function efficiently, scarce capital should be allocated to those sectors, which have the highest marginal productivity of capital. Efficient financial markets continually exert a disciplinary effect on enterprises and constantly monitor the utilisation of capital.

2.121 A strong and efficient financial system which is widespread and functionally diversified is

Table 2.26
Tenth Plan State Government Finances

(as % of GDP at current prices)

	2001-02	2006-07	Average Tenth Plan
States Plan Expenditure	3.8	4.2	4.1
Total Non-Plan Expenditure	13.3	11.5	12.4
Of which			
(a) Interest Payment	2.9	2.9	3.0
(b) Pay & Allowances	3.6	3.0	3.2
(c) Pension & other retirement benefits	1.2	1.0	1.1
(d) Debt repayments	0.7	0.8	0.8
Total Expenditure	17.2	15.9	16.5
Tax Revenue	8.2	9.5	9.0
Of which			
(a) State Own Tax Revenue	5.9	6.6	6.3
(b) Share from Centre	2.4	2.9	2.7
Non-tax Revenue	3.6	3.2	3.3
States' own Non Tax Revenue	1.4	1.2	1.3
Total Revenue Receipts	11.8	12.7	12.3
Total Revenue Expenditure	14.3	12.9	13.6
Total Non-Debt receipts	12.0	12.9	12.6
Gross Fiscal Deficit	4.5	2.2	3.2
Revenue Deficit	2.5	0.2	1.3

Note : Budget figure for the year 2001-02 is estimated by the Planning Commission

essential for providing an impetus to a competitive economy for supporting higher investment levels and increasing growth. The financial sector in India has developed quite substantially in both size and sophistication during the past three decades. The nationalisation of the commercial banks in 1969 led to a rapid growth and spread of banking services all over the country. The sharp increase in financial savings by households, during the 1970s can be largely traced to the spread of banking in the economy. A further fillip was given by the emergence of the non-bank financial companies (NBFCs) in hire purchase and leasing finance, and the boom in the stock markets in the early 1990s arising out of the liberalisation of the financial sector. Despite these favourable developments, it is becoming increasingly apparent that the financial sector in India needs to develop further and faster if the growth rate of the economy of 8 per cent

per annum and more is to be attained during the Tenth Plan and sustained thereafter.

2.122 Financial sector management and the reform process must progress in tandem with the reforms in the real sector. An important outcome of financial sector reforms is that it contributes to greater flexibility in the factor and product markets. With the real sector becoming increasingly market-driven and engulfed by a competitive environment, there is need for a matching and dynamic response from the financial sector. Banks and financial institutions are now required to not only enhance their business volumes and range of services, but also operate in an increasingly technologically sophisticated environment, even while keeping abreast of developments in both the internal and international economy.

2.123 It was recognised that the financial system itself needs to tone up its productivity and efficiency and improve its health. Its critical nature promoted the Government to set up Committees on the Financial System in 1991 and on Banking Sector Reforms in 1998 (Narasimham Committees) to examine all aspects relating to the structure, organisation, functions and procedures of the financial system. The deliberations of the Committee were guided by the demands that would be placed on the financial system by the economic reforms taking place in the real sectors of the economy, and by the need to introduce greater competition through autonomy and private sector participation in the financial sector. Despite the fact that the bulk of the banks were, and are likely to remain, in the public sector, and therefore with virtually zero risk of failure, the health and financial credibility of the banking sector was an issue of paramount importance to the Committees.

2.124 While the first Committee focused on arresting the qualitative deterioration in the functioning of the financial system, the second Committee offered recommendations on the strengthening of the system within the framework of purposive regulation and a strong and effective legal system. The Committees felt that the core issue is the improvement in the quality of the banks' assets portfolios. Banks have a responsibility, as repositories of the public's savings, to deploy them in a manner which ensures their soundness and contributes to national wealth creation. Many of the measures suggested by the two Committees have been accepted by the Government and implemented to a large extent.

2.125 The financial sector reform process has witnessed the adoption of several significant measures since its inception to enable it to meet the challenges of increasing deregulation and emergence of more competitive conditions. But despite this, some areas of concern remain to be addressed. The main area of concern relates to the ability of the financial sector in its present structure to make available investible resources to the potential investors in the forms and tenors that will be required by them in the coming years. In a very stylised sense, the requirement of investment funds for productive investment can be divided into three

broad categories - equity, long-term debt, and medium- and short-term debt. The proportion in which different forms of funds are required depends on the nature of the activity and the sector in which the investment is proposed to be made as well as on the perceptions regarding the future developments in the financial sector. Although there is some flexibility in these proportions, by and large, not too much variation in the debt equity ratio or the term structure of debt appropriate for the particular industry is either possible or desirable, from the point of view of both the lenders and the borrowers. Thus, the desired sectoral and institutional investment pattern in the country gives rise to a particular structure in which investible funds would need to be made available. If the financial sector is unable to provide the funds in the three broad categories in more or less the same proportions as required by the demand, the possibility is that there could simultaneously exist excess demand and excess supply in different segments of the financial market. In such a situation, the segment facing the highest level of excess demand would prove to be the binding constraint to investment activity and effectively determine the actual level of investment in the economy. It is therefore entirely possible that the level of aggregate investment could fall short of the aggregate supply of investible resources not because of a lack of investment demand, but because of a mismatch between the structures of the demand for and the supply of investment funds arising from an inadequately developed financial sector. In such a situation, the growth process could be inhibited.

2.126 Movements of funds between different financial institutions and various type of instruments tend to resolve much of these problems in an efficient and integrated financial market. Portfolio reallocation by the savers who constantly respond to differential movements in the returns to the alternative financial instruments, also facilitates free flow of funds. Frequently, new instruments are also developed to meet specific investment needs. Even in relatively efficient markets, aberrations can arise due to the fact that the rates of return in financial markets, unlike prices in goods markets, have to be qualified by risk factors, and are therefore susceptible to problems arising out of asymmetric information and speculative behaviour. Issues of

adverse selection and moral hazard, characteristic of imperfect information and incomplete markets, are present even in the most developed and sophisticated financial systems. The Indian financial sector, however, has yet to attain this degree of integration and maturity, and can be characterised as a fragmented market. By and large, there is very little movement of funds between the various segments of the Indian financial sector in response to the discrepancies in the demand and supply positions. To make matters worse, most segments of the Indian financial sector are specialised in providing only a limited component of the investment portfolio and are either restricted from or technically incapable of addressing the demand for other components. As a result, both the quantum and pattern of investment in the economy are determined primarily by the portfolio decisions of the savers, and it would be entirely fortuitous if the savings portfolio more or less matches the desired structure of investment.

2.127 As a situation of pervasive excess demand existed in all segments of the market earlier, the potential mis-match between the patterns of demand and supply of investible funds was not of much significance. Such excess demand arose primarily out of the high level of pre-emption of financial savings by the Government together with a substantial portion of directed lending. With the considerable expansion and liberalisation of the financial markets in recent years, both through higher rates of savings and external capital flows, and through reduction in the pre-emptive and directive role of the government, the problems arising out of the non-integration of the financial sector are likely to become increasingly more acute. Unless efforts are made to identify the emerging structure of the investment demand, particularly from the private sector, and to reorient the functioning of the financial sector accordingly, not only might there be a problem in attracting investment in those areas which are of national importance, but the possibility also exists of an inadequate utilisation of investible resources, leading to a slower rate of growth than would be potentially justified by extant savings. In addition, an excess supply of funds in one segment of the financial sector carries the danger that such funds may be used for speculative purposes in foreign

exchange, real estate or commodities, which create their own problems in economic management.

2.128 Private participation in economic infrastructure sector and basic industries continues to be of critical importance and needs to be increased significantly. These activities tend to be characterised by heavy investments, long gestation lags and long pay-back periods, which require the commitment of long-term funds, both as equity and long-term debt. In the past, since these sectors were predominantly catered to by public investment, the need to develop appropriate financing mechanisms was not felt. As a result, the Indian financial sector is heavily biased towards short and medium-term debt, whether it be the commercial banking sector or the development finance institutions (DFIs). Unless the availability of equity and long-term debt to the private sector is increased substantially in the coming years, the likelihood of adequate private investment in these sectors appears to be remote.

2.129 The provision of equity funds is fundamental to all investment activity and its likely availability needs careful consideration. Although India has a fairly well developed secondary market in shares, the primary issues market has traditionally been fairly small and sluggish, except for a short period of intense activity during the early and mid-1990s. One of the reasons for the slow growth in the primary market has been the tendency for the major corporates to rely more on internal accruals for providing equity funds than to dilute shareholdings through public issues. There is no reason to believe that this pattern will change in the near future. Even foreign companies in India tend to hold their shares quite closely and therefore do not contribute in any meaningful manner to the development of the equity market. Rapid growth in the infrastructure sectors will therefore require that relatively new firms enter the market by raising sizeable equity from the public, unless the existing corporate sector becomes considerably more aggressive in its expansion plans. In the alternative, excessive reliance may have to be placed on attracting foreign equity inflows to bridge this shortage.

2.130 In the recent past, equity markets have been rather listless with an insignificant number of

new issues seeking funds. The small investor has lost confidence in the market, which has been buffeted by a series of questionable deals and scams. The mutual funds that afforded a safe conduit to the equity market for the retail investor, have been adversely affected by the lack-lustre markets, and have been displaying dwindling net asset values (NAVs).

2.131 There have been several measures taken by the stock exchanges and SEBI to streamline the functioning of the markets and provide a greater degree of transparency to its operations. Disclosure norms are constantly being made more stringent and investor grievance redressal machinery has been geared up. Issues of insider trading, mergers, acquisitions and takeovers, share buy-backs, etc., are being addressed and suitable guidelines issued. The bourses have adopted modern technology including screen-based trading, and settlement periods are getting shorter. These have been positive developments but have not been able to prevent malpractices completely.

2.132 A feature of the equity markets has been the narrowness of the secondary market in equities and the excessive influence of foreign institutional investors (FIIs). The FIIs, driven by the comparative risk perception of equity markets around the world tended to create substantial volatility in the bourses as the attractiveness level changed. This was often countered by some of the domestic institutions like Unit Trust of India (UTI) whose large-scale market operations enabled it to play a stabilising role. Given the current state of health of the UTI, such a function would now be beyond its capabilities.

2.133 Insofar as long-term debt is concerned, at present the Government monopolises practically all sources of long-term funds, such as insurance, pension and provident funds. Earlier, there was certain logic to this in the sense that since the government was practically the only investor in capital-intensive long gestation projects; its need for such funds was of overriding importance. With the desired shift in investment responsibilities, it has become necessary for the government to vacate some of this space for the private sector. In addition, there is need to create conditions whereby savers are attracted towards investing in long-term debt

instruments, which are practically non-existent today.

2.134 The insurance sector has been an important source of low-cost long-term funds all over the world. This is permitted by the fact that most insurance companies operate in only two major areas - risk cover and annuities - which do not require payment of interest or repayment of the principal respectively. In the Indian context, however, the insurance companies, particularly in life insurance, also tend to act as investment funds in the sense that they not only provide risk cover but are also committed to repayment of the principal with interest, although with long maturities. One of the reasons that this has happened is that the average premium charged by the insurance companies in India tends to be relatively high due to obsolete and rigid actuarial practices and inefficient operations. There is a pressing need to reorient the insurance sector in India in a manner that it fulfills its principal mandate of providing the risk cover.

2.135 A positive development in the insurance sector has been its opening up to the domestic and foreign private sector insurance companies. This has led to increased competition and innovation in this sector. The users of insurance products and services both in the life as well as non-life segment would benefit from the advent of international practices even though pricing of insurance products would continue to be administered by the insurance regulator. The process of liberalisation of the investment guidelines has also begun, although the rate of progress in this area is significantly constrained by the budgetary position of the Central and State Governments. But further deregulation, gaining from the experience of the opening up of the sector, would increase the flow of funds into the sector and improve the availability of long-term funds for industry and infrastructure.

2.136 International experience shows that an important source of long term funds has been the various forms contractual savings such as pension and provident funds. In India, although the quantum of resources available in such funds is quite considerable, they have not played their legitimate role in providing finances for growth and

development in an adequate manner. The attitude towards such funds in India has been excessively focused on safety and security rather than on returns. As things stand today, the responsibility of the management of such funds is either that of the Government or of the employer. This, coupled with the regulatory framework, has led to a situation where such funds have been deployed only in Government securities or in trustee bonds, which are generally also public debt instruments. As a result, the returns to the employees, who are the legitimate owners of these funds, is determined primarily by the interest on Government debt. In a situation where efforts are sought to be made towards lowering the interest on public debt, such restrictions would reduce the returns to these funds. However, efforts at widening the portfolio of these funds are unlikely to be successful unless the pattern of management and responsibility is changed significantly. In the present situation, where either the Government or the employers, in the form of trustees, are responsible for the deployment of these funds, risk-averse behaviour is only to be expected, and merely enabling a more diversified portfolio may not be of much significance. It is suggested therefore that in the case of organised labour, which are the groups presently covered under such schemes, the responsibility for management of provident and pension funds should be vested in associations of employees that may be deemed appropriate. Since a direct nexus would thereby be drawn between the management of these funds and the beneficiaries, the likelihood of taking greater risks for higher returns would be increased. Typically, such arrangements also involve professional asset management companies that provide the expertise for obtaining the best returns for their clients. Such arrangements also need to be encouraged. The Government's efforts in this direction should be redirected to providing the prudential guidelines and supervisory functions, on one hand, and to widen the coverage of contractual savings by bringing unorganised labour also within the ambit of such schemes, on the other.

2.137 As far as the creation of a debt market is concerned, particularly for long-term debt, much more concerted efforts need to be made. At present,

in the absence of such a market, practically all debt instruments are held to maturity, and this illiquidity reduces the attractiveness of debt instruments, particularly those of longer maturity. The efforts at creating a debt market need to be revived with full vigour. The National Stock Exchange should be further encouraged to increase its involvement in debt instruments, as the government now issues public securities of appropriately low denominations. This would help to generate a healthy debt market in the country in which not only financial institutions but also other companies and even individuals can participate. More importantly, once the interest rate on public debt instruments becomes the reference rate, it would considerably enhance the effectiveness of monetary policies in the country, and the dependence on the CRR as an instrument of monetary control can be reduced.

2.138 At present, much of the trading in debt instruments in the secondary markets is confined to government securities, treasury bills, PSU bonds and small amounts of commercial paper. Private corporate debt trading is negligible since there is very little floating stock, as tradable debt issues by the corporate sector have not found favour. Unless an active debt market develops, the issuers in the private corporate sector would not feel encouraged to bring out public offerings in tradable debt. Private placement by corporate continues to be the principal mode of mobilising funds through the debt route.

2.139 The debt market in India lacks transparency and the settlement system needs to be improved. It is necessary to develop a nationwide debt market for all debt securities including all government bonds and treasury bills. For this, an infrastructure for trading, clearing and settlement, similar to the one obtaining in the equity market, is essential. Such a mechanism would enable the formation of a unified debt market, catering to participants of various sizes. An active and deep market in government securities is a pre-condition for the system to throw up a dependable benchmark yield rate.

2.140 Until the secondary debt market becomes sufficiently active so as to be able to absorb debt instruments of various maturities, there is a case for the Central Government to move its debt

portfolio towards the shorter end of the maturity spectrum, which would increase the liquidity in the debt market. This would be consistent with the recommendation for the Centre to vacate more space in SLR placements in favour of States and PSEs. Since there is an integral relationship between the emergence of the treasury bill rate as a credible instrument of monetary policy and the reduction in the CRR, it is suggested that the banks should be permitted to utilise a part of the CRR funds for investment in the secondary T-bill market once the institutional arrangements have been established, instead of depositing these with the RBI. Over time, these funds can be gradually released for more diversified investment, thereby achieving the target CRR level in a phased manner. The government can also utilise the debt of PSEs held by it both to activate the debt market and to provide investible funds for public investment. In order to do so, the government would have to securitise its loans to PSEs, which could then be floated in the market. The advantage of such instruments is that they not only would be relatively risk-free, since they are implicitly guaranteed by the government, but would also carry interest rates which would be sufficiently high so as to make trading feasible for the market-makers.

2.141 With the abandoning of the administered interest rate regime, the lending rates of banks have been freed and banks can now fix these rates on the basis of their asset-liability mix and the desired spread. They, however, need to announce their prime lending rates (PLR) as well as the maximum margin or band over this rate, and the applicable interest rates would essentially depend on their risk perception of borrower's venture. The Reserve Bank of India (RBI) has recently permitted the banks to quote sub-PLR rates to deserving borrowers who can be construed as prime risk. This concession has been given to banks to enable them to match the lower rates of interest at which prime borrowers are able to access funds from extra-banking sources, primarily through commercial paper, non-convertible debentures and external borrowing.

2.142 In fact, these guidelines to banks have removed the floor from their lending rates, leaving it to the judgement of the individual banks as regards credit risk. The intention is that banks

would now have discretion and adopt a selectively preferential approach towards their prime borrowers while retaining the PLR plus rates for their normal customers. A possible danger in sub-PLR lending is that it could trigger off a competitive spiralling of interest rates downwards, with banks attempting to secure additional business. This would be detrimental to the banking industry in the long run. Further, the risk-weighted returns of banks would be adversely affected, thereby impacting on their profitability and capital adequacy.

2.143 It may be true that the lending rates continue to be high, tending to make industry uncompetitive. However, the ability of banks to reduce their interest rates further is limited, notwithstanding the present high real interest rates. Banks are burdened with a large volume of non-performing assets (NPAs) with no returns, which have to be provisioned for or written off, placing considerable strain on their profitability. This position could get worse with stricter NPA norms in place in the coming years. High NPA levels also contribute to the risk-averse nature of banks and propel them towards the safety of investments in government securities, even though returns offered are much lower. NPA levels can be brought down significantly by streamlining the legal system and procedures in the country that tend to be lender-unfriendly. The recent ordinance promulgated on the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest will go a long way in allowing the banks to take control of the assets of willful defaulters without going through cumbersome and time-consuming litigation.

2.144 Another reason for the banks' inability to reduce lending rates is the unduly high spread required for their operations. In addition to the burden of NPAs, it is the high transaction cost which prevents reduction of spreads. With a large branch network and low level of computerisation and networking, the efficient use of funds remains a problem. Asset-liability mis-matches tend to get more pronounced, which has a bearing on the bank's cost of funds. The lending rates could of course be reduced by lowering the deposit rates while retaining the spreads. However, bank deposit rates necessarily have to move in tandem with the rates applicable on competing deposit schemes, like the small savings and post office deposits.

2.145 The interest rates paid by the borrowers, however, though based on the deposit rates, are also determined by the level of efficiency of the financial system. The spreads between the deposit and lending rates in India are much too high by international standards and reflect both the constraints faced by and the relatively low level of efficiency in the financial intermediation system. Long-run competitiveness of the economy cannot be ensured unless these spreads are brought down to at or near international levels. Although in recent years there has been considerable liberalisation of the banking sector, along with a tightening of prudential norms and practices which have led to an improvement in the health of the banking sector, there are some areas of concern which need to be examined.

2.146 The banking industry is carrying a heavy burden of non performing assets which raise the cost of bank operations and consequently the spread, and efforts need to be made to bring these down. However, a balance has to be drawn between the reduction in NPAs, on one hand, and ensuring adequate supply of credit to the economy, on the other. Excessive pressure on banks to reduce NPAs is likely to lead to a high degree of selectivity in the credit disbursement process. As a result, it may well be possible that the total level of credit issued by the banking system may fall short of the levels dictated by the growth in deposits. While this would no doubt reduce the level of NPAs, it would also have the effect of raising the average cost of credit actually disbursed. As a result, the spreads would be affected by two contradictory influences and, in the short run, it is likely that the latter effect would dominate so that either the spreads would actually rise or the health of the banking sector would be adversely affected. An increase in spreads through an increase in the lending rates would be self-defeating for the banking sector in view of the fact that the prime borrowers also have access to international sources of funds and are likely to switch if domestic interest rates are raised in any significant manner, thereby raising the average level of risk exposure in the lending portfolios of banks.

2.147 There are a number of considerations, which enter into determining the effects of policy on banking spreads. First, the level of the cash

reserve ratio (CRR) that is to be maintained by the Indian banks is considerably higher than the international levels that are specified for prudential reasons. While such a target for the CRR is eventually desirable for the health of the banking sector and a reduction in the spreads, it needs to be seen in the context of the immediate policy imperatives. A decrease in the CRR enables the banking system to generate a higher level of credit from the same deposit base, which implies an increase in the money multiplier. Thus, in view of a given inflation target, a decrease in the CRR would require a corresponding decrease in the rate of growth of base money, which would reduce significantly the extent of seignorage available to the Government. In view of the relatively high level of fiscal deficits that are likely to obtain during the Ninth Plan period, it does not appear desirable to reduce the potential seignorage excessively. Sharper decreases in the CRR can be brought about once the fiscal deficit of the government has been brought to about 3.5 per cent of GDP and the revenue account comes into surplus. Secondly, with the greater importance of monetary policy in macroeconomic management, the CRR will continue to be an important instrument until such time as the interest rate on treasury bills and the bank rate become credible instruments of monetary control. This is unlikely to happen until an active market in treasury bills is created and the treasury bill rate becomes a commonly accepted reference rate for the structure of interest rates in the country.

2.148 Policy intervention by the Government in the operation of the banking system also takes place through the medium of the statutory liquidity ratio (SLR) where it is mandatory for the banks to hold Government and public sector securities. The negative effects of the SLR have been mitigated to a considerable extent in recent years both by a reduction in the SLR from 38.5 per cent of the total net demand and time liabilities (NDTL) of banks to 25 per cent, and by having market determined rates of interest on public debt instead of rates prescribed by the government. However, in the absence of an active debt market in government securities, the SLR is characterised both by a certain degree of illiquidity with the banks and an interest rate on public debt which is not determined in a truly competitive market. These factors will become increasingly more

important during periods of relatively tight liquidity. On the whole, however, the SLR is desirable both as a prudential measure and in view of the need to generate debt resources for the government. The latter rationale will be obviated once a proper debt market comes into existence and the creditworthiness of the public sector, particularly States and PSEs, improves adequately. It would be desirable for the Centre to gradually vacate the space for long-term debt and make these available to the States and public sector enterprises which have the most pressing needs for long-term funds.

2.149 The third area that needs examination is the directed lending for priority sectors. The role that priority sector lending has played in making credit available to sectors, which are of national importance in terms of their effects on employment and poverty alleviation, such as agriculture and small-scale industries, and which have strong externalities cannot be gainsaid. The Indian economy is still not in a position in which the sectors with access to organised sector credit will be able to take care of these objectives. Since pure price rationing in the sense of using the interest rate as a single allocation device is neither feasible nor desirable in the presence of incomplete information and adverse selection possibilities, and since a comprehensive portfolio balancing approach is administratively difficult in a widely dispersed banking network, there is a high probability that smaller borrowers would be systematically discriminated against in terms of credit allocation. This would be contrary to the interests of both the nation and even the banking sector itself. The institutional mechanism for making available credit to the priority sectors needs to be revised. Since most new banks do not have the capacity to either appraise or effectively supervise lendings in the priority sectors, specialised institutions may have to be developed not only on a sectoral basis but perhaps also on a regional basis. In this context institutions such as National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India (SIDBI), local area banks (LABs), regional rural banks (RRBs) and cooperative financial institutions need to be strengthened and professionalised, and the linkages between themselves and with the commercial banking sector established on a firmer

and more formal footing. It should be ensured that with greater autonomy and private participation in public sector banks, the institutional structure of branch networks, which are critical for effective implementation of priority sector lending, is not diluted. In the case of banks without such wide-spread infrastructure and non-bank financial institutions, the funds may have to be routed through the specialised institutions. In such cases care would have to be taken that the rate of interest paid by the specialised institutions is no higher than the risk weighted interest received by the public sector banks on their direct loans to the priority sectors. Further, the recent tendency for inclusion of various activities under priority sector needs to be curbed, since it tends to diffuse the focus from those sectors which have high externalities and which need to be supported in a distinct and focused manner. Therefore, not all infrastructure should be categorised as priority sector, but only those that have high social returns and long pay-back periods.

2.150 Credit to the small industrial sector, along with agriculture has always enjoyed special attention both in policy formulation and institution building efforts in view of their importance with regard to employment potential, income redistribution and support to the balance of payments. Credit flows to small-scale industries have been a part of priority sector directives; but despite this, complaints continue regarding inadequacy of bank credit. Suggestions have been made to enhance credit flows to this sector by liberalising credit appraisal norms. While banks and other credit institutions need to devise appraisal criteria to suit this sector and be responsive to their genuine requirements for credit, their approach should not sacrifice sound canons of banking prudence.

2.151 The experience of banks in small scale industry financing has not been wholly satisfactory in view of the high incidence of sickness in this sector. The banks often find it difficult to monitor the credit flows closely and diversion of the credit funds is not often checked in time. The channelising of bank credit through local ground level informal finance agencies like chit funds, nidhis and money lenders is one way of ensuring that credit delivery is focused and diversion of funds does not take

place. As these local finance agencies are already an integral part of the community in their sphere of influence, banks can benefit from their information gathering system and their ability to recognise signals of potential sickness and take corrective measures at the incipient stage.

2.152 An important area of priority sector lending involves credit to the social sectors and activities which may not be 'bankable' in the usual sense of the term, but which may have high social returns. Micro-credit is well established as an area of focus not only in India but in a number of other countries as well, and a number of experiments have been successfully tried. It has been found that the loan servicing experience with micro-credit can be as good or even better than credit to formal sectors if it is implemented through appropriate mechanisms such as group lending. The experience of public sector banks in providing credit through self-help groups has been excellent and this lending activity needs to be expanded to cover a wider clientele.

2.153 Apart from directed credit, provision of long and medium term credit to industry has always been considered as an important element in the process of industrialisation. Among the large number of specialised institutions which were set up to provide finance to different sectors of the economy in the post-independence period, a well-knit structure of development financial institutions (DFIs) was set up for meeting the requirements of medium and long-term finance of all range of industrial units. Realising the significance of these all-India and State-level financial institutions, the government and RBI provided various types of financial incentives and other supportive measures. It was accepted that these institutions would provide long-term finance to industry, as commercial banks were not able to fill this gap in the economic growth process due to asset-liability mismatch fears.

2.154 To encourage investment in industry at that time, it was decided that the DFIs should provide long-term finance at interest rates, which were softer than those being charged by banks on their advances. To enable the DFIs to finance industry at concessional rates of interest, low-cost funds were made available to them by the government and RBI through bonds with

government guarantee, budgetary support etc. Banks were also not permitted to provide term loans to large industries and such loans became the exclusive domain of the DFIs.

2.155 However after the economic liberalisation and financial sector reforms were initiated, the protection available to the DFIs was no longer there, and with it the concessional funds, thereby forcing them to compete with the commercial banks whose cost of funds was much lower on account of their branch network. Furthermore, the level of NPAs of DFIs rose considerably on account of global competition faced by industrial units financed by them due to import liberalisation and the consequent adverse effect on their profitability. Moreover, with commercial banks now entering into term financing, the viability of DFIs suffered much more.

2.156 The changed business environment compelled the DFIs to re-engineer themselves and identify new areas of operations or convert themselves into commercial banks or universal banks. The traditional business of DFIs of providing long-term finance to industry and infrastructure is dwindling, as it is becoming increasingly difficult for them to provide funds at interest rates, which are low enough to make these long-gestation projects viable. But the financial institutions still possess rich expertise in project appraisal systems and an in-depth knowledge of the various industrial sectors, which should be profitably utilised. Commercial banks are yet to acquire this expertise as well as experience in term lending.

2.157 As the creation of infrastructure facilities in the economy continues to be a priority, and large industrial projects require a heavy component of medium to long-term funds, it is necessary that long-term funds, which are low cost, are made available to financing institutions. With the systems and appraisal skills already in place with DFIs, such funds should flow through these institutions and there is a case for SLR funds and government guaranteed bonds being provided to them. However, it must be ensured that the DFIs are managed professionally with the latest system of credit appraisal, delivery and recovery so that NPAs are kept to the minimum. Spreading the financing over a wider spectrum of industrial sectors and size of industrial units would also help in mitigating risk of over-exposure.

2.158 Banks, particularly the public sector banks have traditionally concentrated in industrial, trade and agricultural advances and personal segment loans have not been favoured much by them. This trend has changed in the last few years. When banks have been aggressively enhancing their personal loans portfolio by marketing housing loans, vehicle loans, educational loans etc. Of these, housing loans form the largest chunk. Earlier, banks were not lending to the housing segment directly. Housing finance companies used to borrow from banks and lend to the retail customer at a good margin. However, with sluggish industrial growth, banks have been finding profitable investments difficult. Returns from government securities have gone down, not justifying the cost of funds. These factors have led the banks to shift focus on the housing loan segment, which offers good returns and where potential NPAs are low. The encouragement of home loans by banks coupled with the low rates of interest at present would witness a spurt in house building activity and become one of the drivers in the process of development.

2.159 In addition to the above policy influences on the performance of the banking sector, the vulnerability of financial institutions, particularly banks, has increased on account of the much larger range of activities that they need to undertake and for which they may not be adequately prepared. Especially in the nationalised banking sector, each bank is presently undertaking the full range of banking and other services for which they may not be fully competent. Some of the areas where such shortcomings are becoming increasingly apparent are project appraisal skills, particularly for non-industrial activities, treasury and portfolio management skills, merchant banking skills and skills in operating in the foreign exchange and derivatives markets.

2.160 Assessing and managing a variety of risks is the core activity in banking. The whole spectrum of risk management functions has become far more complex in recent times as the business environment in the real sector has turned more dynamic and competitive. Bankers must be competent to assess and manage a wide variety of risks like credit risks, market risks, interest and

foreign exchange risks, liquidity risks and operational risks. Another factor adding to the complexity of managing banking business is the growing use of information and communication technologies. These technologies are being deployed for developing a whole range of newer products and services in an increasingly competitive environment, which goes beyond national borders.

2.161 There is a need to upgrade the level of such skills in all segments of the financial sector, and most particularly in the nationalised banks. While formal training in these areas is necessary, it is not sufficient. In order to develop most of these skills there has to be a considerable amount of learning by doing experience, which can be acquired only gradually. In the private financial sector some of these problems have been addressed by hiring professionals with the requisite skills and qualifications. In the nationalised sector however, there are policy and other barriers to taking recourse to such solutions. This would put the nationalised banks at a disadvantage and, given the dominance of this sector in the Indian economy, harm the interest of their customers.

2.162 Human resource policies of public sector banks have to now take into consideration age and skill profiles of banking personnel and turn to the open market for recruitment. While the voluntary retirement scheme launched in the banking industry two years ago has addressed the first issue to some extent, merit-based recruitment is skill not practiced. Banks need to top up their skill base by resorting, on an ongoing basis, to lateral induction of experienced and skilled personnel, particularly for quick entry into new activities and areas.

2.163 One characteristic feature of the organised financial sector in India, which is a cause of considerable concern, is the lack of free flow of information within the financial system regarding the creditworthiness of borrowers and solvency of institutions. The high level of existing NPAs can in some measure be traced to this lacuna. Unless information sharing and early warning systems are instituted, the dangers to the financial system will get multiplied as the level of complexity of financial transactions in the economy increases.

2.164 Information management is an area where, globally, technology has played a very active role and lack of readily available verifiable information proves to be a handicap for banks in risk assessment. It is essential to have a broad information infrastructure that captures not only individual and corporate information but also transactional information. This requires a new industry of information service providers that would develop and maintain relevant corporate and personal information that is easily accessible to all authorised users. This calls for an environment that facilitates the collection of accurate credit information on a transparent basis. Banks would then have an easily accessible matrix for risk assessment that will enable them to benchmark their risk-reward position with the rest of the system. The formation of the Credit Information Bureau is a positive step in this direction and efforts should be made to equip it sufficiently in order to fulfill its desired objective.

2.165 Finally, the liberalisation of the Indian economy, particularly with respect to foreign investment and external flow of funds, is exposing the Indian financial sector to issues that have not been of great significance earlier. In particular, the Indian markets have extremely slow operational and reaction speeds in comparison to the international market. Unless the speed of transaction in the Indian system is increased significantly, it would expose the Indian financial institutions to vulnerabilities arising out of arbitrage and speculative behaviour. The introduction of modern banking and money management systems has to be of the highest priority before further liberalisation of international financial flows can be contemplated.

2.166 Information technology and electronic funds transfer system have emerged as the twin pillars of modern banking development. Products offered by banks have moved way beyond conventional banking, and access to these services has become round-the-clock. Banks can now be accessed on phone, internet and through ATMs

for most of the services required by customers. This indeed is a revolution in Indian banking but some systemic changes are urgently required. Cyber laws and other procedures which are commensurate with modern technology-based banking have to be put in place urgently and sufficient regulatory mechanism has also to be instituted so that the fast strides in banking automation does not go on undesirable lines.

2.167 Corporate governance in banks and financial institutions has assumed great importance in India, and there is still some ground to cover in order to make all banking institutions safe, sound and efficient. It is necessary that institutions, which form a part of the financial system, have internal management, governance and accountability structures, which measure up to the highest standards. Liberalisation and deregulation has given greater autonomy to the financial sector, particularly banks, in regard to their maturity structure, interest rates and asset management. Even as greater freedom implies greater responsibilities, there are more players in the field today public sector banks, private banks, co-operatives, NBFCs, etc. where the markets are more free but more competitive. As some recent instances involving co-operative banks have pointed out, contagion and systemic implications are inevitable and here corporate governance becomes crucial. Added to this is the greater volatility in the inter-linked financial architecture where effects tend to be instantaneous.

2.168 Some of the issues, which need to be debated, are those of compatibility of corporate governance with public ownership of banks and making the system accountable to economic institutions and regulators. It is essential to put appropriate mechanisms in place to enforce accountability, asset liability management, early warning and prompt corrective action systems. It is also imperative that there is complete alignment between the goals of the management of the banks and the goals of shareholders.

CHAPTER 3

PUBLIC SECTOR PLAN : RESOURCES AND ALLOCATIONS

Overview

3.1. The chapter 2 of the volume has indicated the required level of public sector investments in the Tenth Plan to be consistent with 8 per cent growth of gross domestic product (GDP). These estimates form the basis for the minimum size of public sector plan resources which are required to be mobilised to achieve the plan objectives. This chapter projects the public sector resources for the Tenth Plan at Rs.15,92,300 crore (Rupees fifteen lakh, ninety-two thousand and three hundred crore, or approximately, Rs. 16 trillion) at 2001-02 prices. At comparable prices it amounts to an increase of 67.4 per cent over the Ninth Plan realisation. Given the twin requirements of securing a sustainable debt burden and restricting the public sector draft on private savings to a reasonable limit, contribution of debt resources to the projected increase accounts for 6.6 per cent only. Consequently, non-debt resources must contribute 93.4 per cent of the projected increase in the Tenth Plan resources over the Ninth Plan realization.

3.2. If the poor realisation of non-debt resources vis-à-vis the projections during the Ninth Plan is anything to go by, the task of raising non-debt resources to the Tenth Plan target levels is quite difficult, although definitely not impossible. However, fiscal reforms in this regard assume critical importance and are most crucial to attaining the Tenth Plan targets. Reforms for raising the tax to GDP ratio, increasing user charges, compressing expenditure on administration and establishment and adherence to commercial principles by public sector enterprises must attract focused attention and generate time-bound results. This chapter reviews the Ninth Plan performance of both the Centre and States and Union Territories (UTs), projects the Tenth Plan resources, measures the incremental effort required over Ninth Plan realisation levels, proposes a set of policies for

attaining the Tenth Plan targets, and indicates the allocation of the public sector plan resources.

Resources of the Centre during the Ninth Plan

3.3. The Centre's gross budgetary support (GBS) to the Ninth Plan was projected at Rs.3,74,000 crore at 1996-97 prices including Rs.1,70,018 crore of Central assistance to the States and UTs. With the Ninth Plan resources of Central Public Sector Units (CPSUs) projected at Rs.2,85,379 crore, resources available for the Central Plan was arrived at Rs.4,89,361 crore. The Ninth Plan realisation places the Centre's GBS at Rs.3,16,286 crore or 84.6 per cent of the projected level. Central assistance to States' and UTs was realised at Rs.1,38,394 crore or 81.4 per cent of the projected level. With realisation of CPSUs resources at Rs.2,28,795 crore or 80.2 per cent of the projected level, the resources available for the Central Plan works out to 83.1 per cent of the projected level or Rs.4,06,687 crore at 1996-97 prices. Table 3.1 indicates the projection and realisation of the Ninth Plan resources and its funding of the Centre.

3.4. The realised pattern of funding the GBS reflects a significant deterioration of non-debt contribution vis-à-vis the Ninth Plan projections. The share of balance from current revenues (BCR) in GBS reduced to a negative 49.6 per cent as against a projected share of a negative 0.7 per cent only. The realised share of borrowings therefore had to increase to 144.1 per cent as against a projected share of 84.7 per cent, to bridge the BCR gap.

3.5. The 5,544 percent deterioration in BCR was caused by stagnant level of revenue receipts and substantial growth in non-plan revenue expenditure (NPRE) in relation to GDP. Net Central revenues declined by 0.43 percentage points of GDP from 9.23 per cent in 1996-97 to 8.80 in 2001-

Table 3.1
Ninth Plan Resources of the Centre

(Rs. crore at 1996-97 prices)

Sources of Funding	Projection	Realization	% Realisation
1. Balance from current revenues	-2,778 (-0.7)	-1,56,790 (-49.6)	-5,544.0
2. Borrowings including net MCR	3,16,760 (84.7)	4,55,624 (144.1)	143.8
3. Net inflow from abroad	60,018 (16.0)	17,452 (5.5)	29.1
4. Gross budgetary support to plan (1 to 3)	3,74,000 (100.0)	3,16,286 (100.0)	84.6
5. Central assistance to States & UTs	-1,70,018 (45.5)	-1,38,394 (43.8)	81.4
6. GBS for Central plan (4+5)	2,03,982	1,77,892	87.2
7. Resources of public sector enterprises	2,85,379	2,28,795	80.2
8. Resources for Central Plan (6+7)	4,89,361	4,06,687	83.1

Note : Figures in parentheses are percentage of Gross Budgetary Support .

02. Tax revenue (net) decreased by more than 1 percentage point from 6.85 per cent in 1996-97 to 5.80 per cent in 2001-02. The fall in tax revenue (net) could not be compensated by a 0.69 percentage points increase in non-tax revenue from 2.38 per cent to 3.07 per cent during the same period. As against a 1.05 percentage points fall in tax revenue (net), the gross tax revenue of the Centre fell by 1.21 percentage points from 9.41 per cent in 1996-97 to 8.20 per cent in 2001-02. This implied that the impact of the fall in gross Central tax revenues on Central finances was somewhat shared with the States.

3.6. The deterioration of the gross Central tax revenues in relation to GDP has given rise to concern on the following issues.

- Shrinkage of the tax base, as implied by inadequate coverage of the service tax base.
- Growth in various types of tax concessions and exemptions.
- Increase in the coverage of Modified Value Added Tax (MODVAT) without upward adjustment of tax rates.
- General slackening of the tax administration leading to revenue leakage.

3.7. The NPRE grew rapidly by 1.30 percentage points of GDP from 9.30 per cent in 1996-97 to 10.60 per cent in 2001-02. The breakdown of this increase is summarised in Table 3.2.

3.8. Almost 40 per cent of the increase in NPRE was due to the growth in pension and salary payments brought about by the implementation of the Fifth Pay Commission's recommendations. Along with the growth in subsidies and other NPRE, mainly comprising defence, the massive deterioration of BCR was the outcome of the stagnant levels of Centre's revenue receipts. Borrowings had to increase to bridge the gap, which consequently raised the interest burden and led to further increase in NPRE, resulting in still sharper deterioration of BCR. Increase in interest payments accounted for a quarter of the total growth of NPRE during the Ninth Plan.

3.9. The debt-servicing burden, as reflected by the percentage of interest payments to revenue receipts, increased from 47.1 per cent in 1996-97 to 50.5 per cent in 2001-02, underlining the fragile sustainability of the Centre's debt burden. The debt burden of the Centre increased by almost 8 percentage points from 49.4 to 57.5

Table 3.2
NPRE and its components of the Centre

(As a percentage of GDP)

Items	1996-97	2001-02	Increase
1. Interest	4.35	4.69	0.34
2. Pension	0.37	0.64	0.27
3. Salary	0.48	0.76	0.28
4. Subsidies	1.13	1.33	0.20
5. Other NPRE	2.97	3.18	0.21
6. (Total) NPRE	9.30	10.60	1.30

per cent of GDP during the same period. The gross fiscal deficit of the Centre, which caused this, grew from 4.88 per cent of GDP in 1996-97 to 5.76 per cent in 2001-02, an increase of 0.88 percentage points. Consequently, borrowings for funding the GBS was 43.8 per cent above the projected level.

3.10. The net inflow from abroad on government account, which is deployed for funding externally aided projects (EAP) was projected to contribute 16.0 per cent of the GBS in the Ninth Plan. However, its realization is placed at 29.1 per cent of the target, which reduces its realised share in plan resources to 5.5 per cent. The fall in net inflow from abroad has been attributed to international sanctions, following the Pokharan nuclear tests and inadequate provision for counterpart funding of EAP projects through domestic resources.

3.11. Following from the lower realisation of the Centre's GBS, Central assistance to the State and UT Plans also recorded a similar level of achievement at around 81.4 per cent. Central assistance as a percentage of GBS, which was projected at 45.5 per cent, declined to a level of 43.8 per cent. The proportional impact of a shrinking GBS on the quantum of Central assistance is clearly in evidence here.

3.12. After accounting for the Central assistance to States and UTs, the GBS left for the Central sector Plan was projected to account for 41.7 per cent of the Central Plan resources. Internal and extra-budgetary resources (IEBR) of the CPSUs provided the remaining share at 58.3 per cent. The realised share of IEBR in the Ninth Plan is placed at 56.3 per cent indicating,

by and large, a similar deterioration as that of GBS. In absolute terms, IEBR was realised at 80.2 per cent. Operational inefficiencies of the CPSUs accounted significantly for a lower realization of internal resources (IR).

Projection of the Tenth Plan (2002-07) Resources of the Centre

3.13. In keeping with the requirement of stepping up public sector investments for attaining an 8 per cent GDP growth during the Tenth Plan, the GBS of the Centre has been projected to grow from 4.33 per cent of GDP in 2001-02 to 5.39 per cent in 2006-07. Thus, the Tenth Plan projected average GBS stands at 4.93 per cent of GDP as against the Ninth Plan realisation of 4.02 per cent.

3.14. Fiscal sustainability considerations demand a reduction in debt financing for funding of GBS for the Tenth Plan. Accordingly, the gross fiscal deficit, which stood at 5.90 per cent of GDP in 2001-02 has been projected to reduce to 4.32 per cent in 2006-07, obtaining a Tenth Plan average of 4.73 per cent. The Ninth Plan average realisation had stood at 5.82 per cent. The gross fiscal deficit is implicit in own borrowings, inclusive of net miscellaneous capital receipts (MCR). Own borrowings inclusive of MCR in the Tenth Plan are projected at 4.78 per cent of GDP, down from 5.78 per cent realised during the Ninth Plan. Net inflow from abroad, in the form of external assistance, is projected at 0.19 per cent of GDP, slightly diminished from 0.22 per cent realised during the Ninth Plan.

3.15. The BCR is arrived at as a small negative of 0.04 per cent of the GDP as against a negative 1.98 per cent realised in the Ninth Plan. To achieve a BCR of this order, Central revenues (net) must grow from 8.80 per cent of GDP in 2001-02 to 9.98 per cent in 2006-07, an increase of 1.18 percentage points. NPRE must come down from 10.60 per cent of GDP in 2001-02 to 9.06 per cent, a decrease of 1.54 percentage points. Thus, an improvement of 2.72 percentage points in BCR during the Tenth Plan is being sought mainly from a contraction of NPRE.

3.16. Central assistance to States and UTs during the Tenth Plan has been projected at 42.5 per cent of the Centre's GBS. In relation to GDP, Central assistance to States and UTs is projected at 2.09 per cent in the Tenth Plan, up from 1.76 per cent realised during the Ninth Plan. After deducting Central assistance to States and UTs, GBS available for the Central Plan is arrived at 2.82 per cent of GDP, an increase of 0.56 percentage points over the Ninth Plan realization of 2.26 per cent.

3.17. In order to meet the public sector investment and savings requirements, IR of CPSUs is placed at 2.85 per cent of the GDP in the Tenth Plan, up from 2.15 per cent realised during the Ninth Plan. The railways and power sector CPSUs must raise their operational efficiency to meet this target. The extra-budgetary resources (EBR) of CPSUs was projected at 0.75 per cent of the GDP, same as the realised level obtained in the Ninth Plan. Thus, the IEBR of CPSUs is placed at 3.60 per cent of GDP in the Tenth Plan.

3.18. With a GBS net of Central assistance to State and UT plans projected at 2.79 per cent

and IEBR of CPSUs indicated at 3.60 per cent, resources available for the Central Plan are arrived at 6.39 per cent of GDP, up from 5.16 per cent realized during the Ninth Plan, an increase of 1.23 percentage points. Table 3.3 indicates the resources of the Centre and its funding in the Tenth Plan.

3.19. The GBS of the Centre is placed at Rs.7,06,000 crore at 2001-02 prices. Central assistance to State & UT plans works out to Rs.3,00,265 crore. After deducting Central assistance to States and UTs, the GBS available for the Central plan is Rs.4,05,735 crore at 2001-02 prices. With an IEBR of CPSUs indicated at Rs.5,15,556 crore at 2001-02 prices, total resources available for the Central Plan is projected at Rs.9,21,291 crore at 2001-02 prices. The Central Ministries have indicated an IEBR of Rs.4,87,448 crore, which falls short by Rs.28,108 crore vis-à-vis the required IEBR. The IEBR currently indicated by the Central Ministries, if taken in place of the projected IEBR, reduces the Central resources for the Tenth Plan to Rs.8,93,183 crore.

Table 3.3
Projection of Tenth Plan Resources of the Centre

(Rs. crore at 2001-02 prices)

Sources of Funding	Projection
1. Balance from Current Revenues	-6,385 (-0.9)
2. Borrowings including net MCR	6,85,185 (97.0)
3. Net inflow from abroad	27,200 (3.9)
4. Gross Budgetary Support to Plan(1 to 3)	7,06,000 (100.0)
5. Central Assistance to States & UTs	-3,00,265 (42.5)
6. GBS for Central Plan (4+5)	4,05,735
7. Resources of Public Sector Enterprises	5,15,556
7.1. Internal Resources	4,09,000
7.2. Extra Budgetary Resources	1,06,556
8. Resources for Central Plan (6+7)	9,21,291

Note : Figures in parentheses are percentage of GBS.

Table 3.4
Ninth Plan Realisation and Tenth Plan projection of Resources of Centre

(As a percentage of GDP)

Sources of Funding	Ninth Plan realization	Tenth Plan projections	Increases(+)/ Decreases(-)
1. Balance from Current Revenues	-1.98	-0.04	(+)1.94
2. Borrowings including net MCR	5.78	4.78	(-)-1.00
3. Net Inflow from Abroad	0.22	0.19	(-)-0.03
4. Gross Budgetary Support to Plan	4.02	4.93	(+) 0.91
5. Central Assistance to States & UTs	-1.76	-2.09	(-) 0.33
6. GBS for Central Plan (4+5)	2.26	2.84	(+) 0.57
7. Resources of Public Sector Enterprises	2.90	3.60	(+) 0.70
7.1. Internal Resources	2.15	2.85	(+) 0.70
7.2. Extra Budgetary Resources	0.75	0.75	-
8. Resources for Central Plan (6+7)	5.16	6.44	(+) 1.27

3.20. A funding pattern as envisaged in Table 3.3 is a challenging task, the extent of which could be gauged by comparing the Tenth Plan projected levels to the Ninth Plan realisation. Table 3.4 indicates the Ninth Plan realization and the Tenth

Plan projection of resources of the Centre in relation to GDP.

3.21. The steps detailed in Box 3.1 will be necessary for achieving these targets.

BOX 3.1

- Comprehensive computerisation of the income tax system and universal usage of tax identification numbers in monetary transactions must be employed for facilitating improved enforcement of the income-tax administration.
- The policy direction for removing unnecessary exemptions under corporate tax must continue so that corporate income, liable to taxation, comes nearer to book profits as declared by the companies.
- The current policy of moving progressively to a truly single excise rate should continue to be pursued while tightening up much more on existing exemptions, particularly those under small enterprises, all for improving tax compliance.
- The coverage of the service tax must be extended continuously under the union excise system so that much greater tax buoyancy can be achieved through increased coverage of the economy as a whole.
- The extension of VAT at the State level must be taken up at the earliest for facilitating its integration with the Central VAT and bringing about harmonisation of tax rates levied by different tax jurisdictions.
- Peak customs tariff must be continuously lowered for enabling greater integration with the world economy and consequently raising customs revenue through larger volumes of imports as would arise from expansion of international trade.

- User charges must be raised to cost recovery levels and made acceptable by a communication campaign to convince members of the general public that such a system would be in their own overall interest.
- The recommendation of the Expenditure Reforms Commission, on the road map provided by it for progressive reduction in fertilizer subsidy, as also fully eliminating petroleum subsidy for reducing NPRE must be pursued.
- A change has to be made in the design of the food subsidy programme whereby a shift from the one based on minimum support price to Food for Work Programme is taken for reducing as well as effectively directing food subsidy.
- Curtailment in pay and allowances of the government must be pursued on a continuous basis as, in the wake of the implementation of the Fifth pay Commission's recommendations, downsizing has become most critical to reducing NPRE.
- The operational efficiency of Indian Railways and the power sector CPSUs must be improved with a view to eventually eliminating all budgetary support and generating adequate internal resources for expanding the transport and power facilities in the country.

Resources of States and UTs during the Ninth Plan (1997-2002)

3.22. The Ninth Plan resources of States and UTs were projected at Rs.3,69,839 crore at 1996-97 prices. At comparable prices, the realisation was

placed at Rs. 2,99,131 crore or 80.9 per cent of the projected level. The realized pattern of funding however, show wide divergences from the projected levels. Table 3.5 summarises the projection and realisation of the Ninth Plan resources and their sources of funding.

Table 3.5
Ninth Plan Resources of States and UTs

(Rs. crore at 1996-97 prices)

Sources of Funding	Projection	Realisation	% Realisation
1. Balance from Current Revenues	1,372 (0.4)	-1,06,962 (-35.8)	-7,896.1
2. Resources of Public Sector Enterprises	55,030 (15.0)	52,107 (17.4)	94.7
2.1. Internal Resources	14,890 (4.1)	-35,416 (-11.8)	-337.9
2.2. Extra-budgetary Resources	40,140 (10.9)	87,523 (29.2)	218.0
3. Borrowings including net MCR	1,43,419 (38.6)	2,15,592 (72.1)	150.3
4. States' Own Resources (1 to 3)	1,99,821 (54.0)	1,60,737 (53.7)	80.4
5. Central Assistance	1,70,018 (46.0)	1,38,394 (46.3)	81.4
6. Aggregate Plan Resources (4 + 5)	3,69,839 (100.0)	2,99,131 (100.0)	80.9

Note : Figures in parentheses are percentage of aggregate plan resources.

3.23. As indicated in the Table, the BCR deteriorated by 7,896.1 per cent, significantly drawing borrowings away from plan resources. Borrowings therefore had to increase to 150.3 per cent of the projected level in order to provide some support to plan resources. The Ninth Plan saw a considerable shift from non-debt to debt funding. The non-debt funding reflected by BCR, which was projected to contribute a small surplus realised a contribution of negative 35.8 per cent. Consequently, borrowings, which were projected to contribute 38.6 per cent, ended up contributing 72.1 per cent of the Ninth Plan resources.

3.24. Available evidence suggests that deterioration of BCR was a result of both revenue and expenditure related slippages. The growth in NPRE was much more than the growth in current revenues during the Ninth Plan period. The implementation of the Fifth Pay Commission's recommendations significantly contributed to the rapid growth of NPRE. In one single year, salary and pension payments rose by almost one-third of the pre-Pay Commission level. The effect could have been largely mitigated but for the inability in reducing the staff strength. Further, interest payments in the terminal year of the Ninth Plan rose by as much as two and a half times the base year level in absolute terms, due to mobilisation of large borrowings.

3.25. Under revenue receipts, States' share of Central taxes reduced by 0.14 percentage points of GDP across the Ninth Plan period. This was due to industrial recession, which could not impart much buoyancy to the growth in union excise revenues. Revenue losses on account of expansion in the coverage of MODVAT without commensurate upward adjustment of tax rates has also been argued as another reason behind the falling ratio of the Centre's gross tax revenue to GDP. Own tax revenues of States and UTs also failed to exceed the buoyancy factor of 1. Excessive tax competition among States resulting in lowering of tax rates as well as various fiscal concessions provided to attract industrial investment were instrumental in not boosting the own tax revenues. Growth in own non-tax revenues was driven down due to the Centre's inability to raise royalty rates on minerals. States and UTs also could not raise user charges

adequately on irrigation and other departmental services.

3.26. Contribution of the resources of State public sector enterprises (SPSEs) was realised at 94.7 per cent of the projected level. The realization however could have significantly exceeded 100 per cent had it not been for the deterioration of IR. The IR of SPSEs, which were projected to contribute 4.1 per cent of plan resources, realised a contribution of negative 11.8 per cent. The deterioration of almost 16 percentage points in IR was largely funded by an increase in the contribution of EBR of PSEs. The contribution of EBR to plan resources, which was projected at 10.9 per cent realised a contribution of 29.2 per cent, an increase of almost 19 percentage points.

3.27. The deterioration in IR brings into focus the poor performance of State Electricity Boards (SEBs), whose current costs have increasingly failed to be covered by current revenues. Unproductive expenditure on administration and establishment has grown rapidly without commensurate increase in user charges. Such events accentuate the importance of power sector reforms, which should enable SEBs to earn at least a minimum rate of 3 per cent on their assets.

3.28. The trebling of the contribution of EBR to plan resources vis-à-vis the Ninth Plan projections, despite a massive deterioration of IR implies an imprudent use of guarantees, which States issue for SPSEs to raise borrowings. The contingent liability embodied in the issue of guarantees is most likely to fall on State budgets if SPSEs do not improve the mobilisation of internal resources. In such an event, the fiscal balance of States' finances can come under severe strain.

3.29. As against a projected contribution of 38.6 per cent of borrowings to plan resources, Ninth Plan realisation places it at 72.1 per cent, an increase of almost 34.0 percentage points. Unfortunately, such a sizeable growth in borrowings was used to bridging the BCR gap rather than augmenting plan resources. Rapid increase in borrowings also led to an increase in public sector draft on private savings as is implied by growth in States' outstanding debt as a percentage of GDP from 17.8

per cent in the beginning to 25.9 per cent at the end of the Ninth Plan. Simultaneously, a larger debt burden increasingly became unsustainable, as the accompanying growth of interest payments was not matched by a commensurate growth in revenues. Interest payments as a percentage of revenue receipts increased from 16.7 per cent in the beginning to 22.8 per cent at the end of the Ninth Plan.

3.30. Central assistance to States and UTs realised 81.4 per cent of the projected level. However, its realised contribution to plan resources remained the same as the projected contribution at around 54 per cent. The significance of GBS to States and UTs Plan remained unchanged during the Ninth Plan period. However, a shortfall in absolute terms underlines the growing budgetary strain of the Centre in meeting the targets of Central assistance.

Projection of Tenth Plan (2002-07) Resources of States and UTs

3.31. In keeping with the requirement of stepping up public sector investment for attaining an 8 per cent GDP growth during the Tenth Plan, budgetary resources for the States & UTs plan has been projected to grow from 3.85 per cent of GDP in 2001-02 to 4.20 per cent in 2006-07. The Tenth Plan average stands at 4.10 per cent, as against the Ninth Plan realization of 3.14 per cent.

3.32. The fiscal sustainability of States and UTs is considerably more vulnerable than for the Centre and requires greater fiscal correction. Accordingly, the gross fiscal deficit, which stood at 4.47 per cent of GDP in 2001-02 has been projected to reduce to 2.19 per cent in 2006-07, obtaining a Tenth Plan average of 3.19 per cent. The Ninth Plan average had stood at 3.37 per cent. The projected target of gross fiscal deficit is implicit in own borrowings inclusive of MCR and the loan component of Central assistance. Own borrowings inclusive of MCR in the Tenth Plan are arrived at 1.82 per cent of GDP, down from 2.74 per cent realised during the Ninth Plan. Central assistance in the Tenth Plan is placed at 2.09 per cent of GDP, up from 1.76 per cent realized during the Ninth Plan.

3.33. BCR is arrived at 0.19 per cent of GDP. To achieve a BCR of this order, non-plan revenue receipts must grow from 10.27 per cent of GDP in 2001-02 to 11.00 per cent in 2006-07, an increase of 0.73 percentage points. NPRE must come down from 12.15 per cent of GDP in 2001-02 to 10.32 per cent, a decrease of 1.83 percentage points. Thus an improvement of 2.56 percentage points in BCR during the Tenth Plan is mainly sought from a contraction of NPRE.

3.34. IR and EBR of SPSEs were determined in consultation with State Governments. The need for improving IR, particularly of SEBs was emphasized. Accordingly, IR was projected at -0.05 per cent of GDP for the Tenth Plan, a much improved level from -0.45 per cent realised during the Ninth Plan. After a considered view, which favored a reduction in the contingent liabilities of States and UTs, EBR was projected at 0.63 per cent of GDP in the Tenth Plan, down from 1.11 per cent realised during the Ninth Plan. Total resources of SPSEs in the Tenth Plan are therefore projected at 0.58 per cent of GDP, slightly diminished from 0.66 per cent realised during the Ninth Plan. Table 3.6 indicates the Tenth Plan resources and its funding of States and UTs in the Tenth Plan.

Table 3.6
Tenth Plan Projection of Resources of States and UTs

(Rs.crore at 2001-02 prices)

Sources of Funding	Tenth Plan Projections
1. Balance from Current Revenues	26,578 (4.0)
2. Resources of Public Sector Enterprises	82,684 (12.3)
2.1. Internal Resources	-7,760 (-1.2)
2.2. Extra-budgetary Resources	90,444 (13.5)
3. Borrowings including net MCR	2,61,482 (39.0)
4. States' Own Resources (1 to 3)	3,70,744 (55.3)
5. Central Assistance	3,00,265 (44.7)
6. Aggregate Plan Resources (4 + 5)	6,71,009 (100.0)

Note : Figures in parentheses are percentage of aggregate plan resources.

3.35. Aggregate plan resources of States and UTs are arrived at Rs.6,71,009 crore at 2001-02 prices, comprising Rs.3,70,744 crore of own resources and Rs.3,00,265 crore of Central assistance. Of the total aggregate plan resources, budgetary resources are placed at Rs.5,88,325 crore.

3.36. A funding pattern, as envisaged is a demanding task, whose extent could be gauged by comparing the Tenth Plan projected levels to Ninth Plan realization. Table 3.7 indicates the Ninth Plan realisation and Tenth Plan projection of resources of the States and UTs in relation to GDP.

3.37. The steps detailed in Box 3.2 are necessary to achieve these targets.

3.38. The Planning Commission held discussions with States and UTs about projecting the core Tenth Plan resources. The projection of the core Tenth Plan resources was at a level lower than what was required to achieve 8 per cent growth of GDP. This was due to the apprehension that improvement in BCR, as required under the 8 per cent GDP growth scenario may not be achievable. Thus, as against a BCR of 0.20 per cent in the 8 per cent growth scenario, core plan resources

Table 3.7
Ninth Plan Realisation and Tenth Plan Projection of Resources of States and UTs

(As a percentage of GDP)

Sources of Funding	Ninth Plan Realisation	Tenth Plan Projections	Increases(+)/ Decreases(-)
1. Balance from Current Revenues	-1.36	0.20	(+)1.56
2. Resources of Public Sector Enterprises	0.66	0.58	(-) 0.08
2.1. Internal Resources	-0.45	-0.05	(+) 0.40
2.2. Extra-budgetary Resources	1.11	0.63	(-) 0.48
3. Borrowings including net MCR	2.74	1.82	(-) 0.92
4. States' Own Resources (1 to 3)	2.04	2.60	(+) 0.56
5. Central Assistance	1.76	2.09	(+) 0.33
6. Aggregate Plan Resources (4 + 5)	3.80	4.69	(+) 0.89

BOX 3.2

- Improving tax/GDP ratio of the Centre and States/UTs through inclusion of services in the tax base, removal of tax exemptions and concessions, harmonisation of tax rates, tightening of tax administration, and adopting an integrated VAT regime.
- Reduction of budget-based subsidies by raising user charges of departmental services, reducing expenditure by cutting administrative and establishment cost and privatization and through Centre's initiative switching over to ad valorem rates of royalty on minerals.
- Reducing staff strength through adoption of a policy of net attrition and constituting a pension and amortisation fund to make committed payments like terminal benefits and debt servicing, self-financing.
- Enacting a 'Fiscal Responsibility and Budget Management' bill under which borrowings shall be restricted to attain a non-rising debt to GDP ratio from current levels in order to reduce the burden of interest payments.
- Improving internal resources of States PSUs by implementing power sector reforms and reducing the burden of contingent liabilities on State budgets through a legislative or administrative ceiling on the issue of State guarantees.

indicated its level at negative 0.11 per cent. Further it was also recognised that the level of Central assistance indicated at 2.09 per cent of GDP may also not be available if the Centre's GBS fails to rise to the Tenth Plan projected levels. Consequently, the core plan resources arrived at a Central assistance level of 1.80 per cent of GDP, by and large the same level realized in the Ninth Plan. Table 3.8 gives a break-down of the funding of plan resources of States and UTs under the core plan scenario.

3.39. The core Tenth Plan resources of States and UTs are projected at Rs.5,90,948 crore, Rs.80,061 crore less than the level consistent with the 8 per cent GDP growth scenario. To be

consistent with the 8 per cent growth target, States and UTs are required to raise Rs. 38,553 crore of own resources and the Centre required to provide Rs. 41,508 crore of Central assistance to make up for the balance. States & UTs wise disbursement of the Central assistance component of the balance, inter-alia, may have to be linked to their respective abilities in mobilising the own resources component.

Overall Financing Pattern

3.40. Table 3.9 revisits the Ninth Plan realisation levels of plan resources of the Centre and States and UTs. Total resources realised for the public

Table 3.8
Core Tenth Plan Resources of States & UTs

(Rs.crore at 2001-02 prices)

Sources of Funding	States	UTs(1)	UTs(2)	Total
1.Balance from Current Revenues	-37,099	21,804	-	-15,295
2.Resources of Public Sector Enterprises	85,566	-2,882	-	82,684
2.1. Internal Resources	-4,878	-2,882	-	-7,760
2.2. Extra-budgetary Resources	90,444	-	-	90,444
3.Borrowings including net MCR	2,62,013	2,789	-	2,64,802
4. States' Own Resources (1 to 3)	3,10,480	21,711	-	3,32,191
5. Central Assistance	2,51,093	3,195	4,469	2,58,757
6. Aggregate Plan Resources (4 + 5)	5,61,573	24,906	4,469	5,90,948

Note : UTs(1)-With Legislature; UTs(2)-Without Legislature.

Table 3.9
Ninth Plan Realisation of Resources for the Public Sector Plan

(Rs. crore at 1996-97 prices)

Sources of Funding	Centre	States / UTs	Total
1.Balance from Current Revenues	-1,56,790	-1,06,962	-2,63,752
2.Borrowings including net MCR	4,55,624	2,15,592	6,71,216
3. Net Inflow from Abroad	17,452	-	17,452
4. Centre's GBS (1+2+3)	3,16,286	-	-
5.Resources of Public Sector Enterprises	2,28,795	52,107	2,80,902
5.1. Internal Resources	1,69,046	-35,416	1,33,630
5.2. Extra budgetary Resources	59,749	87,523	1,47,272
6. States' Own Resources (1+2+5)	-	1,60,737	-
7. Central Assistance to States & UTs	-1,38,394	1,38,394	-
8. Resources for the Public Sector Plan (1+2+3+5+7)	4,06,687	2,99,131	7,05,818

Note : The Centre's GBS available for the Central Plan works out to Rs.177892 crore.

sector's Ninth Plan indicates the large presence of negative BCR, which has been bridged by a substantially high level of borrowings. Had the BCR realisation been in alignment with what was projected, the contracted borrowings would have significantly stepped up the resources for the public sector plan, much higher than what was projected. In that event, the increase in overall debt burden would have been accompanied by a larger public sector investment, which would have built the productive capacities of the economy rather than funding the consumption expenditure of the government.

3.41. Table 3.10. projects the overall resources for the Tenth Plan on the presumption that the negative BCR gap would be erased, leaving borrowings exclusively for the public sector investment and not for meeting the consumption expenditure of the government. The projection also requires the public sector enterprises to substantially enhance their internal resources for limiting the need for raising EBR.

Allocation of Public Sector Resource

3.42. The projected requirement of resources of the public sector for the Tenth Plan at Rs.15,92,300 crore at 2001-02 prices comprise the Centre's share at Rs.9,21,291 crore and

States and UTs share at Rs.6,71,009 crore. The resources for the Central Plan includes the GBS component of Rs.4,05,735 crore and the IEER component of Rs.5,15,556 crore. The IEER component as currently assessed by Central Ministries is Rs.4,87,448 crore, which is Rs.28,108 crore lower than the level consistent with the 8 percent growth of GDP in the Tenth Plan.. Thus, the resource allocation in the Central sector amounts to Rs.8,93,183 crore, which is indicated in Annexure 3-A with details of budgetary support and IEER furnished in Annexure 3-B.

3.43. The Tenth Plan resources of the States and UTs are projected at Rs.6,71,009 crore at 2001-02 prices. Core plan estimates, however, arrive at a resource figure of Rs.5,90,948 crore, leaving a balance of Rs.80,061 crore. Sectoral allocation in the States/UTs sector includes the core plan resources and the Central Assistance component of the balance, that is, Rs.41,508 crore. This component has been allocated to certain critical sectors identified by the Planning Commission. The allocation of the own resources component of the balance, which is placed at Rs. 38,553 crore, will have to await its actual mobilization by the States and UTs. Consequently, sectoral allocations in the States/ UTs sector is arrived at Rs.6,32,456 crore. This

Table 3.10
Tenth Plan Projection of Resources for the Public Sector Plan

(Rs. crore at 2001-02 prices)

Sources of Funding	Centre	States/UTs	Total
1.Balance from Current Revenues	-6,385	26,578	20,193
2.Borrowings including net MCR	6,85,185	2,61,482	9,46,667
3. Net Inflow from Abroad	27,200	-	27,200
4.Centre's GBS (1+2+3)	7,06,000	-	7,06,000
5.Resources of Public Sector Enterprises	5,15,556	82,684	5,98,240
5.1. Internal Resources	4,09,000	-7,760	4,01,240
5.2. Extra budgetary Resources	1,06,556	90,444	1,97,000
6. States' Own Resources (1+2+5)	-	3,70,744	-
7.Central Assistance to States & UTs	-3,00,265	3,00,265	-
8.Resources for the Public Sector Plan (1+2+3+5+7)	9,21,291	6,71,009	15,92,300

Note : The Centre's GBS available for the Central Plan works out to Rs.4,05,735 crore. Allocations of Public Sector Resources.

allocation in the States/UTs sector is indicated in Annexure 3-A with States/UTs wise core plan details furnished in Annexure 3-C. Annexure 3-D indicates the details of Central assistance component of the balance in the States/UTs sector.

3.44. Thus, as against the public sector resources of Rs.15,92,300 crore for the Tenth Plan, allocations aggregate to Rs.15,25,639 crore. Table 3.11 indicates the resources and allocation of the public sector Tenth Plan.

Table 3.11
Public Sector Resources & Allocations
Tenth Plan (2002-07)

(Rs. crore at 2001-02 prices)

Sources of funding	Required	Allocated
CENTRE		
1. Budgetary Support	4,05,735	4,05,735
2. IEBR	5,15,556	4,87,448
3. Total-Centre (1+2)	9,21,291	8,93,183
STATES & UTs		
4. Core Plan	5,90,948	5,90,948
5. Balance (5.1+5.2)	80,061	41,508
5.1 Own Resources	38,553	-
5.2 Central Assistance	41,508	41,508
6. Total-States & UTs (4+5)	6,71,009	6,32,456
TOTAL PUBLIC SECTOR		
7. Grand Total (3+6)	15,92,300	15,25,639

Sectoral Allocations of Public Sector's Resources: Ninth Plan Realization (1997-2002) and Tenth Plan (2002-07) Projections

(Rs. crore at 2001-02 prices)

Heads of Development	CENTRE						STATES AND UTs						CENTRE, STATES & UTs					
	Budgetary Support			IEBR			Total Outlay			Total Outlay			Total Outlay					
	Ninth Plan	Tenth Plan	% Increase	Ninth Plan	Tenth Plan	% Increase	Ninth Plan	Tenth Plan	% Increase	Ninth Plan	Tenth Plan	% Increase	Ninth Plan	Tenth Plan	% Increase	Ninth Plan	Tenth Plan	% Increase
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
1. Agriculture & Allied Activities	12008	21068	75.4	-	-	-	12008	21068	75.4	25231	37865	50.1	37239	58933	58.3			
2. Rural Development	56404	79724	41.3	-	-	-	56404	79724	41.3	32561	42204	29.6	88965	121928	37.1			
3. Special Area Programmes	-	-	-	-	-	-	-	-	-	5408	20879	286.1	5408	20879	286.1			
4. Irrigation & Flood Control	1955	3600	84.1	-	-	-	1955	3600	84.1	67875	99715	46.9	69830	103315	48.0			
5. Energy	25632	51600	101.3	118757	266583	124.5	144389	318183	120.4	74854	85744	14.5	219243	403927	84.2			
6. Industry and Minerals	7362	11786	60.1	26102	28586	9.5	33464	40372	20.6	11231	18567	65.3	44695	58939	31.9			
7. Transport	36784	65350	77.7	61627	82098	33.2	98411	147448	49.8	44838	78529	75.1	143249	225977	57.8			
8. Communications	3559	7944	123.2	89263	91012	2.0	92822	98956	6.6	14	12	-14.3	92836	98968	6.6			
9. Science, Technology & Environment	14563	27570	89.3	11	-	-	14574	27570	89.2	1093	2854	161.1	15667	30424	94.2			
10. General Economic Services	4091	10587	158.8	960	500	-47.9	5051	11087	119.5	8683	27543	17.2	13734	38630	181.3			
11. Social Services	64927	120333	85.3	11215	18669	66.5	76142	139002	82.6	118387	208389	76.0	194529	347391	78.6			
12. General Services	5987	6173	3.1	-	-	-	5987	6173	3.1	9659	10155	5.1	15646	16328	4.4			
Total	233272	405735	73.9	307935	487448¹	58.3	541207	893183	85.0	399834	632456²	58.2	941041	1525639	62.1			

Source: (1) Core IEBR indicated by the Central Ministries, which is Rs. 28108 crore less than the level consistent with 8 percent growth of GDP in the Tenth Plan, that is Rs.515556 crore.

(2) Includes allocation of Rs. 590948 crore of core Plan resources of States/UTs and Rs. 41508 crore, additional outlays proposed by the Planning Commission.

Budget Support, IEBR and Outlay for Central Ministries/Department : Ninth Plan Realization & Tenth Plan Projections

(Rs. crore at 2001-02 prices)

Ministry/Department	Budgetary Support			IEBR			Total Outlay		
	1. Ninth Plan Realization	2. Tenth Plan Projections	3. % Increase	4. Ninth Plan Realization	5. Tenth Plan Projections	6. % Increase	7. Ninth Plan Realization	8. Tenth Plan Projections	9. % Increase
1. Agriculture & Cooperation	8308	13200	58.9	-	-	-	8308	13200	58.9
2. Agriculture Research & Education	2673	5368	100.8	-	-	-	2673	5368	100.8
3. Animal Husbandry & Dairying	1027	2500	143.4	-	-	-	1027	2500	143.4
4. Agro & Rural Industries	2675	2950	10.3	-	-	-	2675	2950	10.3
5. Atomic Energy	6771	21550	218.3	1671	10820	547.5	8442	32370	283.4
6. Chemicals & Petro-Chemicals	191	300	57.1	5516	2744	-50.3	5707	3044	-46.7
7. Fertilizers	1013	1050	3.7	4474	4850	8.4	5487	5900	7.5
8. Civil Aviation	204	400	96.1	9228	12528	35.8	9432	12928	37.1
9. Coal	2233	1050	-53.0	14823	30541	106.0	17056	31591	85.2
10. Mines	950	1271	33.8	4873	8187	68.0	5823	9458	62.4
11. Commerce	1876	4547	142.4	169	15	-91.1	2045	4562	123.1
12. Industrial Policy & Promotion	2113	2000	-5.3	-	-	-	2113	2000	-5.3
13. Information Technology	1236	2714	119.6	619	2778	348.8	1855	5492	196.1
14. Post	443	1350	204.7	-	-	-	443	1350	204.7
15. Telecommunications	915	1500	63.9	86435	85484	-1.1	87350	86984	-0.4
16. Food & Public Distribution	236	250	5.9	620	485	-21.8	856	735	-14.1
17. Consumer Affairs	52	55	5.8	-	-	-	52	55	5.8
18. Disinvestment	-	-	-	-	-	-	-	0	-
19. Development of North-Eastern Region	-	150	-	-	-	-	-	150	-

Contd. Annexure : 3-B

Ministry/Department	Budgetary Support			IEBR			Total Outlay		
	Ninth Plan Realization	Tenth Plan Projections	% Increase	Ninth Plan Realization	Tenth Plan Projections	% Increase	Ninth Plan Realization	Tenth Plan Projections	% Increase
	1.	2.	3.	4.	5.	6.	7.	8.	9.
20. Environment & Forests	3186	5945	86.59	-	-	-	3186	5945	86.59
21. External Affairs	1803	2811	55.9	-	-	-	1803	2811	55.9
22. Economic Affairs	2931	300	-89.8	-	-	-	2931	300	-89.8
23. Expenditure	15	2	-86.7	-	-	-	15	2	-86.7
24. Revenue	3	1	-66.7	-	-	-	3	1	-66.7
25. Food Processing Industries	216	650	200.9	-	-	-	216	650	200.9
26. Health	5314	9253	74.1	-	-	-	5314	9253	74.1
27. Family Welfare	15088	27125	79.8	-	-	-	15088	27125	79.8
28. Indian Systems of Medicine & Homeopathy	322	775	140.7	-	-	-	322	775	140.7
29. Heavy Industry	958	700	-26.9	1649	1363	-17.3	2607	2063	-20.9
30. Public Enterprises	-	50	-	-	-	-	-	50	-
31. Home Affairs	707	2000	182.9	-	-	-	707	2000	182.9
32. Elementary Education & Literacy	23792	30000	26.1	-	-	-	23792	30000	26.1
33. Secondary Education & Higher Education	-	13825	-	-	-	-	-	13825	-
34. Women & Child Development	6729	13780	104.8	-	-	-	6729	13780	104.8
35. Information & Broadcasting	965	2380	146.6	2209	2750	24.5	3174	5130	61.6
36. Labour	510	1500	194.1	-	-	-	510	1500	194.1
37. Company Affairs	1	50	4900.0	-	-	-	1	50	4900.0
38. Justice	397	700	76.3	-	-	-	397	700	76.3
39. Non-Conventional Energy Sources	1721	4000	132.4	2140	3167	48.0	3861	7167	85.6
40. Ocean Development	498	1125	125.9	-	-	-	498	1125	125.9

Contd. Annexure : 3-B

Ministry/Department	Budgetary Support			IEBR			Total Outlay		
	Ninth Plan Realization	Tenth Plan Projections	% Increase	Ninth Plan Realization	Tenth Plan Projections	% Increase	Ninth Plan Realization	Tenth Plan Projections	% Increase
	1.	2.	3.	4.	5.	6.	7.	8.	9.
41. Personnel, Public Grievances & Pensions	78	250	220.5	-	-	-	78	250	220.5
42. Petroleum & Natural Gas	-	-	-	70338	103656	47.4	70338	103656	47.4
43. Planning Commission	614	340	-44.6	-	-	-	614	340	-44.6
44. Power	14907	25000	67.7	29785	118399	297.5	44692	143399	220.9
45. Railways	16491	27600	67.4	34120	33000	-3.3	50611	60600	19.7
46. Road Transport & Highways	19393	35000	80.5	18279	24700	35.1	37672	59700	58.5
47. Drinking Water Supply	8052	14200	76.4	-	-	-	8052	14200	76.4
48. Land Resources	2404	6526	171.5	-	-	-	2404	6526	171.5
49. Rural Development	43273	56748	31.1	-	-	-	43273	56748	31.1
50. Bio-Technology	669	1450	116.7	-	-	-	669	1450	116.7
51. Science & Technology	1635	3400	108.0	11	-	-	1646	3400	106.6
52. Scientific & Industrial Research	1478	2575	74.2	-	-	-	1478	2575	74.2
53. Shipping	696	2350	237.6	6350	11870	86.93	7045.87	14220	101.8
54. Small Scale Industries	-	2200	-	666	384	-42.3	666	2584	288.0
55. Social Justice & Empowerment	5404	8530	57.8	-	-	-	5404	8530	57.8
56. Space	7097	13250	86.7	-	-	-	7097	13250	86.7
57. Statistics & Programme Implementation	215	725	237.2	-	-	-	215	725	237.2
58. Steel	85	65	-23.5	8882	10978	23.6	8967	11043	23.2
59. Textiles	1836	3500	90.6	42	80	90.5	1878	3580	90.6
60. Tourism	640	2900	353.1	171	-	-	811	2900	257.6

Contd. Annexure : 3-B

Ministry/Department	Budgetary Support			IEBR			Total Outlay		
	Ninth Plan Realization	Tenth Plan Projections	% Increase	Ninth Plan Realization	Tenth Plan Projections	% Increase	Ninth Plan Realization	Tenth Plan Projections	% Increase
	1.	2.	3.	4.	5.	6.	7.	8.	9.
61. Culture	740	1720	132.4	-	-	-	740	1720	132.4
62. Tribal/Affairs	654	1754	168.2	-	-	-	654	1754	168.2
63. Urban Development	4754	7000	47.2	2571	5168	101.0	7325	12168	66.1
64. Urban Employment & Poverty Alleviation	1150	4050	252.2	8644	13501	56.2	9794	17551	79.2
65. Water Resources	1955	3600	84.1	-	-	-	1955	3600	84.1
66. Youth Affairs & Sports	980	1825	86.2	-	-	-	980	1825	86.2
Total	233272	405735	73.9	314285	487448	55.09	547557	893183	65.0

Tenth Plan (2002-07) Outlays by States/UTs
(Major Heads of Development)

Sectors/States	(Rs. Crore at 2001-02 prices)												
	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
	Andhra Pradesh	Arunachal Pradesh	Assam	Bihar	Chattisgarh	Goa	Gujarat	Haryana	Himachal Pradesh	J & K	Jharkhand	Karnataka	Kerala
1. Agriculture & Allied Activities	2333.21 (5.0)	515.31 (13.3)	664.98 (8.0)	536.11 (2.6)	860.97 (7.8)	158.34 (4.9)	3548.71 (8.9)	469.53 (4.6)	1201.69 (11.7)	1507.80 (10.4)	824.85 (5.6)	2346.94 (5.4)	1125.00 (4.7)
2. Rural Development	4592.07 (9.9)	158.17 (4.1)	582.61 (7.0)	4136.50 (19.7)	1158.91 (10.5)	84.50 (2.6)	1361.94 (3.4)	305.85 (3.0)	438.16 (4.3)	374.10 (2.6)	3272.33 (22.4)	2227.72 (5.1)	569.75 (2.4)
3. Special Area Programme	1123.52 (2.4)	65.00 (1.7)	56.40 (0.7)	40.69 (0.2)	0.00	18.00 (0.6)	38.30 (0.1)	147.37 (1.4)	20.80 (0.2)	771.87 (5.3)	0.00	640.74 (1.5)	100.00 (0.4)
4. Irrigation & Flood Control	10844.98 (23.3)	184.37 (4.7)	645.33 (7.8)	6016.87 (28.7)	2506.65 (22.8)	222.90 (7.0)	8810.05 (22.0)	1541.04 (15.0)	453.18 (4.4)	805.79 (5.6)	2076.70 (14.2)	14176.57 (32.5)	930.00 (3.9)
5. Energy	7141.72 (15.3)	498.12 (12.8)	837.04 (10.1)	2735.44 (13.0)	133.25 (1.2)	405.00 (12.7)	6018.93 (15.0)	1400.47 (13.6)	1235.00 (12.0)	2885.74 (19.9)	814.00 (5.6)	2266.95 (5.2)	3500.00 (14.6)
6. Industry & Minerals	1655.11 (3.6)	76.36 (2.0)	237.04 (2.9)	241.50 (1.2)	214.12 (1.9)	116.40 (3.6)	2068.45 (5.2)	84.34 (0.8)	104.73 (1.0)	435.65 (3.0)	473.87 (3.2)	1452.87 (3.3)	1328.75 (5.5)
7. Transport	3994.19 (8.6)	824.42 (21.2)	879.32 (10.6)	1303.12 (6.2)	451.64 (4.1)	392.84 (12.3)	1851.39 (4.6)	1286.65 (12.5)	1635.94 (15.9)	1640.70 (11.3)	1287.64 (8.8)	4854.44 (11.1)	2660.00 (11.1)
8. Communications	0.00	0.00	0.00	0.00	0.00	0.00	34.05 (0.09)	0.00	2.11 (0.02)	0.00	0.00	0.00	0.00
9. Science, Technology & Environment	11.20 (0.0)	4.62 (0.1)	8.15 (0.1)	0.00	10.83 (0.1)	4.75 (0.1)	326.01 (0.8)	8.48 (0.1)	6.42 (0.1)	36.19 (0.2)	330.00 (2.3)	25.78 (0.1)	120.00 (0.5)
10. General Economic Services	804.80 (1.7)	231.70 (6.0)	217.59 (2.6)	352.89 (1.7)	169.19 (1.5)	159.75 (5.0)	838.87 (2.1)	512.35 (5.0)	223.74 (2.2)	1734.91 (12.0)	189.52 (1.3)	895.63 (2.1)	1168.05 (4.9)
11. Social Services	13634.04 (29.2)	1239.33 (31.9)	4157.11 (50.0)	5076.73 (24.2)	5256.15 (47.8)	1526.52 (47.7)	15089.45 (37.7)	4311.08 (41.9)	4893.48 (47.5)	4016.43 (27.7)	4847.14 (33.1)	14182.98 (32.6)	4360.45 (18.2)
12. General Services	479.16 (1.0)	90.92 (2.3)	29.65 (0.4)	560.15 (2.7)	238.29 (2.2)	111.00 (3.5)	20.85 (0.1)	217.84 (2.1)	84.75 (0.8)	290.82 (2.0)	516.69 (3.5)	487.60 (1.1)	8138.00 (33.9)
GRAND TOTAL	46614.00 (100.0)	3888.32 (100.0)	8315.24 (100.0)	21000.00 (100.0)	11000.00 (100.0)	3200.00 (100.0)	40007.00 (100.0)	10285.00 (100.0)	10300.00 (100.0)	14500.00 (100.0)	14632.74 (100.0)	43558.23 (100.0)	24000.00 (100.0)

Contd. Annexure : 3-C

Sectors/States	Madhya Pradesh	Maharashtra	Manipur	Meghalaya	Mizoram	Nagaland	Orissa	Punjab	Rajasthan	Sikkim	Tamil Nadu	Tripura	Uttar Pradesh
	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.
1. Agriculture & Allied Activities	1581.52 (6.0)	4248.62 (6.4)	113.86 (4.1)	299.60 (10.0)	161.98 (7.0)	255.50 (11.5)	1165.20 (6.1)	635.41 (3.4)	1649.48 (6.0)	174.99 (10.6)	3932.05 (9.8)	450.00 (10.0)	5142.40 (8.6)
2. Rural Development	2881.16 (11.0)	6919.72 (10.4)	120.91 (4.3)	208.18 (6.9)	156.65 (6.8)	180.05 (8.1)	897.91 (4.7)	1276.50 (6.8)	2298.84 (8.4)	74.00 (4.5)	4100.00 (10.3)	540.00 (12.0)	7127.91 (11.9)
3. Special Area Programme	0.00	373.22 (0.6)	22.88 (0.8)	44.70 (1.5)	40.37 (1.8)	44.55 (2.0)	0	134.37 (0.7)	169.22 (0.6)	30.00 (1.8)	0.00	315.00 (7.0)	1000.00 (1.7)
4. Irrigation & Flood Control	4915.89 (18.8)	15255.01 (22.9)	368.54 (13.1)	97.40 (3.2)	28.28 (1.2)	41.00 (1.8)	4099.21 (21.6)	2611.51 (14.0)	2767.88 (10.1)	31.00 (1.9)	2375.00 (5.9)	360.00 (8.0)	7607.35 (12.7)
5. Energy	5506.20 (21.0)	10163.51 (15.3)	230.51 (8.2)	505.77 (16.8)	194.85 (8.5)	248.45 (11.2)	2864.88 (15.1)	5982.73 (32.1)	7260.74 (26.6)	242.90 (14.7)	8029.65 (20.1)	225.00 (5.0)	9611.99 (16.1)
6. Industry & Minerals	202.38 (0.8)	716.56 (1.1)	332.94 (11.9)	144.00 (4.8)	60.38 (2.6)	192.05 (8.6)	109.33 (0.6)	55.98 (0.3)	955.66 (3.5)	62.00 (3.7)	555.00 (1.4)	135.00 (3.0)	1262.46 (2.1)
7. Transport	1353.05 (5.2)	5217.21 (7.8)	223.48 (8.0)	540.30 (18.0)	481.90 (21.0)	170.35 (7.6)	1959.91 (10.3)	2711.50 (14.5)	3039.79 (11.1)	265.00 (16.0)	6730.00 (16.8)	495.00 (11.0)	6740.25 (11.3)
8. Communications	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.00 (0.20)	0.00
9. Science, Technology & Environment	59.70 (0.2)	55.25 (0.1)	17.22 (0.6)	7.90 (0.3)	5.32 (0.2)	4.50 (0.2)	43.11 (0.2)	38.75 (0.2)	12.17 (0.0)	11.00 (0.7)	160.40 (0.4)	13.50 (0.3)	2414.75 (4.0)
10. General Economic Services	759.66 (2.9)	2849.51 (4.3)	245.21 (8.7)	59.70 (2.0)	125.55 (5.5)	228.03 (10.2)	2285.04 (12.0)	150.15 (0.8)	1079.89 (4.0)	40.40 (2.4)	175.60 (0.4)	67.50 (1.5)	2297.25 (3.8)
11. Social Services	7634.97 (29.2)	19233.21 (28.9)	1032.00 (36.8)	1034.35 (34.4)	956.87 (41.6)	738.40 (33.1)	5075.89 (26.7)	4858.37 (26.0)	7996.77 (29.3)	666.25 (40.2)	13653.55 (34.1)	1822.50 (40.5)	16091.19 (26.9)
12. General Services	1295.40 (4.9)	1600.18 (2.4)	96.45 (3.4)	67.10 (2.2)	87.88 (3.8)	124.77 (5.6)	499.52 (2.6)	201.83 (1.1)	87.56 (0.3)	58.20 (3.5)	288.75 (0.7)	67.50 (1.5)	412.45 (0.7)
GRAND TOTAL	26189.93 (100.0)	66632.00 (100.0)	2804.00 (100.0)	3009.00 (100.0)	2300.01 (100.0)	2227.65 (100.0)	19000.00 (100.0)	18657.00 (100.0)	27318.00 (100.0)	1655.74 (100.0)	40000.00 (100.0)	4500.00 (100.0)	59708.00 (100.0)

Contd. Annexure : 3-C

Sectors/States	Uttaran chal		West Bengal		States (1 to 28)		A & N Islands		Chandi- garh		D & N Haveli		Daman & Diu		NCT of Delhi		Lakshwa- dweep		Pondi- cherry		UTs Total (30 to 36)		States & UTs Total (29 + 37)	
	27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.	38.	39.	40.	41.	42.	43.	44.	45.	46.	47.	48.	49.	50.
1. Agriculture & Allied Activities	694.92 (9.1)	914.63 (3.2)	37513.60 (6.7)	177.77 (7.2)	20.33 (2.0)	27.84 (9.2)	9.23 (3.8)	137.45 (0.6)	106.84 (24.4)	195.80 (10.3)	675.25 (2.3)	38188.85 (6.5)												
2. Rural Development	420.52 (5.5)	3797.69 (13.3)	50262.65 (9.0)	150.84 (6.1)	10.17 (1.0)	10.53 (3.5)	10.58 (4.3)	463.25 (2.0)	5.60 (1.3)	31.52 (1.7)	682.49 (2.3)	50945.14 (8.6)												
3. Special Area Programme	3.88 (0.1)	1063.79 (3.7)	6264.67 (1.1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6264.67 (1.1)												
4. Irrigation & Flood Control	178.53 (2.3)	1898.66 (6.6)	91849.69 (16.4)	27.57 (1.1)	2.00 (0.2)	12.60 (4.1)	4.52 (1.8)	156.00 (0.7)	17.34 (4.0)	73.70 (3.9)	293.73 (1.0)	92143.42 (15.6)												
5. Energy	1943.68 (25.5)	7855.50 (27.4)	90738.02 (16.2)	207.43 (8.4)	109.42 (10.9)	77.75 (25.6)	51.49 (21.0)	3457.50 (15.0)	20.38 (4.7)	165.60 (8.7)	4089.56 (13.9)	94827.58 (16.0)												
6. Industry & Minerals	93.02 (1.1)	1509.84 (5.3)	14865.69 (2.6)	37.46 (1.5)	1.90 (0.2)	1.70 (0.6)	1.95 (0.8)	100.00 (0.4)	5.06 (1.2)	173.00 (9.1)	321.07 (1.1)	15186.76 (2.6)												
7. Transport	1089.06 (14.3)	2799.17 (9.8)	56878.26 (10.1)	978.19 (39.4)	46.20 (4.6)	62.74 (20.6)	66.95 (27.3)	5446.71 (23.7)	146.15 (33.4)	180.26 (9.5)	6927.20 (23.6)	63805.46 (10.8)												
8. Communications	0.00	0.00	45.16 (0.01)	9.08 (0.37)	0.00	0.00	0.00	0.00	0.00	0.00	9.08 (0.03)	54.24 (0.01)												
9. Science, Technology & Environment	62.06 (0.8)	155.19 (0.5)	3953.25 (0.7)	2.12 (0.1)	3.30 (0.3)	0.35 (0.1)	0.80 (0.3)	55.00 (0.2)	7.08 (1.6)	3.16 (0.2)	71.81 (0.2)	4025.06 (0.7)												
10. General Economic Services	235.35 (3.1)	258.47 (0.9)	18356.30 (3.3)	60.98 (2.5)	19.65 (2.0)	6.17 (2.0)	6.26 (2.6)	107.30 (0.5)	51.18 (11.7)	81.75 (4.3)	333.30 (1.1)	18689.60 (3.2)												
11. Social Services	2840.85 (37.2)	7867.80 (27.5)	174093.86 (31.0)	765.86 (30.8)	771.45 (77.1)	97.82 (32.2)	84.05 (34.3)	12247.40 (53.2)	54.84 (12.5)	924.40 (48.5)	14945.82 (50.9)	189039.68 (32.0)												
12. General Services	78.13 (1.0)	520.26 (1.8)	16751.68 (3.0)	65.70 (2.6)	15.59 (1.6)	6.50 (2.1)	9.17 (3.7)	829.39 (3.6)	22.53 (5.2)	77.30 (4.1)	1026.17 (3.5)	17777.85 (3.0)												
GRAND TOTAL	7630.00 (100.0)	28641.00 (100.0)	561572.83 (100.0)	2483.00 (100.0)	1000.00 (100.0)	304.00 (100.0)	245.00 (100.0)	23000.00 (100.0)	437.00 (100.0)	1906.49 (100.0)	29375.49 (100.0)	590948.35 (100.0)												

Annexure 3-D

Proposed Additional Allocation for the Tenth Plan

(Rs. crore at 2001-02 prices)

Sr. No.	Sector	States and UTs Plan	Amount
1.	Health	Improving Secondary/Tertiary Health Care	1400
2.	Health	Strengthening of Universities of Health Sciences	100
3.	Education	Access to Seondary Education in Educationally Backward Districts	300
4.	Education	Vocational Education Mission	650
5.	Rural Development	Jai Prakash Narain Rozgar Yojana	5000
6.	Agriculture	Grants to Agriculture Universities for Research and Transfer of Technology	500
7.	Agriculture	Drought Proofing (a) Watershed Development (b) Wasteland Development (c) JFM (d) Agro-forestry	4000
8.	Agriculture	Control of Shifting Cultivation	400
9.	Tourism	Development of World Heritage Sites/ Tourism Circuits	1000
10.	Irrigation	AIBP	5000
11.	Urban Development	Urban Sanitation Mission	2000
12.	Planning Commission	Extremist Affected Districts (RSVY)	1000
13.	Roads	Improvement of Riding quality of State Highways	2000
14.	Power	Accelerated Power Development & Reform Programme	3500
15.	Special Area Programmes	State Initiatives (like Post Matric Scholarships for SCs, STs: EAPs etc.)	14658
Total State/UTs Plan			41508

Note : The allocated amounts are over and above the core States/UTs Plan outlay indicated in Annexure:3-C

CHAPTER 4

EXTERNAL SECTOR DIMENSIONS

4.1 The acceleration in the growth rate proposed for the Tenth Plan cannot take place without tapping the opportunities offered by the international economy in terms of markets, investments and technologies. The macro-economic exercises carried out in chapter 2 clearly indicate that the demand constraints afflicting Indian industry warrant greater focus on external sources of demand if growth opportunities are not to be missed. Concurrently, resource requirements and efficiency enhancement involve larger flow of external funds and technologies. Equally important, the inflow of foreign direct investment (FDI) has been identified as a critical component in raising the level of corporate entrepreneurial activity in the country. Thus, both demand and supply considerations for growth acceleration dictate a significantly higher degree of engagement with the international economy than in the past. But in so doing, vulnerabilities have to be identified and addressed.

4.2 The twin processes of globalisation and liberalisation are shaping a new system of international economic relations in which the changing pattern of investment, production and trade, the global span of finance and the central role of technology are dominant. The increased interaction with the world economy is expected to be facilitated by the overall reduction in the cost of transaction and communication. The accelerating pace of liberalisation and globalisation in the world economy has increased opportunities for growth and development, but it has also added new complexities and risks in the management of global interdependence. The ability of the developing countries to influence the pace and direction of global policy initiatives is still weak, while their vulnerability to the economic policy decisions taken by major developed countries, and more so by major market institutions, has increased.

4.3 Inter-linkages between trade, investment, money and finance, services, technology, commodity markets and the environment have, no doubt, made policy formulation more complex. The problem is compounded by weak commodity markets, decline in Overseas Development Assistance (ODA), heavy debt burden, uncertainties in capital flow, and restrictions on and high costs of technology transfer. In order to benefit from globalisation, developing countries like India will need to engage themselves more actively in shaping the contours of the international economic order. Passive acceptance of and reactive adjustments to decisions made elsewhere and on other considerations will not suffice. India continues to play an active role in various international organisations and multilateral fora to draw attention to important economic issues, especially in the context of developing countries. But the ambit has to be widened. In particular, the voices of the domestic civil society and commercial interest must not only find articulation in our international positions, but they must become major actors in the process of determining our stand. Unfortunately, the institutional mechanisms for eliciting such participation are still weak, despite considerable progress in recent years. The autarchic mind-set appears to afflict our private sector even more than the government. It is hoped that the projections for the immediate future will convince the private sector decision-maker that enlightened self-interest dictates not just active engagement with the government, but also investment of resources in research and mutual consultations.

4.4 The importance of reforming and revitalising the institutional structures governing our international economic relations cannot be overstressed. A defensive and *status-quoist* position has to give way to a more aggressive and proactive position. This cannot be done without a closer

interaction between the agencies concerned with trade and investment, including those in the private sector, and those in charge of our external relations. Indeed, international commerce cannot any longer be treated as a mere hand-maiden of diplomacy. Quite the opposite, in fact. Diplomacy must today support, as well as sub-serve, the commercial interests of the country. There will, undoubtedly, be situations in which political and commercial interests may come into conflict. Resolution of such differences will have to rank high on the political agenda.

4.5 This chapter first examines the external economic situation faced by the country in the emerging global context. Detailed analyses of the status of balance of payments position, trade and tariff policy and important World Trade Organisation (WTO) related issues are subsequently presented. Based on the overall situation, the projections about various dimensions relating to the balance of payments in different scenarios that have been made for Tenth Plan period are also presented in the chapter.

RECENT EVENTS IN INTERNATIONAL ECONOMY

4.6 During the Ninth Five Year Plan, there have been a number of events in the international economy that have influenced the behavioural pattern of the international economic relationship significantly, especially from the Indian point of view. These include the East Asian crisis of 1997-98, global slow-down since 1999-2000, and the September 11, 2001 event. Some of these are outlined in this section.

(a) East Asian Crisis

4.7 Prior to the Ninth Five Year Plan, the East Asian Countries were visualised as the harbinger of economic growth – their performance being described as the East Asian Miracle. The scenario, however, changed in 1997 when financial and corporate sector weaknesses combined with macro-economic vulnerabilities sparked off a crisis. The weakness can be explained as exposure of financial institutions to a variety of external threats including decline in asset values, market contagion, speculative attacks, and a reversal of capital flows. Formal

and informal currency pegs, which discouraged lenders and borrowers from hedging, contributed to the problem. Capital inflows had helped rapid credit expansion while lowering the quality of credit, thereby leading to asset inflation. The inflated asset prices encouraged further capital inflows, lent often by weakly supervised non-bank financial institutions. Highly leveraged corporate sectors and large unhedged short-term debt made the crisis ridden countries vulnerable to changes in the market sentiments in general, and exchange rate changes in particular.

4.8 The initial priorities in dealing with the crisis were to stabilise the financial system and to restore confidence in economic management. Forceful measures were needed to stop bank runs, protect the payment system, limit central bank liquidity support, minimise disruptions to credit flows, maintain monetary control and stem capital outflows. In the crisis-ridden countries, emergency measures, such as the introduction of blanket guarantees and bank closings, were accompanied by comprehensive bank restructuring programmes and supported by macro-economic stabilisation policies.

4.9 India could escape the contagion because the management of our external sector was governed by parameters indicated by the High-level Committee on Balance of Payments (Rangarajan Committee) such as a flexible exchange rate, sustainable current account deficit, preference to non-debt creating resource flows, limits on the quantum, use and cost of external debt and a highly restrictive approach to short-term debt.

Box 4.1

Lessons learnt from the Asian Crisis

- Any currency could come under speculative attack if its exchange rate is out of alignment with the fundamentals for a prolonged period of time.
- Once the speculative attack is launched on any currency, the neighboring currencies are also vulnerable, no matter how sound their policies may be.
- The overvaluation of the currency acts as a catalyst when there is a run on the currency, as all the market players base their action on the information that the currency is due for correction.

4.10 Since efficient markets cannot always overcome speculative activities, it is necessary to remain ever vigilant on the performance of economic parameters both on domestic and external front. Efficient micro and macro-economic management, transparency, putting in place an appropriate regulatory framework and government's effective and timely intervention in case the markets dither, are necessary measures to avoid the occurrence and impact of such crisis in India.

(b) Global Slow-down

4.11 While the East Asian crisis was being resolved, the prospects for global growth weakened significantly, particularly during recent times due to a slow-down in the United States, a stalling recovery in Japan, and a moderate growth in Europe and in a number of emerging market economies. The growth rate of global output increased from 3.6 per cent in 1999 to 4.7 per cent in 2000, but declined to around 2.2 per cent in 2001. The projections for 2002 and 2003 are 2.8 per cent and 3.7 per cent respectively (World Economic Outlook, IMF, September 2002).

4.12 In the context of the world economic outlook, the following observations are worth noting:

- In an environment of slowing global growth, commodity prices may decline. Oil prices have retreated from their late 2000 high though their volatility remains a matter of concern and continues very much to depend upon the production decisions of the Organisation of Petroleum Exporting Countries (OPEC), though the risks may be on the downside.
- Non-fuel prices are expected to remain broadly unchanged; but if global demand slows down more than expected, prices may decline, affecting adversely commodity producers, including many poor countries.
- With the possibility of oil prices declining and wage increases remaining moderate, inflation levels are likely to stabilise. This would allow fiscal maneuvering in many countries.

- While a number of countries continue to face serious difficulties, external and financial vulnerabilities in emerging markets have been generally reduced since the 1997-98 crisis, and the shift away from soft exchange rate pegs has improved their ability to manage external shocks.
- Over the past several years the strong expansion in the US economy has been instrumental in stabilising global activity in the face of weak demand elsewhere. Unfortunately, with the recovery in Japan stalling, and its potential growth being still modest, the present slow-down in the US is likely to be offset by higher demand growth elsewhere. In these circumstances, there would be greater risk of spillovers to other countries through financial market and confidence effects.
- Given that financial risks often tend to be underestimated in periods of rapid expansion, lower growth could expose fragility of financial markets. Further, downward revision to expectations of corporate profit growth could intensify pressures on equity markets in the United States and elsewhere, with adverse effects on wealth, investment, confidence and risk aversion.
- In emerging markets, prospects depend critically on maintaining investor confidence. External financing conditions have recently deteriorated. Given the global outlook, and continued economic difficulties in some emerging market countries, economies are likely to remain volatile in the period ahead. This underscores the need to maintain prudent macro-economic policies and to press ahead with corporate, financial and institutional reforms.

(c) Post September 11, 2001 Situation

4.13 Even before September 11, 2001, world's major economies had been witnessing a slow-down. In USA, growth rates had dropped to near-zero due

to weakening consumption growth, declining investment and reduced imports, coupled with a dwindling manufacturing sector growth. Japan witnessed deflationary pressures and Europe's growth rate was slowing sharply. The events of September 11, 2001 further hit the global economy at a vulnerable point when it had fewer buffers to offer and its resilience to absorb new shocks was suspect. As a result, world trade growth is anticipated to decline from 12.6 per cent in 2000 to (-) 0.1 per cent in 2001, 2.1 per cent in 2002 and 6.1 per cent in 2003 (World Economic Outlook, September 2002).

4.14 Insofar as India is concerned, the post-September 11 developments have affected a few important sectors adversely. The Nasscom had first estimated the software exports to grow by 52 per cent during 2001-02, but the actual rate came down to only 13 per cent during the year. The civil aviation sector has also been hit, apart from fall in demand, hike in insurance costs has increased the operational cost. India's tourism industry, which serves 2.6 million tourists a year, has been adversely affected. The flow of remittances has also declined during 2001-02.

4.15 Adverse external developments after September 11, and their effect on India's financial markets, necessitated a quick response to provide appropriate liquidity and overall comfort to the markets. In order to stabilise domestic financial markets, the Reserve Bank of India (RBI) ensured that interest rates are kept stable with adequate liquidity. The RBI also undertook sale/purchase of foreign exchange as and when it was necessary to meet any unusual supply-demand gap. In view of the extraordinary circumstances in the government securities market, the RBI opened a purchase window for select government securities on auction basis. Indian companies were permitted to increase the foreign institutional investment (FII) limit. A special financial package was announced for large value exports of six select products, which were internationally competitive and had high value addition.

4.16 The above measures had the desired effect of moderating possible panic reactions and

reducing volatility in financial markets, particularly in money, foreign exchange and government securities markets. While financial markets are generally stable, liquidity is adequate, and interest rate environment is favourable so far, the outturn of industrial output has been limited. This continues to be a matter of serious concern. It is hoped that as global markets gain back momentum after some time, it will have a favourable impact on the investment climate in India as well.

4.17 The series of international disturbances, however, throw open a window of opportunities that can be harnessed. The interest rates have been cut several times in the USA giving an opportunity to off-load the interest burden. Excess capacity afflicts virtually every capital goods sector across the globe, which presents an opportunity to import machines and equipments at bargain prices. It may be possible for India to attract higher FDI under the circumstances. This is a time for the Indian multinationals to look for cheap global acquisitions. When US companies resort to cost-cutting exercises, they may also resort to outsourcing, due to which the IT-enabled services sector such as call centers, back-office operations, transcriptions, payroll accounting services etc., will get a boost.

STATUS OF THE EXTERNAL SECTOR

4.18 During the Ninth Plan period, India's balance of payments position remained mostly comfortable. The current account deficit narrowed down and on the average was 0.8 per cent of gross domestic product (GDP), less than one half of the 2.1 per cent envisaged in the plan. The growth of exports in dollar terms during the Ninth Plan period has been 5.6 per cent as against the targeted growth rate of 11.8 per cent. During the same period, import growth has been 3.3 per cent as against the target of 10.8 per cent. The country has withstood the East Asian Crisis of 1997-98 and the recent global slow-down. Invisible receipts have been buoyant. Foreign exchange reserves have increased significantly to around \$ 54 billion by the end of March 2002. The exchange rate of the Indian rupee, in terms of the US dollar, has depreciated by 6 per cent. The external value of the rupee seen in terms of real

effective exchange rate (REER) has, however, appreciated slightly. Foreign direct investment inflows have increased while foreign institutional investments have gone down. The key indicators of external debt have improved considerably as a result of better management of external debt. It is some of these trends that are discussed in greater detail in this section.

Exports

4.19 The Ninth Plan had envisaged a growth of 11.8 per cent per annum in exports, against which the actual growth was 5.6 per cent (in dollar terms) during the Ninth Plan period. Even this unsatisfactory performance was accompanied by high volatility. Exports had recorded a negative growth of 3.9 per cent during 1998-99. The year 2000-01 witnessed a high growth of 19.6 per cent but declined sharply to 0.05 per cent in 2001-02. The Ninth Plan had also envisaged that the export-GDP ratio would be 10.4 per cent, but the likely outcome would be lower, at around 9 per cent.

4.20 The drastic reduction in growth rate of exports during 2001-02 was primarily due to structural constraints operating on the demand as well as on the supply side. The recessionary tendencies across the world affected the demand for our exports as well. As mentioned in para 4.13, world trade in goods and services is projected to

record a negative growth of 0.1 per cent in 2001 as against a growth rate of 12.6 per cent during 2000. Such slow-down and contraction of world trade also resulted in emergence of protectionist policies by developed countries in some sectors in the form of barriers of technical, environmental and social standards, affecting market access and disrupting our exports.

4.21 Movements of the exchange rate also affected export performance. Major supply constraints that continued to hamper our exports include infrastructural constraints, high transaction costs, reservation for small scale industries, labour inflexibility, constraints in attracting FDI in exports sector and maintenance of product quality.

4.22 Changes in the composition of exports during the Ninth Plan may be seen in Table 4.1. It may be observed that the share of agriculture and allied products has been declining, while that of ores and minerals has remained more or less steady. Share of manufactured goods increased during the first three years, but came down during the two later years. Share of petroleum products increased significantly in 2000-01 and more so in 2001-02, while 'others' have shown a gradual rising trend during the Ninth Plan period. It is important to note that the share of processed agricultural exports and manufactured goods must be suitably raised not

Table 4.1
Broad Composition of Exports

S.No.	Commodity Group	Percentage Share				
		1997-98	1998-99	1999-2000	2000-01	2001-02
1.	Agri.and Allied Products	18.9	18.1	15.2	13.5	13.4
2.	Ores and Minerals	3.0	2.7	2.5	2.6	2.8
3.	Manufactured Goods	75.8	77.7	80.7	78.0	76.1
4.	Petroleum Products	1.0	0.3	0.1	4.2	4.9
5.	Others	1.3	1.2	1.5	1.7	2.8
	Total	100.0	100.0	100.0	100.0	100.0

Source : Directorate General of Commercial Intelligence and Statistics (DGCI&S).

only for a sustainable balance of payments position, but also to provide adequate aggregate demand to support the projected growth in these sectors.

4.23 Looking at the direction of these exports, it was observed that the share of our exports to the Organisation for Economic Cooperation and Development (OECD) countries has been declining, especially due to decline in our share to the European Union (EU) and Japan. Share of exports to USA has increased and so has to the OPEC and Latin American countries. It has gone down in the case of Eastern Europe, with slowing down of exports to Russia, while shares of exports to less developed countries in Africa and Asia have remained more or less at the same level. Exports to 'other' countries have increased and need to be further stepped up.

Imports

4.24 The Ninth Plan had envisaged a growth of 10.8 per cent per annum in imports. The actual growth of imports has been 3.3 per cent (in dollar terms) during the Ninth Plan period. Petroleum Oil and Lubricants (POL) imports during the Ninth Plan increased by 6.4 per cent while that of non-POL by 4.9 per cent. Lower import growth of non-POL is a

reflection of the slow-down in the domestic industrial activity. The Ninth Plan had also envisaged that the import-GDP ratio would be 12.2 per cent. The actual outcome has more or less been around the targeted level as the average for the Plan period works out to 12.66 per cent. The slow growth of imports was clearly offset by the low growth rate of GDP.

4.25 The broad composition of imports during the Ninth Plan can be seen in Table 4.2. It may be observed that the share of bulk items has increased while that of non-bulk items has declined. Amongst the bulk items, share of POL increased sharply till 2001, which, however, came down in 2001-02. The share of bulk consumption goods in imports, mainly comprising food items, has been fluctuating according to domestic demand. Share in import of other bulk items like rubber, pulp and paper, wood and wood products, fertilizers, metalli-ferrous ores and metal scrap, non-ferrous metals, and iron and steel decreased till 2000-01, although it increased thereafter in 2001-02. Share of capital goods has shown a consistent declining trend. Share of export related items consisting of chemicals, pearls and precious stones, cashew, textile yarn and fabric, leather, raw cotton, silk, wool and jute has remained steady in this period.

Table 4.2
Broad Composition of Imports

S.No.	Commodity Group	Percentage Share				
		1997-98	1998-99	1999-2000	2000-01	2001-02 (P)
1.	Bulk Imports	35.7	31.2	39.6	41.2	39.6
	a. Petroleum and products	19.7	15.1	25.4	31.0	27.4
	b. Bulk Consumption Goods	3.6	6.0	4.9	2.9	4.0
	c. Other Bulk Items	12.4	10.2	9.3	7.4	8.2
2.	Non-bulk Imports	64.3	68.8	60.4	57.7	60.4
	a. Capital Goods	23.6	23.7	18.0	17.7	18.2
	b. Export related Items	16.7	16.8	18.4	15.9	16.1
	c. Others	24.1	28.2	24.0	24.1	26.0
	- Of which Gold and Silver	7.6	12.0	9.5	9.2	8.9

Source : DGCI&S.

4.26 Looking at the direction of our major imports, it may be observed that the OECD countries, and EU in particular, was the major supplier of the import items to India, although it was declining by the end of the Ninth Plan period. Also, share of imports from OPEC and Russia declined while the share of 'others' increased substantially. It may be suggested that the import of POL items increased from this set of 'other' countries and away from the OPEC. The share of imports from Africa, Asia and Latin America remained more or less constant.

Trade Balance

4.27 On account of shortfalls in the export growth, the trade deficit averaged an estimated 3.4 per cent of GDP during the Ninth Plan, almost double of 1.8 per cent, envisaged in the Plan document. However, in absolute terms the trade deficit has moved within a range of \$ 12.7 billion and \$ 17.8 billion during the Ninth Plan period. In fact, this was only \$ 12.7 billion in 2001-02 as against \$ 14.8 billion in 1996-97.

Invisibles

4.28 The total invisibles receipts increased from \$ 21,405 million in 1996-97 to \$ 35,612 million in 2001-02 (i.e. an average growth of 10.72 per cent). Total payments increased from \$ 11,209 million in 1996-97 to \$ 21,558 million in 2001-02 (i.e. an annual growth of 13.97 per cent). Net invisibles thus increased from \$ 10,196 million in 1996-97 to \$ 14,054 million in 2001-02 (i.e. a growth of 6.63 per cent). There has also been buoyancy in miscellaneous net receipts and private transfers. Invisible flows were a source of immense strength to the current account. Miscellaneous receipts (net) increased from \$ 355 million in 1997-98 to \$ 3,774 million in 2001-02, and similarly, net private transfers maintained a higher level, increasing from \$ 11,830 million in 1997-98 to \$ 12,798 million in 2000-01, but went down slightly to \$ 12,125 million in 2001-02. Private transfer receipts remain augmented by the inclusion of local redemption of non-resident deposits since 1996-97. Private remittances account for the bulk of private transfer receipts. Software

service exports, included under miscellaneous receipts of non-factor services, have emerged as the second largest item of invisible receipts. Software service exports had grown at an annual rate of about 52.5 per cent during the five years ending 1999-2000. The growth momentum was sustained in 2000-01, when these recorded a growth of 57 per cent from \$ 4.02 billion in 1999-2000 to \$ 6.3 billion in 2000-01.

Current Account Balance (CAB)

4.29 It is estimated that the CAB would average about (-) 0.8 per cent of GDP during the Ninth Plan, less than one half of 2.1 per cent envisaged in the Plan document. The balance of payments position may be seen in Table 4.3.

4.30 The CAB was \$ (-) 5.5 billion in 1997-98, which came down to \$ (-) 2.6 billion in 2000-01 and turned positive to \$ 1.35 billion in 2001-02. The improvement in CAB was made possible largely because of dynamism in export performance, a sustained buoyancy in invisibles, reflecting a sharp increase in software service exports and private transfers, and partly due to the subdued non-oil import demand.

Foreign Exchange Reserves

4.31 India's foreign exchange reserves comprise foreign currency assets of the RBI, gold held by the RBI and special drawing rights held by the Government of India. Foreign exchange reserves increased rapidly during the last decade, increasing from \$ 5,834 million in 1990-91 to \$ 42,281 million in 2000-01. The reserves continued to increase to reach the level of \$ 54,106 million by March 2002, and \$ 62,021 million by mid September 2002. The import cover of reserves increased from 6.9 months in 1997-98 to 8.6 months in 2000-01 and further to almost one year in 2001-02, which is a source of comfort. Besides, it provides a measure of insulation against unforeseen external shocks or exigent domestic supply shortages. It also helps to satisfy the need for liquidity, which instills confidence in the economy among international investors and financial markets.

Table 4.3
Balance of Payment

(\$ million)

S.No.	Items	1997-98	1998-99	1999-2000	2000-01	2001-02
1.	Exports	35,680	34,298	37,542	44,894	44,915
2.	Imports	51,187	47,544	55,383	59,264	57,618
	- Of which, POL	8,164	6,399	12,611	15,650	13,669
3.	Trade Balance	-15,507	-13,246	-17,841	-14,370	-12,703
4.	Invisibles (net)	10,007	9,208	13,143	11,791	14,054
	Non-factor services	1,319	2,165	4,064	2,478	4,199
	Investment Income	-3,521	-3,544	-3,559	-3,821	-2,728
	Private Transfers	11,830	10,280	12,256	12,798	12,125
	Official Transfers	379	307	382	336	384
5.	Current Account Balance	-5,500	-4,038	-4,698	-2,579	1,351
6.	External Assistance (net)	907	820	901	427	1,117
7.	Commercial Borrowing (net) @	3,999	4,362	313	4,011	-1,144
8.	IMF (net)	-618	-393	-260	-26	0
9.	NR Deposits (net)	1,125	960	1,540	2,317	2,754
10.	Rupee Debt Service	-767	-802	-711	-617	-519
11.	Foreign Investment (net) Of which	5,353	2,312	5,117	4,588	5,925
	i) FDI (net)	3,525	2,380	2,093	1,828	3,904
	ii) FII's	979	-390	2,135	1,847	2,021
	iii) Euro equities and others	849	322	889	913	
12.	Other Flows (net)+	-606	608	3,940	-2,291	1,412
13.	Capital Account Total (net)	9,393	7,867	10,840	8,409	9,545
14.	Reserve Use (-increase)	-3,893	-3,829	-6,142	-5,830	-10,896

Note : @ Figures include receipts on account of India Development Bonds in 1991-92, Resurgent India Bonds in 1998-99 and India Millennium Deposits in 2000-01 and related repayments, if any, in the subsequent years.

+ Include, among others, delayed export receipts and errors and omissions.

Source : Reserve Bank of India (RBI).

Exchange Rate Movement

4.32 The exchange rate of the rupee has broadly been market determined, except for

occasional counter-cyclical operations by the Reserve Bank of India. The movement of exchange rate during the Ninth Plan has been as follows (Table 4.4).

Table 4.4
Exchange Rate (Rs. / \$)

Year	Exchange Rate	Depreciation (per cent)
1997-98	37.165	4.48
1998-99	42.071	11.66
1999-00	43.333	2.91
2000-01	45.684	5.15
2001-02	47.707	4.24

Source : Reserve Bank of India.

4.33 The exchange rate market has displayed reasonable stability, with the rupee depreciating by 6.1 per cent from the annual average of Rs. 37.165 per dollar in 1997-98 to Rs.47.707 in 2001-02.

4.34 The world economy experienced one of the worst shocks after the events of September 11, 2001 in the US. Foreign exchange markets in India also became volatile as a consequence, with the rupee showing a depreciation of 1.3 per cent vis-à-vis the dollar during the 10 days period of September 10-20, 2001. In order to stabilise domestic financial markets, the RBI announced some measures during the period September 15-25, 2001. These measures had the desired effect of moderating possible

panic reactions and reducing volatility in financial markets, particularly in money, foreign exchange and government securities markets.

4.35 The exchange rate management policy continues its focus on smoothening the excessive volatility in the exchange rate with no fixed rate target, while allowing the underlying demand and supply conditions to determine the exchange rate movements over a period in an orderly way. The RBI monitors closely the development in the financial markets at home and abroad and coordinates the market operations with suitable regulatory measures, as considered necessary from time to time.

4.36 Given the movement of the exchange rate of the rupee and the domestic inflation rate relative to important trading partners, the real effective exchange rate (REER) is reckoned as one of the most important determinants of the country's external competitiveness. The position of the rupee in terms of REER and nominal effective exchange rate (NEER) is given in Table 4.5.

4.37 The REER was 63.81 in 1996-97, which increased to 67.02 in 1997-98 and declined during 1998-99 and 1999-2000, thereafter increasing again during the next two years. This shows the volatility

Table 4.5
Indices of Real Effective Exchange Rate (REER) and Nominal Effective Exchange Rate (NEER) of the Indian Rupee
(36- Country bilateral trade based weights)
(Base : 1985=100)

Year	REER	%Variation	NEER	%Variation
1996-97	63.81	0.3	38.97	-1.9
1997-98	67.02	5.0	40.01	2.7
1998-99	63.44	-5.3	36.34	-9.2
1999-00	63.30	-0.2	35.46	-2.4
2000-01	66.53	5.1	35.52	0.2
2001-02 (P)	68.43	2.9	35.75	0.7

Note : The indices on REER have been recalculated from April 1994 onwards using the new Wholesale Price Index (WPI) Series with base 1993-94 = 100.

Source : Reserve Bank of India.

in the exchange rate of the rupee. This also gives an impression that it is slightly overvalued. With the appreciation of the dollar vis-à-vis the major currencies, the rupee also appreciated in real terms.

Foreign Investment

4.38 In developing countries like India, FDI is seen as a means to supplement domestic investment for achieving a higher level of economic growth. FDI benefits the domestic industry as well as the consumers by providing opportunities for technological up-gradation, access to global managerial skills and practices, optimal utilisation of human and natural resources, opening up export markets and access to international quality goods and services. Towards this end, the FDI policy has been constantly reviewed, and necessary steps taken to make India a most favorable destination for foreign investors.

4.39 FDI inflows depend upon a number of factors like the assurance of safe recovery of capital, regular repatriation of dividends, overall climate, exchange rate and price stability, availability of raw materials and other inputs, skilled manpower, infrastructural facilities and the existence of domestic and export markets. The government policy on FDI since 1991 has aimed at encouraging foreign investment, particularly in the core and infrastructure sectors. The government has permitted access to the automatic route for FDI in most sectors, except for a small negative list. The foreign investors only need to inform the RBI within 30 days of bringing in their investment, and also within 30 days of issuing of shares. Emphasis is given to foreign investment in infrastructure sectors with 100 per cent FDI, including in power, telecom, oil refining, etc.

4.40 Foreign investment inflows increased from \$ 103 million in 1990-91 to \$ 5,925 million in

Table 4.6
Foreign Investment Inflows

(\$ million)

S.No.	Items	1997-98	1998-99	1999-2000	2000-01	2001-02
A	Direct Investment	3,557	2,462	2,155	2,339	3,904
	a) Govt. (SIA/FIPB)#	2,754	1,821	1,410	1,456	2,221
	b) RBI	202	179	171	454	767
	c) NRI#	241	62	84	67	35
	d) Acquisition of Shares*	360	400	490	362	881
B	Portfolio Investment	1,828	-61	3,026	2,760	2,021
	a) GDRs/ADRs@	645	270	768	831	477
	b) FIIs **	979	-390	2,135	1,847	1,505
	c) Offshore funds and others	204	59	123	82	39
	Total (A+B)	5,385	2,401	5,181	5,099	5,925

Note : * Relates to acquisition of shares of Indian companies by non-residents under Section 5 of FEMA, 1999. Data on such acquisitions have been included as part of FDI since January, 1996.

@ Represents the amount raised by Indian Corporate through Global Depository Receipts (GDRs) and American Depository Receipts (ADRs).

** Represents fresh inflows of funds by Foreign Institutional Investors (FIIs).

SIA = Secretariat of Industrial Approval.

FIPB = Foreign Investment Promotion Board.

NRI = Non-resident Indians.

Source : RBI.

2001-02, peaking at \$ 6,133 million in 1996-97. Table 4.6 shows the pattern of these inflows during the Ninth Plan period.

4.41 Foreign direct investment flows, after reaching a peak of \$ 3,557 million in 1997-98, declined to \$ 2,339 million in 2000-01 and increased to \$ 3,904 million in 2001-02. The source and direction of FDI remained, by and large, unchanged during the 1990s. The bulk of FDI was channeled into computer hardware and software, engineering industries, services, electronics and electrical equipment, chemical and allied products and food and dairy products.

4.42 Foreign institutional investment inflows increased from a mere \$ 1 million in 1992-93, reached their peak of \$ 2,135 million in 1999-2000 and have been at \$ 1,505 million during 2001-02. The year 1998-99 witnessed FII flows to record a negative of \$ 390 million. The policy regarding portfolio investment by FIIs is reviewed constantly and major initiatives are taken, when necessary. In the budget of 2001-02, it was proposed to raise the limit for portfolio investment by FIIs from the normal level of 24 per cent of the paid-up capital of a company to 49 per cent, subject to the approval of the General Body of shareholders by a special resolution. More recently, Indian companies have been permitted to raise the aggregate ceiling for portfolio investment by FIIs through the secondary market from the normal level of 24 per cent up to the applicable sectoral cap levels of the issued and paid up capital of the company, subject to compliance with the special procedure, viz.,

(a) approval by the board of directors of the company to the enhanced limit beyond 24 per cent, and (b) a special resolution passed by the general body of the company approving the enhanced limit beyond 24 per cent.

4.43 Funds raised through GDRs/ADRs amounted to \$ 831 million in 2000-01 and \$ 477 million in 2001-02. The Government has been liberalising the guidelines for issue of GDRs/ADRs in a phased manner.

External Debt

4.44 India's external debt was \$ 98.14 billion at the end of March 2002 as compared to \$ 93.47 billion at end March 1997 and \$ 93.53 billion at end March 1998. The stock of external debt increased by 0.98 per cent during the Ninth Plan. The position relating to India's outstanding external debt is given in Table 4.7.

4.45 Despite marginal increase in the external debt stock, the country's external debt position has improved in recent years. The debt-GDP ratio, which shows the magnitude of external debt in relation to domestic output, declined from 38.7 per cent at end March 1992 to 22.3 per cent at end March 2001 and further to 20.8 per cent at end March 2002. Similarly, the debt-service ratio that measures the ability to serve debt obligations, declined from the peak level of 35.3 per cent of current receipts in 1990-91 to 17.3 per cent in 2000-01, and further to 14.1 per cent by end March 2002. The short-term debt to total debt (with maturity up to one year)

Table 4.7

India's External Debt Outstanding (end March)

(\$ million)

Categories	1998	1999	2000	2001	2002 (P)
Short-Term Debt	5,046	4,274	3,933	3,480	2,746
Long-Term Debt	88,485	92,612	94,330	96,224	95,392
Total Debt	93,531	96,886	98,263	99,704	98,138

Source : RBI.

Table 4.8
External Debt : Key indicators

(Percent ratio)

Items	1998	1999	2000	2001	2002 (P)
Total External Debt to GDP	24.3	23.6	22.2	22.3	20.8
Short Term Debt to Total Debt	5.4	4.4	4.0	3.5	2.8
Short Term Debt to Foreign Currency Assets	19.4	14.5	11.2	8.8	5.4
Concessional Debt as per cent to Total Debt	39.5	38.5	38.9	36.0	35.8

Source : RBI.

declined from 10.2 per cent to 3.5 per cent from end March 1991 to end March 2001 and further to 2.8 per cent by end March 2002. Short-term debt to foreign currency assets has also improved from a high of 382.1 per cent at end March 1991 to 8.8 per cent at end March 2001. The ratio was 5.4 per cent at end March 2002. The share of concessional debt, which was steady around 45 per cent during the first half of the 1990s, declined to 38.5 per cent at end March 1999 and further to 35.8 per cent at end March 2002. India has the highest share of concessional debt among the top 15 debtor countries of the world.

4.46 India's indebtedness position vis-à-vis other economies has improved. In terms of the absolute level of debt, the position improved from the third largest debtor after Brazil and Mexico in 1991 to the tenth in 1999, after Brazil, Russian Federation, Mexico, China, Indonesia, Argentina, Korea, Turkey and Thailand. In terms of the present value of external debt too, India ranks as the tenth largest debtor country. In terms of indebtedness classification, India improved its position from 'close to severely indebted' category in 1991, to 'less indebted' bench-mark in 1999 (Global Development Finance 2001, World Bank).

4.47 The improvement in India's external debt position since 1991-92 is due to a conscious debt management policy that focused on high

growth rate of exports, keeping the maturity structure as well as the total amount of commercial debt under manageable limits, limiting short-term debt, and encouraging non-debt creating financial flows. These measures led to a sustained improvement in the external indebtedness position of the country. Efforts are now on to further consolidate the gains already made. A number of new initiatives have been undertaken to meet this objective. This includes increased coverage and computerisation of external debt data, better co-ordination among agencies reporting debt statistics, pre-payments/refinancing of more expensive external debt and other measures to actively manage sovereign external debt of the country.

EXTERNAL SECTOR PROJECTIONS

4.48 As indicated in chapter 2, the macro-economic dimensions targeting an 8 per cent growth in GDP would lead to an increase in the investment rate to 32.3 per cent by the year 2006-07, as against the present investment rate of 24.3 per cent. It is expected that this growth rate will be achieved with improvement in efficiency in the economy, and by including higher capacity utilisation. The savings ratio is expected to increase to 29.4 per cent by 2006-07, as against a level of 23.5 per cent in 2001-02. For the Plan as a whole, the savings rate has been targeted at 26.8 per cent. The implied current account deficit, seen in terms of the gap between

investment requirement and domestic savings by the end of the Tenth Plan, would be an estimated 2.9 per cent of the GDP by 2006-07 and an average 1.6 per cent for the Plan as a whole. This gap is to be met from a combination of inflows of foreign investment, external commercial borrowings and other forms of external assistance. In order to look at the behavioural side of the current account deficit, in this section we look at the projections of exports, imports and flow of invisibles. These projections are built on the experiences of the Eighth and Ninth Plan periods. The actual balance of payments outcome will no doubt depend on developments in the world economy and internal macro-economic balances, but the policy stance regarding external variables will also have an important role to play.

4.49 On the basis of the more liberalised balance of payments policy to be pursued and taking into account past trends in exports and imports as well as other determining variables, projections have been made for exports and imports for the Tenth Five Year Plan period.

Exports

4.50 In the Indian context, exports are still seen to be primarily supply-side determined. Although demand-related factors, like relative prices (including exchange-rate movements) and world incomes, are becoming progressively more important, particularly for specific export items, the dominant factor continues to be the ability of the economy to produce adequate volumes of exportables to address international markets. Analysis of the recent export performance indicates that the share of tradables in GDP continues to exert a strong influence on export behaviour, with exchange rate variations and relative prices also playing significant roles. International income levels still do not appear to matter significantly, reflecting the low share of Indian exports in international trade.

4.51 Using the results of the analysis and taking the projected growth in GDP and its constituents during the Tenth Plan period and certain assumptions for trends in the independent variables during

the Ninth Plan period, export projections have been made. The results indicate that if the Tenth Plan growth targets are met, exports are likely to increase from \$ 44,915 million in 2001-02 to \$ 80,419 million by 2006-07. This would mean a compound growth rate of 12.4 per cent during the Tenth Plan, with an elasticity of 1.5. It needs to be noted, however, that these projections are based on the assumption that the REER will be maintained at more or less the current level. Thus, some flexibility does exist in increasing exports further with a more aggressive exchange rate policy, if necessary.

4.52 On the basis of these projections, the sector-wise export vector has been estimated for about 53 broad commodity groups, as may be seen in Annexure-1. The sector-wise break up is based on shares and growth rates of these sectors during the Ninth Plan period. It may be observed that fishery products, other food and beverages, textiles, readymade garments, other non-metallic minerals (including pearls, precious and semi-precious stones), leather products, petroleum products, chemicals, iron and steel, machinery and communication and electronic items are expected to constitute the highest share of exports. At the same time, the highest growth during the Tenth Plan is expected in petroleum products, followed by communication and electronic equipments, electrical machinery, other non-metallic minerals, chemicals, paints, drugs and cosmetics, textiles, readymade garments, food and beverages, etc. As far as the projections for export of food items is concerned, it may be mentioned that these are subject to availability of surplus, and priority would be given to domestic nutritional requirements. However, with an increase in agricultural production of 4 per cent during the Tenth Plan and with limited domestic demand (due to constraints in purchasing power), efforts would be on to increase export of processed items. This could include exports of horticulture products, particularly processed foods and vegetables, cashew nuts, spices, manufactured tobacco, castor oil and oil meals, apart from dairy products, poultry, processed meat and other processed foods and beverages. The projections for agricultural exports take these aspects into account.

The overall growth in export of agriculture and allied products has been projected to be around 9 per cent.

Imports

4.53 In India, imports are primarily demand determined, and are also very sensitive to changes in average tariffs. The customs tariffs have been reduced gradually as a part of the reforms process. The average tariff duty in 1991-92 was 128 per cent, along with a very large number of separate tariff rates across commodity groups and also coupled with many exemptions. In 1996-97, the average (total) duty rates were 38.6 per cent with a standard deviation of 19. The highest duty rate was in the intermediate goods sector, and with substantial variation. By 2001-02, the average import duty (total) was reduced to 37.1 per cent, which has been further reduced to 33.7 per cent in 2002-03 (the average basic import duty is 28.9 per cent in 2002-03). While there is scope for further rationalisation of tariff structure to bring it in line with other East Asian countries, the sensitivity of imports to the tariff rates demands that care be taken not to place undue pressure on the macro-economic balances. It becomes necessary, therefore, to examine the implications of alternative tariff reform scenarios on balance of payments.

4.54 The behaviour of aggregate import demand in the country is expected to be strongly driven by domestic growth rates. In addition, the average level of tariffs also exerts a strong influence. Unexpectedly, the exchange rate effects were not particularly significant over the recent past. A possible explanation for this is that average tariff rates in India are still too high for the exchange rate to make any material difference in the decision to undertake imports. It is expected that as tariff rates are reduced, exchange rate movements will become progressively more important.

4.55 The projection of imports during the Tenth Plan period has been made on the basis of two likely scenarios. In the first (scenario-1), the average (total) tariff rate is assumed to come down to the East Asian level of 15 per cent in the terminal

year of the Plan. In scenario-2, the indicative target announced by the government has been assumed to obtain, which yields an average duty rate of 18 per cent in the terminal year. The time phasing of these two sets of tariff reductions are also different. In scenario-1, tariff reductions are assumed to follow a pattern where the present average of total duty rate is brought down from 33.7 per cent to 27 per cent in the next year, then to 22 per cent and 18 per cent subsequently, and finally to 15 per cent by 2006-07. In scenario-2, the gradual reductions assume 28 per cent in 2003-04, and 24 per cent, 20 per cent and 18 per cent respectively by 2006-07. In both the scenarios, GDP growth has been taken at the Plan target of 8 per cent per annum. Using the results of the analysis imports were projected.

4.56 In scenario-1, with tariffs reduced to 15 per cent by 2006-07, total imports are likely to increase from \$ 57,618 million in 2001-02 to \$ 1,32,058 million by 2006-07, implying an annual growth of 18 per cent and an elasticity of 2.3. However, if tariffs are reduced only to 18 per cent, the imports are likely to reach up to \$ 1,22,846 million by 2006-07, i.e. an annual increase of 16.3 per cent and an elasticity of 2.0.

4.57 The details of the sector-wise projections for imports are provided in Annexure-2. The methodology used for estimation is the same as commodity-wise projections for exports. It is expected that crude petroleum would continue to have the highest share, followed by other metallic (including gold and silver) and non-metallic minerals, chemicals, machinery and transport equipments. Import of food items is projected to be relatively low, except edible oils. The highest growth in imports during the Tenth Plan is likely to be from communication and electronic equipments, followed by electrical and non-electrical machinery, edible oils, non-metallic minor minerals, tea and coffee and leather and leather products.

Trade Balance

4.58 The trade balance, derived on the basis of the projected exports and imports under different scenarios, is expected to increase to \$ (-) 1,64,141

million in scenario-1 and to \$ (-) 1,41,352 million in scenario-2.

Invisibles

4.59 The net invisibles are projected exogenously and are expected to grow broadly at the rate of 11 per cent from the base position of \$ 14,054 million in 2001-02, comprising \$ 35,612 million

receipts and \$ 21,558 million payments. It is expected that the projected net-invisibles would increase to \$ 23,716 million by 2006-07.

Current Account Balance

4.60 Based on the projected trade balance and the net invisibles, the status of current account balance is arrived at in different scenarios and given

Table 4.9
Current Account Balance during the Tenth Plan Period

(\$ million)

Scenario-1 : (GDP 8 % : Tariff 33.7 %, 27 %, 22 %, 18 %, 15 %)				
	2001-02	2006-07	Total	Gr.Rate (%)
GDP	4,37,029	6,42,025	27,37,497	8.0
Exports	44,915	80,419	3,22,863	12.4
Imports	57,618	1,32,058	4,87,004	18.0
Trade Balance	-12,703	-51,639	-1,64,141	
Trade Balance/GDP (%)	-2.9	-8.0	-6.0	
Invisibles – Receipts	35,612	67,077	2,64,542	13.5
– Payments	21,558	43,361	1,67,155	15.0
Invisibles (Net)	14,054	23,716	97,387	11.0
Current Account Balance	1,351	-27,923	-66,754	
Current Account/GDP (%)	0.3	-4.3	-2.4	
Scenario-2 : (GDP 8 % : Tariff 33.7 %, 28 %, 24 %, 20 %, 18 %)				
	2001-02	2006-07	Total	Gr.Rate (%)
GDP	4,37,029	6,42,025	27,37,497	8.0
Exports	44,915	80,419	3,22,863	12.4
Imports	57,618	1,22,846	4,64,215	16.3
Trade Balance	-12,703	-42,427	-1,41,352	
Trade Balance/GDP (%)	-2.9	-6.6	-5.2	
Invisibles – Receipts	35,612	67,077	2,64,542	13.5
– Payments	21,558	43,361	1,67,155	15.0
Invisibles (Net)	14,054	23,716	97,387	11.0
Current Account Balance	1,351	-18,711	-43,965	
Current Account/GDP (%)	0.3	-2.9	-1.6	

Note : Tariffs are total duties and include basic and special additional duty.

Source : RBI for the year 2001-02.

in Table 4.9. It may be observed that the CAB is likely to increase sharply with lowering of tariffs from an average 33.1 per cent in 2001-02 and 33.7 per cent in 2002-03 (the first year of the Tenth Plan), to bring it in line with East Asian levels, i.e. to 15 per cent. Reduction of tariffs to 18 per cent by 2006-07 would be most consistent with this. The CAB would be relatively more manageable if the tariffs are reduced to 18 per cent as may be seen from the status of the CAB/GDP ratios.

Capital Account

4.61 The capital account projections show the financing of the current account balance, as in Table

4.10, which gives the details of foreign savings. These projections for the external assistance and foreign investment during the Tenth Plan estimates are worked out on the basis of the past trends and likely developments in the future. In particular, the repayment of Resurgent India Bonds and the India Millennium Depositories has been fully taken into account.

Balance of Payments

4.62 On the basis of the current account and capital account, the balance of payments seen in terms of change in reserves, has been projected under the two scenarios as may be seen in Table

Table 4.10
Inflow of Foreign Savings

(\$ million)

	2001-02(P)	2006-07
External Assistance (net)	1,117	1,572
Commercial Borrowings (net)	-1,114	4,400
Non-Resident Deposits (net)	2,754	2,750
Rupee Debt Service	-519	-600
Foreign Direct Investment (net)	3,905	7,500
Portfolio Investment	2,020	5,600
Foreign Investment Flows (net)	5,925	13,100
Other Capital Flows (net)	1,382	1,000
Capital Account Total (net)	9,545	22,222
Debt	2,550	9,122

Source : Planning Commission (September 2001), Report of the Sub-Group on External Aid and WTO Commitments,

Table 4.11
Change in Reserves under Various Scenarios

(\$ million)

Year	Current Account Balance and CAB/GDP in bracket		Capital Account (Net)	Change in Reserves	
	Sc-1	Sc-2		Sc-1	Sc-2
2001-02	1,351 (0.3)	1,351 (0.3)	9,545	10,896	10,896
2006-07	-27,923 (-4.3)	-18,711 (-2.9)	22,222	-5,701	3,511

Source : Derived from Table 4.9 and 4.10.

4.11. In scenario-1, when the tariffs are brought down to 15 per cent, the change in reserves by 2006-07 is likely to be \$ (-) 5,701 million. The change in reserves is likely to be \$ 3,511 million by 2006-07 in scenario-2 where the tariffs are brought down less sharply to 18 per cent.

4.63 As may be observed from Table 4.11, the sustainable current account deficit and balance of payments situation at present are likely to be substantially compromised if average tariffs are brought down sharply to East Asian levels. Concerted effort would, of course, be required to increase exports. Since structural changes (in terms of changing share of tradables and relative prices) can be a medium to long-term option, it is the nominal exchange rate that would need to be suitably adjusted from time to time to keep balance of payments under control. It is the financing of the current account deficit that is important for sustained development during the Tenth Plan. Flow of foreign investment into productive sectors is essential. Moreover, as has been learnt from the experience in East Asian countries, the present trend of limited reliance on the 'flighty' short-term debt needs to be continued. Flow of foreign exchange reserves to short-term debt and, even more so, from the short-term debt to export of goods and services, needs to be maintained at viable levels to maintain buoyancy in the international capital markets.

TRADE AND EXCHANGE RATE POLICY

4.64 The trade regime in India till recently, has been very complex, characterised by severe quantitative restrictions on imports and exports, and very high tariffs on imports. Quantitative restrictions on imports were based on a restrictive licensing policy and further complicated by a wide variety of special import schemes. These included the import replenishment scheme for exporters, the actual user policy, government purchase preference and canalised imports for specified items through designated state agencies.

4.65 It is recognised that the most important pre-condition for creating a more open economy is to create an expanding production base of tradable

goods and services, which can not only withstand external competition, but also provide the surplus necessary to ensure sufficient export earnings for meeting the import needs of the country. The second pre-condition is to create conditions under which the export market becomes increasingly more attractive, so that there is both a shift from selling in the domestic market to exports, and developing capacities to specifically target such export opportunities. Both these conditions are inextricably interlinked, and involve the reduction and eventual elimination of the anti-export bias that has characterised the Indian economic system in the past and continues to exist to some degree even at present. There are two dimensions to this. First, the incentive structure has to be re-oriented towards investment in tradable goods and services and away from non-tradables. Second, the relative profitability of exports vis-a-vis domestic sales has to be improved. The principal instrument for achieving both these conditions is the exchange rate, which is discussed in some detail.

4.66 With the steady reduction of controls in trade matters, the exchange rate has emerged as a major instrument of policy. It needs to be used firmly but judiciously to achieve steady and sustainable growth of trade, investment and competitiveness. With the introduction of almost full convertibility on the current account and also partial convertibility on the capital account, the exchange rate has already been made more sensitive to the demand for and supply of foreign exchange in the economy. This, however, may have to be tempered occasionally by strategic intervention of the government in order to ensure that the imperatives of macro-economic policy are met. Since exports have a central role to play in the attainment of the Tenth Plan targets and in the present and future development strategy, it is suggested that the exchange rate be viewed primarily as an instrument to affect the behaviour of exports at least until such time as the production base of the economy is sufficiently integrated with the international market and exports are robust enough to withstand periodic fluctuations in the exchange rate and in international prices.

4.67 The exchange rate not only affects the degree of price competitiveness of domestic tradables in comparison to international markets, but also determines the relative profitability of tradables vis-a-vis non-tradables in the domestic economy. In the present context, both the factors are of importance, and the conduct of exchange rate policy would have to take into account the somewhat different considerations that underlie the two objectives. The standard measure of domestic prices relative to international prices, the real effective exchange rate, adjusts the nominal exchange rate by the differential rates of inflation in India and abroad. During the Ninth Plan, the export-weighted real effective exchange rate of the rupee has shown considerable amplitude, combining sharp depreciations with long periods of gradual appreciation, with the effect that at the end of the Ninth Plan (2001-02) the REER was 1.4 per cent

above its level in March 1997, which implies that the relative price competitiveness of Indian exports on account of the exchange rate has been eroded to this extent. Matters are worse if the effect of the exchange rate on relative attractiveness of tradables vis-a-vis non-tradables in the domestic economy is considered. The appropriate measure of this is not the REER, but the nominal exchange rate adjusted only by the domestic inflation rate. This measure has appreciated quite substantially over the same period by 35.9 per cent, as shown in Table 4.12. This behaviour of the exchange rate is not conducive to a steady move towards greater export orientation of the economy. During the Tenth Plan, the exchange rate will need to be deliberately depreciated in terms of the average level of prices in the country, which would, given the targeted rate of inflation for the Tenth Plan period, imply a nominal depreciation in the range of 5 to 7 per cent per

Table 4.12
Indices of the Exchange Rate

(Base 1997-98 = 100)

Year	NEER		REER		WPI/NEER	
	Level	% Change	Level	% Change	Level	% Change
1997-98	100.00	-	100.00	-	100.00	-
1998-99	90.83	-9.17	94.66	-5.34	116.65	16.65
1999-00	88.63	-2.42	94.45	-0.22	123.45	5.83
2000-01	88.78	0.17	99.27	5.10	132.06	6.98
2001-02	89.35	0.64	102.10	2.85	135.94	2.94

Note : (1) NEER = Nominal Effective Exchange Rate
= $w(i).e(i).e$
where : $w(i)$ = $x(i)/x$
 $x(i)$ = exports made in the i th currency
 x = total exports
 $e(i)$ = index of the exchange rate of the i th currency against \$ expressed as the number of units of i th currency per \$ 1
 e = index of exchange rate of the rupee expressed as the number of units of \$ to Re. 1
(2) REER = Real Effective Exchange Rate
= $NEER.[w(i).P/P(i)]$
where : P = Price Index for India
 $P(i)$ = Price Index of i th country
(3) WPI = Wholesale Price Index (domestic)

Source : Economic Survey 2001-02 and Annual Report, RBI, 2001-02.

annum under normal circumstances. Such an exchange rate strategy would, to some extent, correct the bias against tradables, by leaving the relative prices of traded and non-traded goods more or less unchanged, and thereby facilitate the efforts at containing the secular reduction in the share of tradables in GDP. This should also automatically lead to a depreciation of the REER in the 2 to 3 per cent per annum range, assuming that the international rate of inflation does not accelerate from its usual trend rate of 3 to 4 per cent per annum, and thereby improve the price competitiveness of Indian goods and services in the external market.

4.68 There is a point of view which holds that the exchange rate is not only an uncertain instrument of export promotion but it also has the negative effects of generating cost-push inflation and retarding external capital inflows, and that greater reliance should be placed on increase in efficiency and improvements in quality, productivity and technology for attaining greater international competitiveness. While it is no doubt true that in the longer run there is no substitute for efficiency, quality, productivity and technology, these take time to develop and may not be directly affected by public policy during the short to medium run. These attributes are expected to develop steadily over time in the Indian economy as a normal consequence of increased competition and greater integration with the international economy, and the government can play only a facilitative role. The immediate imperative is to encourage a greater degree of outward orientation through policy initiatives, for which the exchange rate is the principal instrument.

4.69 Note, however, has to be taken of the alleged negative dimensions of exchange rate depreciation. The first argument against a policy of steady depreciation is that it is inherently inflationary and, when exports are either import-dependant or face low price-elasticity of demand, it may not stimulate exports in any substantial manner. Thus, the trade-off involved in exchange rate depreciation is between the negative effects of acceleration in domestic inflation and a net export expansion effect. It is true that any effort at altering the relative price structure tends to be inflationary

as the various sectors of the economy attempt to protect their relative position. This does not, however, constitute a compelling argument for not making the effort at altering the price relatives when it is desirable as a part of a development strategy. On the other hand, it does underline the need to adopt a stringent anti-inflationary policy stance as a complementary measure, which is in any case an integral component of the Tenth Plan strategy. Furthermore, in the Indian context, there is ample empirical evidence that exchange rate depreciation does have strong export expanding effect. This arises primarily out of the fact that the Indian export basket still has a very low share of differentiated or branded products, which are the category of goods that are less price-sensitive, and the bulk of exports rely principally on price competitiveness. This characteristic of the Indian export basket is likely to continue to obtain in the immediate future, and emphasises the need to follow an active exchange rate policy.

4.70 It is sometimes argued that a stable nominal exchange rate is conducive to attracting greater external capital flows, and an expectation of currency depreciation may deter such inflows by lowering the expected returns denominated in foreign currency terms. But, it should be noted that if the exchange rate gets misaligned due to inflation and macro-economic imbalances, there will be expectations of depreciation, and a prolonged non-adjustment of the exchange rate will only strengthen such expectations resulting in reduced capital flows and eventual capital flight. What is called for is the adoption of appropriate policies to maintain macro-economic balances and not any artificial pegging of the exchange rate. Furthermore, the real benefits of foreign investment can be reaped, only when these investments come in, on the basis of the intrinsic strengths of and the real factors present in the economy, rather than on the basis of the implicit capital gains arising out of an expected appreciation of the currency. The advantage of a depreciating currency is that the foreign investment that does come in under such an expectation will not only be less speculative, but also more export-oriented in its own interest as against the greater inward orientation of investment that relies on nominal

exchange rate stability. The possibility of an outflow of existing portfolio investment, arising out of an expected depreciation, adds to the urgency of clearly signaling the future strategic approach to exchange rate management before the stock of such external portfolio liabilities becomes too large to risk any substantial net outflow.

4.71 There is, however, an issue as to whether the exchange rate should be depreciated gradually or devalued sharply to attain some medium-run target value. If the primary emphasis of exchange rate policy is on its effect on external capital flows, then a devaluation is generally to be preferred, since it immediately improves the incentive to export and reduces the probability of generating expectations of further depreciation among foreign investors. However, such a step does not generally create the condition for a sustained shift towards greater export orientation, particularly insofar as new investments are concerned. It may also require much sharper anti-inflationary measures, which may be contractionary in the short run since the fiscal parameters are unlikely to improve sufficiently within the short period. A more gradualist exchange rate stance, on the other hand, not only improves the relative profitability of exports, albeit less than a devaluation, but also affects the pattern of investment in favour of tradables in general, and exportables in particular. It would, however, require strict management in terms of the collateral macro-economic policies, particularly to prevent generation of inflationary expectations that may accompany a process of gradual depreciation. In view of the objectives of the Tenth Plan, it appears preferable to opt for the latter strategy and address the issue of foreign investment through policies aimed at reducing and eventually eliminating the impediments that exist at present.

4.72 In recent years, the ability of the government to determine the behaviour of the exchange rate has eroded quite significantly. Relatively large movements of financial capital and the need for monetary restraint have constrained the extent to which the exchange rate could be used as a policy instrument. In order to re-establish the primacy of the exchange rate as an instrument of macro-

economic policy in an open economy, the government has to create the conditions whereby it can intervene in the foreign exchange markets in a meaningful way. For this, binding ceilings not only on ECBs as at present, but also some control on net FPI flows through taxes and other disincentives, appear inescapable, at least until such time as the Indian foreign exchange market achieves sufficient depth and the foreign exchange reserves of the country are sufficiently large to withstand speculative pressures. Such restrictions on the inflow of FDI are, however, unnecessary since they are normally associated with real capital inflows, both physical and in the form of technology and services.

4.73 Exchange rate management, however, is only one of the instruments to affect a greater degree of export orientation in the economy. Tariff reforms is an important component of the efforts at increasing competition and efficiency in the economy, and making Indian exports more competitive both abroad and, also, relative to import substitutes in the domestic market. As has already been mentioned, the Tenth Plan will attempt to achieve international levels of tariffs, while carefully phasing out the changes, keeping in view the larger interests of the economy and the progress made on other fronts. This transition can be made without too much disruption in view of the additional protection to domestic industry that is sought to be provided through the process of exchange rate depreciation during the Tenth Plan period.

DIRECT EXPORT POLICY INITIATIVES

4.74 The policy reforms have aimed at creating an environment for achieving rapid increase in exports to make it an engine for achieving higher economic growth. Depending on the international environment and domestic exigencies, various export policies have been formulated from time to time. More recently, a number of steps have been taken to enhance the export growth. This includes reduction in transaction costs through decentralisation, simplification of procedures and various other measures, which are enumerated in the EXIM Policy 2002. Steps have been taken to promote

exports through multilateral and bilateral initiatives, identification of thrust sectors and focus regions. Special economic zones are being set up to further boost the exports. Import of second hand capital goods, which are of less than 10 year vintage, have been allowed. In order to encourage export of quality/branded goods, double weightage has been accorded to exports made by units having ISO or equivalent status. Other measures include promotion of agricultural exports, market access initiative, setting up of business-cum-trade facilitation centres and trade portals, strengthening of the Advance Licensing Scheme, Duty Free Replenishment Certificate (DFRC), Duty Entitlement Pass Book (DEPB) Scheme, etc.

4.75 The EXIM Policy 2002 has removed all quantitative restrictions (QRs) on exports, except for a few sensitive items retained for export through the State trading enterprises. The comprehensive policy covers the agricultural sector, cottage and handicrafts and the small-scale sectors. Apart from removing restrictions on agricultural exports, it is proposed that transport assistance be made available for exports of fresh and processed fruits, vegetables, floriculture items, poultry and dairy products, and products of wheat and rice.

4.76 Some of the sector-specific packages in the policy include incentives for export of jewellery, leather and textiles, handicrafts, and other items from the small-scale sector. To elaborate, the package includes reduction of customs duty on import of rough diamonds to zero per cent; abolition of licensing for rough diamonds which should help India to emerge as a major international center for diamonds; reduction in value addition norms for export of plain jewellery from 10 per cent to 7 per cent; and allowing export of all mechanised unstudded jewellery at a value addition of 3 per cent only as part of the effort to achieve a quantum jump in jewellery exports. Further, relaxations have been made in terms of extension of duty-free imports of trimmings and embellishments up to 3 per cent of f.o.b. value, hitherto confined to leather garments to all leather products; and permitting DEPB rates for all kinds of blended fabrics among several other benefits for the textile sector. The policy also marks

the launching of a new programme called, Special Focus on Cottage Sector and Handicrafts, keeping in view that the small scale products form 50 per cent of India's exports.

4.77 In addition to merchandise exports, there is tremendous scope for increasing exports from the services sector as India has a highly skilled manpower and a large industrial base. This is being tapped for electronic and computer software, engineering consultancy, banking, insurance, tourism, etc. The Policy is geared towards nearly doubling India's present exports of about \$ 45 billion to more than \$ 80 billion over the Tenth Five Year Plan by 2007.

4.78 It was also announced that overseas banking units (OBUs) would be permitted to be set up in special economic zones (SEZs). These units would be virtually foreign branches of Indian banks but located in India. These OBUs would be exempt from usual requirements of credit reserve ratio and statutory liquidity ratio. The banks would provide access to SEZ Units and SEZ developers to international finances at international rates. The policy includes various duty-neutralisation instruments for exports such as the Duty Entitlement Pass Book. Export Promotion Capital Goods (EPCG) and all other schemes like Advance Licenses, etc., would continue along with the existing dispensation of not having any value caps. EPCG licenses of Rs.100 crore or more will have 12 years export obligation period (as against 8 years earlier) with a five-year moratorium. A Plan scheme entitled, Market Access Initiative (MAI) was initiated to assist industry in research and development, market research, warehousing and marketing infra-structure. Also, a scheme for participation of States in the export endeavour, Assistance to States for Infrastructure Development for Exports (ASIDE) is being encouraged. Moreover, attention is being paid to aspects of grading and quality control, and scientific packaging methods to meet international standards/specifications.

4.79 In order to promote exports to Latin America, Africa and the Commonwealth of Independent States (CIS) countries, various programmes

have so far been launched. It is expected that in addition to the Focus: LAC programme for accelerating trade with Latin American countries, the new programme called Focus: Africa would give a boost to India's trade with the sub-Saharan African region. In order to strengthen trade ties with the CIS countries, a Focus: CIS programme would be launched in the coming year.

4.80 A Medium-Term Export Strategy 2002-07 was announced in January 2002, with a view to providing a road map for the export sector in the medium term. The aim is to focus on the import baskets of our major trading partners (USA, Japan and EU) in the context of India's export basket, and arrive at *focus products* and *focus markets* for India. A total of 220 items and 25 markets have been identified for special attention based on various criteria, and indicative sector-wise strategies have been formulated. The Export Strategy 2002-07 aims to achieve 1 per cent share in world exports by 2006-07, from a 0.67 per cent in 2000-01. In order to achieve this, there is a continued need to address the domestic problem of infrastructural bottlenecks in the country, mainly relating to transport problem and ports facilities. Further, in order to improve the price competitiveness of our exports, provision is being made for WTO compatible subsidies, transport, pricing and comprehensive tax system especially for exporters, strengthening export oriented small-scale industries, dissemination and extension of information to potential exporters, etc. At the international level, apart from genuine trade fluctuations, restrictive trade practices by some of the trading partners in developed countries need to be negotiated.

4.81 Thus, in order to facilitate promotion of exports during the Tenth Plan, there is need to give further impetus to the major foreign exchange earning sectors of cottage and handicrafts, gems and jewellery and exports from the services sector, including electronic and computer software, engineering, and consultancy. The special economic zones already set up could be allowed greater relaxations from investment restrictions, particularly small scale industries reservations, foreign equity

limits, real estate, etc. These zones could be classified as completely duty free enclaves for trade operations and be treated as 'foreign country' insofar as trading conditions are concerned. Relaxations may be given to corporate income tax and other excise and service taxes, and appropriate labour laws made applicable to these enclaves.

FOREIGN INVESTMENT

4.82 The projected balance of payments (BOP) position for the Tenth Plan period given in Table 4.9 indicates that the current account deficit (CAD) is likely to be 2.9 per cent of GDP by the terminal year of the Plan (2006-07). In view of the experience of the late 1980s during which India experienced CADs of above 2 per cent per annum, culminating in the crisis of 1991, there may be some apprehensions about the sustainability of the proposed BOP scenario. On the other hand, there is a point of view which holds that the CAD need not *per se* be a matter of policy concern, and attention should be restricted only to the public component of the external liabilities. The argument is that the private sector can be expected to fully take into account the inter-temporal viability of its liabilities, both internal and external, and hence the private component of CAD would necessarily be self-correcting in the longer run. This is not, however, a tenable position for countries whose currencies are not reserve currencies, and certainly not for countries with non-convertible currencies. The reason for this, apart for the normal failure and default risk present in any commercial activity, is that the individual private sector firm normally evaluates its inter-temporal budget constraint in terms of the domestic currency and not on the basis of the currency in which the liabilities were originally incurred. Thus, the possibility exists that private viability can co-exist with a running down of a country's foreign exchange reserves. International experience, especially the East Asian crisis, provides ample instances of such outcomes.

4.83 Prior to the economic reforms, when foreign investment was virtually non-existent, the sustainable CAD for India was estimated to be about 1.4 per cent of GDP. With the liberalisation of

external trade and investment, this figure has risen quite sharply, since foreign investment does not carry the same level of systemic risk as external debt. On the aggregate, therefore, it is felt that the CAD projections are sustainable provided that the foreign investment flows are of the required magnitudes. Nevertheless, there are two factors that need to be taken into account. First, foreign investments tend to require a higher rate of return than the interest rate on debt over the longer run. Therefore, it would not be prudent to raise the CAD target too much unless there is sufficient confidence in being able to maintain relatively high growth rates of exports over an extended period. Second, a distinction has to be drawn between foreign direct investment and foreign portfolio investment in terms of their effects on the economy.

4.84 In general, FDI is preferred to FPI, partly because its returns are closely linked to the performance of the real economy and partly because it tends to be less volatile than FPI. Besides, the most important disadvantage of FPI flows is that it tends to be pro-cyclical, in the sense that it comes in when the balance of payments (BOP) position is seen to be strong and goes out when the BOP position is expected to weaken. Thus, it accentuates the direction of movement of the BOP, which can cause serious problems in macro-economic management. In the case of countries like India, where the foreign exchange markets are very thin as compared to the international financial market, a free FPI regime carries the danger of speculative movements, which can lead to serious disruption in the economy.

4.85 There is another dimension, however, to the relative benefits of FDI over FPI which needs to be taken into account. FDI can make up not only for deficiencies in the availability of savings and foreign exchange – which is true of all external flows – but also for weaknesses in domestic entrepreneurial capacity. In other words, the role of FDI in directly stimulating investment activity in the country can be of great significance. This is particularly important for India during the Tenth Plan period since, as has been pointed out in chapter 2, there is a likelihood that corporate investment activity may not be dynamic enough to absorb the

available resources, particularly in those areas which are being vacated by the public sector. In such a situation, the entrepreneurial function played by FDI can have the effect not only of bringing in additional resources, but also leading to better absorption of domestic savings. On the other hand, relatively free access for FDI with restrictions on other forms of external capital may put domestic entrepreneurs at a serious disadvantage. This has not only to do with the access to relatively lower cost external funds, but also in terms of the competition for accessing domestic finance. This disadvantage can be bridged by FPI, which increases the liquidity available to domestically listed companies. Thus, a careful balance needs to be struck between the inflows of FDI and FPI in order to ensure that sufficient foreign entrepreneurship comes in to the country without “crowding out” domestic entrepreneurship. The figures for the various forms of external flows given in Table 4.10 reflect these considerations.

4.86 However, it needs to be borne in mind that these foreign investment figures are targets and not projections. Foreign investments, by their very nature, are supply-driven in the sense that although the country can create the conditions for making such investments attractive, the decision as to whether and how much to invest is made by the foreign investor. This factor is of course well recognised, and there is considerable discussion in the country regarding the creation of a conducive environment for foreign investment. It would be desirable to unequivocally state that much of this debate may actually miss the essential issue – namely, that an investor-friendly climate needs to be created in the country for all investment, and not just for foreign investors. Indeed, it is submitted that if the investment climate in general is improved, no exclusive measures may be needed to attract foreign investors. On the other hand, if a special and differentiated investment regime is set up for foreign investors, it may actually do more harm than good.

4.87 Nevertheless, a certain degree of focus on foreign investors has to exist if for no other reason than as a recognition that they would be

trading on unfamiliar waters. There are two dimensions to this which are of particular relevance. First, potential foreign investors have to be specifically targeted at and wooed. Although India's presence has improved significantly in the international investors' radar screen in recent years, there is still a long way to go before it can be taken for granted. This is especially true for a number of sectors in which India's requirements may be at variance with international investor perceptions. Heavy industries are a case in point, especially those which, until recently, were reserved for the public sector. Second, hand-holding operations in the form of an effective investment facilitation mechanism is essential for companies which would be making their first foray into the country. Unfamiliarity with laws, rules and procedures can be a great deterrent, particularly in a country with significant regional variations in these matters.

4.88 Insofar as FPI is concerned, similar considerations apply. The state of the domestic capital market is far more crucial to attracting foreign institutional investors than any special regime or dispensation. The focus, therefore, should be on improving the regulatory and supervisory framework governing the domestic capital markets and on technological modernisation of their operations. There has already been considerable progress in this regard, but it is still some distance away before the full range of financial instruments are introduced in India and innovations are expeditiously permitted. Finally, there is no reason to expect that external investor confidence can be at variance with that of the domestic investor. Therefore, the precondition to attracting greater FPI is the return of the domestic investor to the Indian capital markets.

WTO ISSUES

4.89 India is one of the founding members of the World Trade Organisation (WTO) and participation in the WTO rule based system implies greater stability, transparency and predictability in the governance of international trade. The importance of WTO in promoting multilateral trade is being increasingly acknowledged. The WTO rules envisage non-discrimination in the form of national

treatment and most favoured nation (MFN) treatment to our exports in the markets of other WTO members. National treatment ensures that our exports to other member countries would not be discriminated vis-à-vis their domestic products. MFN treatment likewise ensures non-discrimination among various members in their tariff regimes and also other rules and regulations.

4.90 Emerging from continued discussions in various multilateral fora, developmental issues along with trade related issues are being increasingly focused at the international level. Poverty concerns of developing countries along with development and trade policies are also being given cognisance. Need has been felt for integration of trade policies with development strategies, increasing support to areas of finance and debt relief, recognising the importance of technology for development, improvement in market access for developing countries in sectors like textiles, clothing and agriculture, and providing better access to the dispute settlement mechanisms for these countries. The issue of abuse of the anti-dumping procedure, the problems of rules of origin criteria, technical barriers to trade, regional trading blocs, etc., are also being considered at various levels in the WTO.

4.91 The Government of India has taken several steps to implement the policy commitments made under some of the agreements, particularly under the Agreement on Tariffs and Quantitative Restrictions, Agreement on Agriculture (AoA), Trade Related Intellectual Property Rights (TRIPs), Trade Related Investment Measures (TRIMs), General Agreement on Trade in Services (GATS), apart from others. A strategy for tariff negotiations is, however, required. The additional 'non-trade' issues relating to transparency in government procurement practices, trade and competition policy, trade and environment, and trade and labour standards proposed in the Singapore and the Geneva Ministerial need to be addressed for negotiations. The commitments regarding the technical barriers to trade, social agenda covering labour standards and environmental and phyto-sanitary issues also require establishment of certain national standards and technical regulations in a standardised and transparent system.

4.92 At the same time, there are some issues on which India has expressed certain reservations. These are:

- During the implementation of WTO agreements in the last six years, India has experienced certain imbalances and inequities in the WTO agreements. It is found that some developed countries have not fulfilled their obligations in letter and spirit of the WTO agreements, and many of the Special and Differential Treatment clauses, in favour of developing countries, added in various WTO agreements have remained inoperational.
- Taking advantage of the exception clauses provided in the WTO, most industrialised countries are still enforcing various regulations on foreign producers and suppliers.
- Extending the scope of the investment regime in WTO beyond Trade Related Investment Measures and General Agreements on Trade in Services, is not appropriate.
- A multilateral framework cannot guarantee an increase in FDI inflows although it threatens to adversely affect the quality of the inflows.
- There are also other asymmetries present, as the WTO does not address the responsibilities of corporations which often impose trade restrictive clauses on their subsidiaries.
- WTO has not been able to ensure abolition of non-trade barriers being imposed on labour and environmental considerations, including the linkage in certain Generalised System of Preferences (GSP) schemes to these issues.

4.93 The present negotiations strategy is based on the decisions taken at the Doha Ministerial in November 2001. The Doha Declaration focused mainly on TRIPs agreement, public health, trade and environment and the implementation related issues and concerns. Elaborate timetables on work

programme for current negotiations in agriculture and services and other issues have been worked out.

4.94 The Doha Conference presented mixed results for India. India's main concern was to speed up implementation of various agreements and to undo the imbalances and inequities present in some WTO agreements. From India's point of view, faster removal of the textile quotas maintained by developed countries like the USA was the most important implementation issue, which was, however, met with limited success. As far as environmental issues are concerned, the Doha declaration has mandated negotiations to clarify WTO rules in the light of multilateral environmental agreements. These negotiations could lead to developed countries raising barriers against goods from developing countries on the pretext of environmental protection. India had also reservations on starting negotiations on four new 'non-trade' areas, namely, multilateral investment, global rules on competition, transparency in government procurement and trade facilitation, i.e., framing of uniform custom's procedures for clearance of goods. India could secure only a two-year respite and the study process would continue for two more years, i.e. up to the Fifth Ministerial Conference, when a decision about negotiations will be taken on the basis of an explicit consensus.

4.95 Apart from mandated negotiations in agriculture and services where the process has already started, negotiations on market access for non-agricultural products is quite important for India, as reduction or elimination of tariffs, tariff peaks and tariff escalation as well as removal of non-tariff barriers will be quite helpful in exports. India would, of course, have to make offers even though the negotiations will be carried out under less than full reciprocity as far as developing countries are concerned.

4.96 The other area where action is required is in regard to extension of protection of geographical indications to products other than wines and spirits under Article 23 of TRIPs and the relationship between TRIPs and the Convention on Biological

Diversity (CBD), and Traditional Knowledge (TK) under Article 71.1. The process of legislation in regard to geographical indications needs to be completed. In the area of TRIPs and access to medicine, where additional flexibility is provided in separate ministerial declarations in terms of compulsory licensing and parallel imports, India can benefit in terms of lower prices of crucial life saving drugs and even promoting exports of pharmaceutical products.

4.97 India and other developing countries should now ensure an average balance of reciprocity in these negotiations. There is need for a continued effort to handle some of the complex issues, as per international requirements as well as our domestic resources and other constraints, during the Tenth Five Year Plan. Some of these issues are briefly examined here in the context of the text of the agreements, some of which are already accepted and others proposed for negotiations.

Agreement on Agriculture

4.98 The Agreement on Agriculture (AoA) aims to have an equitable reform programme for trade in agriculture amongst the member countries, also taking into consideration some non-trade concerns including food security. It is recognised that agriculture is a way of life in most developing economies. It contributes significantly to the overall GDP of these countries and employs a large proportion of the workforce. The policies for agricultural development aim to increase productivity and overall production in the agriculture sector. Rapid growth of agriculture in these economies is essential for food security as well as alleviation of poverty. Food security is defined by the FAO as 'the physical economic access for all people at all times for enough food for an active, healthy life with non-risk of losing such access and as such is directly connected with livelihood in the developing countries'. In this background, the commitments made under AoA are expected to ensure that food security interests of developing countries are primary in relation to the disciplines of market access and domestic support.

4.99 The commitments under AoA mainly relate to product-specific and non-product-specific domestic support, market access and export subsidies. The product-specific support is related to the Aggregate Measure of Support (AMS) given to farmers in the form of subsidies for fertilizers, seeds, pesticides, credit, electricity, etc. The AMS is calculated for each product receiving market support and is based on the prices prevailing in the base period 1986-88. Several categories of subsidies have been exempted from AMS calculations such as for research programmes, pests and disease control, training services, extension and advisory services, marketing and promotional services, and infrastructure development. Apart from this so-called 'green box' areas of support, payments for production limiting programmes and also decoupled income support was exempted.

Issues of Concern

4.100 There are a number of issues under the AoA, which are considered against the interests of developing countries like India. First of all, it relates to minimum access for import of primary goods that flout the basic rule of free trade promotion enshrined under the WTO agreement. The government budgetary support for agriculture is subjected to international discipline. 'Green Box' subsidies and also exports subsidies are required to be identified transparently to be permissible, while the rest is actionable by WTO. In any case, the 'blue box' and 'green box' subsidies, which are exempted from reduction commitments, also lead to distortions in trade. This has been emphasised by developing countries, like India, which have a majority of low cost agricultural producers.

4.101 It has been suggested, on the basis of the experience of implementation of the AoA, that the agreement legitimised the various trade distorting practices of the developed countries in their favour. Further, it has even taken away the right of the developing countries to give some limited export subsidies as otherwise provided under the Subsidies and Countervailing Measures Agreement. Despite fulfilling their so called reduction commitments, the total support being given to agriculture in the OECD

countries has gone up from \$ 308 billion in the year 1988 to \$ 361 billion in the year 1999.

4.102 The other problem relates to distortions emerging from inequity in domestic subsidy discipline due to different base positions. The developed countries, which are heavily subsidising countries, are allowed to retain up to 80 per cent of their subsidies, while developing countries can subsidise their farmers not more than 10 per cent of the total value of agricultural production. The domestic support by developed countries needs to be reduced substantially in absolute terms.

4.103 The domestic support measures relaxed for the purpose of food security and PDS are allowed only in relation to the international market price and to the targeted population. This is a problem for countries like India with high percentage of poor population and also dependent on agriculture, where purchase of agricultural products at international market price is not possible without adverse consequences. Food security that is inter-linked with the livelihood security, is extremely important for densely populated countries with a large agrarian economy like India. These countries would need enough flexibility under the Agreement on Agriculture to take care of its food security, rural employment and livelihood concerns.

4.104 India has also argued that low income developing countries such as ours, need to address market access and domestic support discipline such that their food requirements are basically met from domestic sources. The volatile international market can get transmitted to the domestic economy and seriously affect the prices of food grains and food entitlement of the poor. Commodities like wheat, coarse grains, edible oils, sugar, dairy products, fruits and vegetables that are crucial for food security would need to match high levels of export subsidies by developed countries. It is suggested that for development of agriculture in developing countries, diversification of 'green box' subsidies should be encouraged and allowed input subsidies to crops where productivity levels are below the world average. The negative product-specific

support may be permitted so as to be adjusted against non-product-specific support.

4.105 The other issue of concern relates to implementation of changes in the tariff regime for agricultural commodities. The peak tariff on agricultural commodities in countries like USA, Canada, EU, Japan, Korea and the Cairns group continues to prevail at very high rates. A study conducted by the WTO with United Nations Conference on Trade and Development (UNCTAD) (1997) has observed that one-fifth of the peak tariffs of the USA, a quarter of those of EU, about 30 per cent of those of Japan and about one seventh of those of Canada exceed 30 per cent. It further reports that the most important areas for developing countries face highest tariff rates and include the major agricultural staple foods, cereals, meat, sugar, milk, butter and cheese as well as tobacco products and cotton. In fact, the study suggests that tariff wedges will continue to be significantly high on account of tariff escalation, which is a major factor preventing developing countries from diversifying and increasing their share of processed agricultural exports.

4.106 In India, agricultural tariffs are much lower compared to these countries, even though industrial and mining tariff rates still prevail much higher. The peak rates for agricultural commodities in developed countries need to be negotiated. These tariff rates are progressively being reduced to bring them in line with rates prevailing in East Asian economies.

4.107 Moreover, support packages by developed countries under production-limiting programmes for retirement of producers, as well as resources employed for production of marketable surplus in the past is still beyond the purview of the subsidy discipline. This needs to be re-negotiated. Also, there is the issue of import access rights by agricultural exporters of developing countries who are restricted on grounds of phyto-sanitary regulations in developed countries. It is important that scientific phyto-sanitary standards are established at the international level so as to prevent protectionist measures by developed countries on this plea.

4.108 Some of these concerns have been given due cognizance at the Doha Ministerial Meet by WTO in November 2001. The Declaration commits to comprehensive negotiations for improvement in market access for developing countries along with phasing out of all forms of export subsidies and other domestic support being given by developed countries. The development needs of countries like India, including food security and rural development have been taken note of. The issue of trade and environment and the aspects impinging on agriculture, however, met with limited success in the negotiations. There is continued need for negotiations prior to the Mexico Ministerial Meet, apart from the requirement of implementation by India on her commitment from 2004.

4.109 It is important that steps are taken to reap benefits of a liberalised trade regime through increased efficiency in agriculture and combat restriction by developed countries arising from sanitary and phyto-sanitary measures. Efficiency would be greatly enhanced with increased investments and land reforms. Also, diversification of agricultural production into agro-foods, horticulture and floriculture products and farm products with maintenance of international quality standards, along with application of sanitary and phyto-sanitary measures could help to increase exports from this sector.

Trade Related Intellectual Property Rights (TRIPs)

4.110 The agreement on Trade - Related Intellectual Property Rights was introduced in the WTO agreements and includes protection through exclusive rights to provide returns for undertaking innovation. At the same time, balance is ensured between the interest of the innovator on the one hand and the users on the other. It is supposed to contribute to the promotion of technological innovation and also dissemination to the mutual advantage of producers and users of the knowledge and to promote social and economic welfare. The agreement covers copyrights, trademarks, geographical indications, industrial designs, patents, layout designs of integrated circuits and undisclosed

information. The implementation of TRIPs is through prescribed laws and regulations and the members are obliged to ensure that their laws commit effective action in their infringement.

Issues of Concern

4.111 Developing countries like India, which are invariably technology seekers, face difficulties in their commercial dealings with technology holders in developed countries. Apart from market imperfections, these developing countries have inadequate experience and skill in finalising appropriate legal arrangements for acquisition of technology. Technology transfers of crucial scientific developments to the third world have been constrained due to the protection given by the intellectual property rights.

4.112 The declaration on the TRIPs agreement and public health recognises the gravity of the public health problems afflicting the developing countries. The WTO members have a right to formulate their public health policies. It is important also to note that technological development of new medicines should be transmitted to developing countries to promote the development of manufacturing capacities of pharmaceuticals, without restraining policies on access to medications. Emphasis has been on ensuring the accessibility of pharmaceuticals and medical treatments used to treat pandemics such as HIV/AIDS, Malaria, TB, etc., as well as their affordability for all, in accordance with international law.

4.113 It has been suggested that even though exclusive rights conferred by patents provide incentive for further investment in R&D of new and effective medicines, the exclusive rights in case of life-threatening diseases should be treated separately at a different level. There is need to ensure access to medicines for such diseases at affordable rates to the vast majority of the population, particularly in countries where the per capita income is low and per capita expenditure on health is abysmally small. The Doha Declaration made a categorical statement on TRIPs and public health and emphasized the rights of WTO members to

protect public health and to promote access to medicines for all.

4.114 The impact of the far reaching changes in TRIPs needs to be carefully examined in regard to public health in India as improvement in the health status of the population has been one of the major thrust areas in social development programmes of India. Technological improvements and increased access to health care have resulted in steep fall in mortality but disease burden due to communicable diseases and non-communicable diseases and nutritional problems continue to be high. In spite of the fact that norms for creation of infrastructure and manpower are similar throughout the country, there are substantial differences between States and districts in availability and utilisation of health care services and health indices of the population. A re-evaluation of the problem of health and impact of the Declaration under TRIPs needs to be done in the Tenth Plan.

4.115 One way of increasing access to medicines in poor countries is through differential pricing of drugs in the developed and developing countries. Some major companies are already pricing their products in such a manner. However, more widespread and sustainable differential pricing can be made feasible provided a right legal, technical and political environment is secured. The most important aspect is to recognise the importance of respecting the balance found in the negotiations of the TRIPs Agreement and the rights of the developing countries to use the flexibility in it, in regard to compulsory licensing and parallel imports to respond to health concerns. TRIPs Agreement is also not against segmenting of the markets through the prohibition of parallel imports. However, adequate provision has to be made for enhanced R&D efforts in India.

4.116 Traditional Medicine (TM) plays a crucial role in health-care or serves the health needs of a vast majority of people in developing countries. Access to 'modern' health care services and medicine may be limited in developing countries. TM thus becomes the only affordable treatment available to poor people and in remote communities.

The protection of TM under intellectual property rights (IPRs) raises some issues, the most important being the extent to which it is feasible to protect the existing IPR system. Certain aspects of TM may be covered by patents or other IPRs. There have been many proposals to develop *sui generis* systems of protection. Such proposals are based on the logic that if innovators in the 'formal' system of innovation receive compensation through IPRs, holders of traditional knowledge should be similarly treated.

4.117 The grant of patents on non-original innovations (particularly those linked to traditional medicines), which are based on what is already a part of the traditional knowledge of the developing world have been causing a great concern to the developing world. The governments in the third world as well as members of public are rightly concerned about the grant of patents for non-original inventions in the traditional knowledge systems of the developing world. At the international level there is a significant degree of support for opposing the grant of patents on non-original inventions. In fact, a mechanism has been proposed for disclosure of the source of origin of biological material used in invention and obtaining the consent of the country of origin. At the same time, dissemination of knowledge along with patent rights for seed diversity is crucial for developing countries like India where such a large population is dependent on agriculture for their livelihood. The Doha Ministerial Declaration took cognisance of the compatibility between TRIPs and the convention on bio-diversity during its review of the TRIPs agreement.

4.118 On the domestic front, it is important to recognise the need to urgently implement product patenting in India. Detailed documentation of traditional knowledge areas is required to be undertaken at the earliest. Measures have already been initiated for setting up of the 'Traditional Knowledge Digital Library' by the Council for Scientific and Industrial Research. We need to ensure that when an overseas product is based on Indian resources and Indian medicinal knowledge, India's rights must be protected. Therefore, there

is need for a separate government body for (i) facilitating Indian patents abroad, (ii) preventing foreign companies from getting exclusive marketing rights and patents on items of Indian origin, (iii) improved information dissemination to avoid exploitation of Indian consumers particularly of pharmaceutical products and farmers, (iv) better dispute settlement mechanism in consultation with lawyers, scientists and historians, and (v) improved bio-diversity through organised institutions and monitoring of seed economy.

Trade Related Investment Measures, the Multilateral Agreement on Investment and the Singapore Issues

4.119 The agreement on Trade Related Investment Measures mainly applies to trade of goods that take place via Transnational Corporations (TNCs). The agreement aimed to protect conditions applied by an enterprise, like purchase or use of products of domestic origin, volume or value of products and minimum percentage of local production, purchase or use of imported products, export conditions, etc. Similarly, restrictions imposed by host countries on foreign investment were also brought under the purview of this agreement. TRIMs does not cover foreign equity participation in industries and the issue of channeling of investment to particular areas. The agreement does not cover restrictions by government using export performance requirements. The government is expected to have similar trade policies for foreign and domestic companies.

4.120 The developing countries invite TNCs to augment availability of capital and technology. The 'performance clauses' had been added to check their effectiveness. This had led to conflict, as an appropriate code of conduct for TNCs and host countries had not been arrived at. It was against this background that this agreement was introduced in the WTO to combat the problem that had arisen due to large number of countries having imposed restrictions on foreign investment and trade in goods taking place through TNCs. However, since controls on the operations of the TNCs were required to be removed under this agreement, it has been felt that

developing countries may not be in a position to direct their operations to critical areas requiring technological and financial support, without adversely affecting foreign exchange flows. The importance of FDI in developing countries cannot be undermined but selectivity of investment flows continues to be relevant as may be learnt from the foreign investment policy of China (vis-à-vis policies of some of the African and even Latin- American countries).

4.121 Since the establishment of the WTO certain members have been trying to introduce non-trade issues into its agenda. At the First Ministerial Conference in 1996 at Singapore, members like EU and Japan pushed the inclusion of Investment and Competition Policy in the agenda in order to have multilateral set of rules on these issues. At Singapore the developing countries, with India in the lead, managed to limit the work on Investment and Competition Policy to the establishment of Working Groups on Trade and Investment and a Working Group on Trade and Competition Policy. These two issues, along with Trade Facilitation and Transparency in government procurement have come to be known as Singapore issues.

4.122 The Organisation for Economic Cooperation and Development introduced the Multilateral Agreement on Investment to provide better opportunities for investment by TNCs, although there was no consensus on the issues. The OECD initiative covers all direct investment transactions, whether by non-resident enterprises or by domestic enterprises under foreign control. Three fundamental principles form the basis of the OECD instruments, viz. right of entry and establishment, national treatment, and freedom of repatriation, both on capital and current accounts, with the ultimate objective of progressive liberalisation of policies to be carried out by member countries in respect of foreign investment. It was propounded that it will provide the requisite transparency, predictability and legal security to foreign investment.

4.123 The Doha Ministerial Conference decided to start negotiations on the MAI and other Singapore issues once a consensus (on the issue of

negotiations) is reached in the fifth session of the Ministerial Conference. On the basis of the decision, by explicit consensus on the modalities, actual negotiations will begin. However, a number of issues are of concern for developing countries like India, which need to be addressed prior to actual negotiations. Some of these are discussed here.

Issues of Concern

4.124 This agreement has important implications for the developmental objectives that the host country may want to address while inviting foreign investment and negotiating the multilateral agreement. The developing countries feel the need for selective and judicious intervention of the government to support domestic industry and technology creation so as to ensure a level playing field for domestic enterprises. These developing countries also employ an appropriate mix of incentives and performance requirements for foreign investment to achieve specific developmental objectives. The responsibilities of the MNCs need to be addressed and also prevent imposition of trade restrictive clauses on their subsidiaries. It is in this background that the important features of MAI need to be looked into in greater detail and view the proposed agreement of bringing the world under a legally secure, non-discriminatory and stable regime for foreign investment. In any case, it is essential to recognise that the multilateral framework cannot guarantee an increase in FDI inflows, although it could impact the quality of the inflows.

4.125 The treaty seeks to adopt a comprehensive asset-based definition of investment as opposed to the enterprises-based one, i.e., it covers all forms of assets, which are recognised and also the evolving forms of investment. Specifically, investment has been defined as 'every kind of asset owned or controlled, directly or indirectly, by an investor', while the investor is the natural or legal person of a contracting party. Thus, investment would cover, not just equity capital, but also portfolio investment, debt capital, monetary and financial transactions, and every form of tangible and intangible assets including intellectual property rights, licences and authorisations. It is this wide

definition of 'investment' that has been contested. The other major issue of concern under the MAI is regarding performance requirements and investment incentives. The proposed treaty aims to go far beyond the restrictions on performance requirements under the TRIMs agreement of the WTO. The treaty prohibits a wide range of performance requirements totally even if they apply equally to domestic and foreign investors.

4.126 As far as the issue of privatisation of firms in host countries is concerned, the agreement aims to apply national treatment and the most favoured nation principle at all stages of the privatisation process. The agreement does not prohibit government-designated monopolies provided the rules of non-discrimination in their sales and purchases prevail. The problem is regarding handling dispute settlements, particularly that relating to investor to State disputes, State to State disputes, etc. The investor could have an option to file the dispute in the national courts or international arbitration. This would have implications on the rules chosen for arbitration, which could be rules operational in the host or parent country or even other international bodies. At the same time, the State (of the host country) would have no option but to go by the national legal remedies. These are also contentious issues that require negotiations.

4.127 Further, in case of the new MAI framework, it is likely that the flexibility available to us, under bilateral investment protection agreements, is taken away. In the next two years, we need to think in terms of (a) the possible impact of an MAI on different sectors; (b) status of the Indian economy in regard to the relation between trade and investment and trade and technology transfer; (c) existence or devising of new policy instruments or legislation to protect certain high priority areas; (d) to ensure a level playing field for domestic industry and (e) to provide enabling legislations to rein in the multinationals when their conduct is contrary to national objectives. This is possible in view of the emphasis in the Declaration that account should be taken, as appropriate, of the existing bilateral and regional arrangements in investment. In India such agreements are based on a model

code, devised and approved after careful considerations.

4.128 Similarly, the issues relating to Trade and Competition have wide ranging implications. The Working Group has been concentrating on principles of transparency, non-discrimination and procedural fairness and provisions for hardcore cartels. Negotiations on multilateral competition agreement could commence after a consensus is reached after the 2003 Ministerial. There has been considerable exploitation due to monopoly power of major TNCs and the price fixation mechanism. The issue of anti-competitive pricing by TNCs and that of mobility and tradability of factors of production like labour, needs to be taken up as it relates to clarification of core principles, including transparency, non-discrimination and procedural fairness, and provisions on cartels. Strengthening of the international competition law needs to be preceded by strengthening of domestic competition law and regulatory framework. India and many other developing countries are required to introduce such a system domestically. At the same time, legal reforms in governance of factor market, particularly labour market is essential.

4.129 As far as the proposed changes in the issue of 'government procurement' is concerned, greater transparency in assessment of alternative investments in a fair manner would greatly enhance efficiency and help development in the developing countries. Fundamental changes are expected in the Indian and world economies within the period of the Tenth Plan where competition, productivity and efficiency will determine the place of a country in the comity of nations. In recent times, while analyzing the productivity of investment, leakages or corruption has been identified as a retarding factor in the development process. The Doha Declaration, focusing on transparency in government procurement seems to be backed by this consideration. Already there is a plurilateral agreement and a Working Group is working on this issue. During its working, the group has identified and analysed a number of principles of transparency and due process in procurement. These include definition and scope of government procurement,

transparencies of decisions on qualification and contract awards, etc. Of these elements significant differences have remained on several key elements, including, in particular, scope and coverage of a transparency agreement and application of WTO Dispute Settlement Procedures to such a possible agreement. As the discussions in the Working Group on this subject have sought to tread on many market access related issues, developing countries are concerned that the real intention appears to be to extend the market access in future. However, according national treatment to all tendering parties may not be acceptable to developing countries like India, as preference would have to be given to domestic suppliers.

4.130 In India, government procurement procedures are in accordance with technical specifications and no details are revealed on the system of selection of tenders. Although there is a felt need for following standardised and transparent procedures, there is no unanimity on the exact implementation and review method. In fact, it is felt that developed countries should be prevented from using transparency principle as a means of securing market access on grounds of social and development needs. At the same time, an improved and transparent government procurement system is required for our economy.

4.131 Trade facilitation came on the work programme to undertake exploratory and analytical work, drawing on the work of other relevant international organisations, on the simplification of trade procedures in order to assess the scope for WTO rules in this area. Most of the trade facilitation proposals related to customs procedures while some were also related to transport, payment, insurance and other financial requirements. The process of negotiation on trade facilitation is also likely to commence after the Mexico ministerial in 2003. The agreement is expected to modernise and standardise customs procedures and facilitate movement and clearance of goods. The Doha Declaration on trade facilitation carries the objective of Article 8 of GATT regarding the desirability of reducing formalities in trade transactions by reducing customs and other procedures and enhancing movement, release and

clearance of goods. As the transaction cost in Indian exports are quite significant, it is essential to implement reforms in these areas on an urgent basis. This would help our export promotion efforts once improved procedures are established.

4.132 Emphasis needs to be given to measures that ensure economic growth and development with trade. Inclusion of these issues, taking developmental concerns of LDCs, should be given due cognisance which would help to streamline the flow of multilateral investments into these LDCs. On the one hand, it would give access to foreign investors in a transparent framework and get legal protection, while, on the other, it would give greater confidence to the host country players to take maximum benefit in terms of financial support and technological development from TNCs. The Trade Related Committee on Investments of the WTO has been monitoring the notifications for relaxation by member countries. At the same time, negotiations on the labour market front are essential and could ensure that LDCs get improved working conditions for their skilled/unskilled workers abroad.

Trade and Environment and Related Issues

4.133 In line with increased international concern for issues relating to preservation of global environment, the multilateral environment agreements (MEA) are being brought in as part of the agreements on international trade. A harmonised code of conduct is being introduced to achieve universal conservation of the environment, as per global standards. In this case an important distinction has been suggested between environmental problems that are basically domestic, as against those that are inherently international in nature. The latter involves physical spillovers across national borders. It is these intrinsically international environmental problems that are related to trade issues, although domestic environmental problems are also related to trade through the operations of transnational production activities. Due to these issues, need has been felt for neutralising environmental externalities through use of appropriate taxes, subsidies and transfers. As part of the Doha Declaration, it has been mandated to have

negotiations on limited aspects of trade and environment, viz., relating to WTO rules and trade obligations, procedures for exchange of information between MEA and WTO, and reduction/elimination of tariff and non-tariff barriers to environmental goods and services.

4.134 The multilateral Agreement on Environment addresses protection of human, animal and plant life. Here, all governmental and non-governmental bodies that set standards are required to abide by the 'Code of Good Practice for the Preparation, Adoption and Application of Standards', which states that national standards must be based on international norms. An exception is made where the international standards are 'ineffective' or 'inappropriate', or where the national standards are used to pursue 'protection of human health or safety, animal or plant life or health, or the environment'. However, it is suggested that exceptions to international standards must be least trade-restrictive and must be supported by available scientific and technical information.

4.135 Additionally, the agreement aims to establish universal risk assessment criteria in setting pesticide residue levels and other health standards found in environmental laws. The proposed criteria require that the standards for risks to human health be offset by balancing the economic benefits of the harmful activity. The agreement has implications for maintaining appropriate labour standards, including child labour in developing countries. The set of minimum standards proposed include freedom of association, collective bargaining, prohibition of forced labour, elimination of exploitative child labour and non-discrimination. Here the terms 'unfair', 'exploitation' and 'forced' are not precisely defined but reflect basic human rights and standards to stimulate economic development in the interest of all workers and countries.

4.136 The agreement on Technical Barriers to Trade accords protection to developing countries against prescriptions on technical regulations for products which could sometimes work as unreasonable barriers to trade. The basic principles prescribe that the regulations should not be more

trade restrictive than necessary to fulfill legitimate objectives of the government based on security, health or environment. The regulations are prescribed in terms of performance of the product rather than design or descriptive characteristics and are to be non-discriminatory among members. The agreement encourages adoption of international standards. It also requires a high degree of transparency in preparation and administration of technical regulations and standards in the industrialised countries.

Issues of Concern

4.137 It has been felt that trade is basically aimed at exploiting markets whereas preservation of environment is traditionally outside its purview. Need was felt for an objective harmonisation and search for compatibility between the interests of the trading system and environmental protection. Although, steps were taken to harmonise cross-country intra-industry environmental standards, these are being questioned. A particular country's preferred environmental choices and solutions, (say by setting up appropriate pollution standards and taxes) could be very different from that of another country. There are differences in endowments and technology across countries, and different costs of pollution abatement relative to income and consumption levels. Forcing the poor country to spend as much on abatement to improve its trade prospects could reduce its welfare substantially. There is continued need to encourage and promote improved standards rather than have drastic sanctions.

4.138 It has been felt that no universal agreement on minimum labour standards can be outlined from the fact that prevailing labour standards in a particular society are lower than those of another, thereby implying that the former is engaging in 'unfair' practices or is exploiting its labour. There is difference in values which leads to differences in labour standards. Also, consumers indicate their preferences through the market and thus change the prevailing labour standards in their country. Using labour conditions in developing countries to impose trade restrictions, is considered unfair and

somewhat harsh. It is felt that this does not call for imposing protectionist measures/trade sanctions by the developed countries.

4.139 The work programme adopted at Doha clearly indicates that negotiations on environment will begin soon, notwithstanding the opposition from developing countries including India. The negotiations on trade and environment will concentrate on the relationship between existing WTO rules and trade obligations contained in multilateral environment agreements (MEAs) and reduction or elimination of tariffs and non-tariff barriers to environmental goods and services. The work programme of the Committee on Trade and Environment will evaluate the effect of environmental measures on market access, the relevant provisions of TRIPs and labeling requirements for environmental purposes. These, along with the application of the sanitary and phyto-sanitary measures, will create a strict and environment friendly regime having far reaching impact on trade of developing countries like India. As exports of these countries are already affected by the application of precautionary principles and other environmental measures including eco-labeling requirements, necessary steps would be required in upgrading quality control, consistent with the emerging environment regime.

4.140 The transparency requirement on grounds of market access accords the right to the developed countries to be able to intervene in various operations and regulations in developing countries. In case a new technical regulation is introduced by a member country, public notice is required to be issued and cognisance taken of comments offered by other members. A code of good practice for preparation, adoption and application of standards has been suggested to member countries and the measures are drafted in a way to protect their trade interests.

4.141 On the domestic front, it is important to establish set procedures for international and domestic trade, taking into consideration improved health and environment standards. The quality control mechanism could be strengthened as per

requirements of our major export markets in the US, EU and other countries. Industry could also be given incentives for enhancing R&D expenditure to develop environmentally sound technologies and practices.

General Agreement on Trade in Services

4.142 GATS is the first set of multilateral legally enforceable rules covering international trade in services. It covers trade in services in terms of cross border supply of services like international telephony; tourism and education abroad; banking, legal advice and communication; and movement of natural persons. The GATS covers all services based on a positive list, and the aim is to progressively liberalise trade in services, within the existing architecture of GATS. The member countries are required to schedule specific commitments under the agreements. The objective of the GATS negotiations is to achieve progressively higher levels of liberalisation so as to promote economic growth amongst trading partners and development of developing countries. The overall balance of rights and obligations has been emphasised through market access to promote interest of all participants. The participation of developing countries in trade and services has been given special priority. Focus has been on sectors and modes of supply of export interest to the developing countries.

4.143 The Council for Trade in Services (CTS) carries out an assessment of trade in services in overall terms and on sectoral basis with reference to the objectives of GATS. The services negotiations are conducted in special sessions of the CTS, which in turn is required to report to the General Council on a regular basis. Specific schedules of commitments by individual member countries have been drawn out which form the basis for the negotiations. Appropriate flexibility has been provided for developing country members for opening fewer sectors, liberalise fewer types of transactions, progressively extending market access in line with their development situation. It was decided that the process of progressive liberalisation should be advanced in each sub-round

through bilateral, plurilateral or multilateral negotiations directed towards increasing the general level of specific commitments undertaken by the members.

4.144 The sectors inscribed in the individual schedules are required to be accorded treatment that is no less favourable than accorded to its own like services and service suppliers, i.e., the schedules are subjected to 'national treatment'. The members are allowed to modify and withdraw any commitment in its schedule at any time after three years have elapsed from the date on which the commitment came into force, after suitably notifying to the CTS. India has indicated a schedule of specific commitments whereby the limitations on market access and national treatment is outlined. These relate to professional services, computer and related services, R&D services, communication services, audio-visual services, construction and related engineering services, financial services, and other business services.

4.145 The Doha Declaration took cognisance of the proposals on various sectors, including movement of natural persons. Negotiations have been carried out between member countries on commitments for services and environment, movement of natural persons, financial services, maritime transport services, basic telecommunications and professional services. The Committees are to decide on the scope for further liberalisation of these services. The Committee on Professional Services is in the process of examining measures to ensure that the qualification requirement and procedures, technical standards and licensing requirements do not constitute unnecessary barriers to trade.

Issues of Concern

4.146 It is the implementation of some of these issues, which are of concern to developing countries like India. Movement of natural persons has been restricted by many of the developed countries. India has the advantage in movement of professional and computer services, as it has a large reservoir of

highly skilled and experienced professionals like lawyers, chartered accountants, cost accountants, company secretaries, computer and electronics based scientists/technicians, information technology/communications, scientists/technicians, engineers, doctors, etc. The barriers to high level of movement have constrained expansion of trade in technical and non-technical services from India. The requirement of the CTS to undertake constant consultation and cooperation with the UN and its specialised agencies has been limited. Further, GATS is silent on the issue of down-market unskilled workers like construction workers, labour, etc. There is need to negotiate trade of these services for such workers going abroad. There is scope also for promoting greater upmarket skills for higher earnings. Further, standardisation and harmonisation of requisite qualifications and experience of workers moving to the developed countries is called for. Requirements of local competency or local certification (e.g. medical boards) should not be used as non-tariff barriers.

4.147 It is important to note that, for India, the sectors where market access, particularly for professionals is relevant, include health, software, construction and engineering, accountancy, audio-visual, tourism and architecture. India has also to identify the sectors where it may assume commitments on market access in the negotiations. At the same time, there is need to spur active thinking on widening our negotiating initiatives in other modes (besides the mode 4 relating to movement of natural persons) of delivery of services. Commercial presence and cross-border supply are now gradually gaining importance in terms of India's capability.

4.148 On the domestic front, there is need for a regulatory mechanism, based on objective and transparent criteria, so that competence and ability to supply services is given due cognisance. The use of international standards needs to be further encouraged. There is need to improve the level of our professional institutions so as to raise it to the international standards. In addition, it may be mentioned that a demographic shift has been observed in developed countries where the ratio of

working population has witnessed a decline; therefore, supply of skilled manpower/services from developing countries to developed countries may be negotiated suitably.

4.149 Another step needed is supplying more information to service providers in foreign markets with a view to exploiting emerging opportunities. Data and information on services is very important for both WTO negotiations and tapping the export potential for services. In this context, the Committee on International Trade in Services set up by the Department of Commerce has given concrete suggestions to improve the data collection process, which require to be implemented.

4.150 It is quite evident that a defensive position in WTO negotiations is no longer appropriate. India will have to take a more proactive and aggressive position on a number of emerging issues by proposing its own drafts. A few areas in which such positions can be taken are readily identifiable: Multilateral Agreement on Investment, trade in environmental goods, General Agreement on Trade in Services, and even on labour standards.

REGIONAL TRADING ARRANGEMENTS

4.151 With increased globalisation, there has been a proliferation of a number of regional trading blocks for economic cooperation within regions and across regions. There are around 15 regional blocks and an estimated 42 per cent of world trade is carried out through the preferential trade operations. The tariff rates within these blocks are usually significantly lower to the most favoured nation (MFN) rates required to be offered to all members of the WTO. There is thus an apprehension that India may be at a serious disadvantage in exporting to the dominant markets within these blocks. It needs to be noted, however, that the extent of disadvantage depends upon the differential between the MFN tariff rates and the preferential rate for any given product. In the case of most developed country markets, these differentials are fairly small except in the case of a few products in which there are tariff peaks, such as agricultural goods, textiles and clothing. Even in these cases, the effect may

not be particularly substantial at present because of supply-side limitations on our part for most agricultural products and the operation of the Multi-Fibre Agreement (MFA) for textiles and clothing. In the future, however, as our agro-export potential improves and the MFA gets phased out, the negative effects may become considerable.

4.152 It would, therefore, appear desirable that a comprehensive strategy to mitigate the effects of regional trading arrangements be evolved. In doing so, however, it needs to be borne in mind that under the WTO, preferential tariff areas are expected to have a common set of tariffs such that the tariff rate on any product is equal to or less than the lowest rate prevailing in any member country prior to the formation of the block. This continues to remain relevant in the context of India joining one or more of the existing trade blocks, even though the Indian tariff rates are gradually being brought down to East Asian levels.

4.153 India is a member of the South Asian Association for Regional Cooperation (SAARC), which has very low level of intra-regional trade. The exports from India to the SAARC region constitute around 4.5 per cent of the total, while imports are a little over 1 per cent. It is important to emphasise development of regional initiatives in trade and investment since it is crucial for building on the potential synergies that are available in the South Asian region. It has been suggested that the possible gains from liberalisation of trade within the SAARC region are substantial and with very little risk. The main export items from India to the SAARC countries include cotton fabrics, sugar, rice, wheat, machinery, transport equipment, drugs and

pharmaceuticals, rubber products, chemicals, steel, plastic products, etc. There is even greater potential for non-traded products such as power, transport and water resources. The potential of these items need to be explored during the Tenth Five Year Plan with greater vigour.

4.154 During the past few years, there has been efforts to upgrade India's ties with the countries of the Association of South East Asian Nations (ASEAN). India has substantial trade with this region, constituting 7.9 per cent of our exports and 8.5 per cent of our imports. The main items of export in this trade include oil meals, groundnut, sugar, vegetables, wheat, rice, meat and its preparations, drugs and pharmaceuticals, plastic products, steel, machinery items, electronics, gems and jewellery, etc. The main import items are vegetable oils, wood and wood products, yarn and fabrics, electronic goods, machinery, chemicals, etc. There is scope to integrate software exports from India to the South East Asian countries, with the expertise in the computer hardware, apart from support in the form of communications, roads, ports and power. Intra-regional trade arrangements with these countries would facilitate industrial development and trade with the rest of the world. India should also actively participate in the regional grouping of the Bangladesh, India, Myanmar, Sri Lanka, Thailand Economic Cooperation (BIMSTEC) to promote regional cooperation in trade and investment in the region. However, the process should be initiated cautiously in view of the fact that average tariff rates in the ASEAN region are around 10-15 per cent, while tariffs are only expected to be brought down in India to around 18 per cent by the end of the Tenth Plan.

Export Projections for Tenth Plan

(US \$ million)

S.No.	Sector	2001-02	2006-07	Total
1	Paddy & Rice	618.93	1085.09	4389.01
2	Wheat	289.01	383.76	1718.56
3	Other Cereals	74.37	98.75	442.22
4	Pulses	78.35	90.00	426.04
5	Jute	1.75	2.01	9.51
6	Cotton	6.16	7.08	33.52
7	Tea and Coffee	568.23	868.66	3691.60
8	Rubber	15.26	20.27	90.77
9	Other Crops	461.71	613.09	2745.55
10	Animal Husbandry	344.43	631.54	2514.31
11	Forestry and Logging	265.61	290.44	1401.67
12	Fishing	1357.18	2074.74	8817.12
13	Coal & Lignite	42.18	56.01	250.82
14	Iron Ore	327.60	376.32	1781.46
15	Other Metallic Minerals	137.65	200.86	868.35
16	Non Metallic Minor Minerals	369.95	491.25	2199.90
17	Sugar	515.23	863.32	3548.90
18	Edible Oils	179.52	206.21	976.20
19	Other Food & Beverages	1585.42	2656.53	10920.29
20	Cotton Textiles	2183.74	4004.04	15940.96
21	Woolen Textiles	50.04	71.34	311.08
22	Silk Textiles	267.86	381.82	1665.04
23	Art. Silk & Synthetic Fibres	406.78	579.85	2528.63
24	Jute Hemp Mesta Textiles	92.12	154.36	634.52
25	Readymade Garments	5253.59	10070.60	39474.29
26	Other Textiles	2798.52	3989.18	17396.10
27	Wood & Wood Products	33.51	56.16	230.84
28	Paper & Paper Products	255.81	339.69	1521.18
29	Leather & Leather Products	1549.53	2261.14	9775.19
30	Rubber Products	1074.88	1532.20	6681.66
31	Plastic Products	384.45	644.18	2648.07

Annexure 4.1 Contd.

32	Petroleum Products	1757.80	4550.74	16121.44
33	Fertilisers	6.23	7.15	33.86
34	Pesticides	255.13	293.06	1387.34
35	Synthetic Fibre & Resins	430.03	824.32	3231.12
36	Paints, Drugs & Cosmetics	1951.10	4082.97	15527.30
37	Other Chemicals	2134.62	4467.00	16987.75
38	Cement	77.22	110.07	479.99
39	Other Non-Metallic Minerals	6042.49	12644.80	48087.43
40	Iron & Steel	2041.90	3914.12	15342.38
41	Non-ferrous Metals	1662.82	2661.85	11123.89
42	Tractor & other Agricultural Machinery	44.39	63.27	275.93
43	Other Non-Electrical Machinery	1199.74	2299.78	9014.56
44	Electrical Machinery	961.40	2011.88	7651.05
45	Comm. & Electronic Equipment	791.30	1729.18	6479.94
46	Rail Equipment	50.41	71.86	313.38
47	Motor Vehicles	512.56	730.63	3186.16
48	Motorcycles, Scooters & Bicycles	112.63	160.55	700.15
49	Other Transport Equipment	294.39	419.64	1829.96
50	Other Manufacturing	2999.48	4275.64	18645.33
	Total	44915.00	80419.00	322863.13

Import Projections for Tenth Plan
Scenario - 1 (GDP 8.0% ; Tariff : 33.7%, 27%, 22%, 18% & 15%)

(US \$ million)

S.No.	Sector	2001-02	2006-07	Total
1	Paddy	0.02	0.03	0.12
2	Wheat	0.26	0.40	1.70
3	Other cereals	6.70	10.15	43.26
4	Pulses	641.29	1240.19	4846.33
5	Sugarcane	0.00	0.00	0.02
6	Jute	22.47	43.45	169.78
7	Cotton	486.62	1010.26	3852.42
8	Tea and Coffee	14.71	35.90	129.66
9	Rubber	172.13	260.82	1112.03
10	Other crops	49.34	74.76	318.74
11	Animal Husbandry	20.38	39.41	154.01
12	Forestry and Logging	29.88	57.79	225.83
13	Fishing	8.96	17.33	67.72
14	Coal & Lignite	1123.31	2500.97	9313.29
15	Petroleum Crude	12664.60	20046.80	86400.03
16	Iron ore	21.44	41.46	162.00
17	Other Metallic Minerals	5804.82	14165.89	51163.97
18	Non Metallic Minor Minerals	4567.58	13920.89	46815.64
19	Sugar	21.32	44.26	168.77
20	Khandsari	0.00	0.00	0.00
21	Edible oils	1586.49	4835.25	16260.84
22	Other Food & Beverages	471.75	1151.25	4158.04
23	Cotton Textiles	45.67	94.81	361.56
24	Woolen Textiles	147.59	306.41	1168.42
25	Silk Textiles	146.75	304.65	1161.73
26	Art. Silk & Synthetic Fibres	300.72	624.32	2380.71
27	Jute Hemp Mesta Textiles	9.27	19.25	73.40
28	Readymade Garments	43.96	91.27	348.03
29	Other Textiles	402.30	835.21	3184.89
30	Wood & Wood Products	593.66	1657.39	5730.43

Annexure 4.2A Contd.

31	Paper & Paper Products	978.77	2179.18	8114.95
32	Leather & Leather Products	235.47	574.63	2075.44
33	Rubber Products	129.87	251.15	981.44
34	Plastic Products	264.13	548.35	2091.01
35	Petroleum Products	1407.02	2240.77	9381.72
36	Fertilisers	524.95	1115.66	4220.49
37	Pesticides	84.55	179.68	679.72
38	Synthetic Fibre & Resins	485.60	1185.05	4280.12
39	Paints, Drugs & Cosmetics	601.32	1338.79	4985.49
40	Other Chemicals	3649.87	9746.74	34183.70
41	Cement	2.51	5.58	20.79
42	Other Non-Metallic Minerals	356.96	832.22	3051.62
43	Iron & Steel	1396.73	2899.70	11057.43
44	Non-ferrous Metals	925.30	1789.46	6992.70
45	Tractor & other Agricultural Machinery	11.55	28.20	101.84
46	Other Non-Electrical Machinery	3495.70	8530.78	30811.26
47	Electrical Machinery	2025.83	5409.85	18973.37
48	Comm. & Electronic Equipment	3033.90	11439.28	36054.12
49	Rail Equipment	13.27	27.54	105.03
50	Motor Vehicles	915.67	1900.98	7248.99
51	Motorcycles, Scooters & Bicycles	0.32	0.66	2.53
52	Other Transport Equipment	4549.01	9444.01	36012.85
53	Other Manufacturing	3125.71	6959.19	25915.10
	Total	57618.00	132058.00	487003.33

Import Projections for Tenth Plan
Scenario - 2 (GDP 8.0% ; Tariff : 33.7%, 28%, 24%, 20% & 18%)

(US \$ million)

S.No.	Sector	2001-02	2006-07	Total
1	Paddy	0.02	0.03	0.12
2	Wheat	0.26	0.37	1.61
3	Other cereals	6.70	9.31	40.99
4	Pulses	641.29	1138.20	4583.78
5	Sugarcane	0.00	0.00	0.02
6	Jute	22.47	39.87	160.58
7	Cotton	486.62	927.17	3641.97
8	Tea and Coffee	14.71	32.95	122.45
9	Rubber	172.13	239.37	1053.52
10	Other crops	49.34	68.61	301.97
11	Animal Husbandry	20.38	36.17	145.66
12	Forestry and Logging	29.88	53.04	213.59
13	Fishing	8.96	15.91	64.05
14	Coal & Lignite	1123.31	2295.29	8800.43
15	Petroleum Crude	12664.60	20046.80	86400.03
16	Iron ore	21.44	38.05	153.23
17	Other Metallic Minerals	5804.82	13000.86	48317.03
18	Non Metallic Minor Minerals	4567.58	12776.01	44146.37
19	Sugar	21.32	40.62	159.55
20	Khandsari	0.00	0.00	0.00
21	Edible oils	1586.49	4437.59	15333.70
22	Other Food & Beverages	471.75	1056.57	3926.67
23	Cotton Textiles	45.67	87.02	341.81
24	Woolen Textiles	147.59	281.21	1104.59
25	Silk Textiles	146.75	279.60	1098.27
26	Art. Silk & Synthetic Fibres	300.72	572.97	2250.66
27	Jute Hemp Mesta Textiles	9.27	17.67	69.39
28	Readymade Garments	43.96	83.76	329.02
29	Other Textiles	402.30	766.52	3010.91
30	Wood & Wood Products	593.66	1521.08	5406.78

Annexure 4.2B Contd.

31	Paper & Paper Products	978.77	1999.96	7668.08
32	Leather & Leather Products	235.47	527.37	1959.96
33	Rubber Products	129.87	230.50	928.27
34	Plastic Products	264.13	503.25	1976.79
35	Petroleum Products	1407.02	2056.48	8885.13
36	Fertilisers	524.95	1023.91	3989.32
37	Pesticides	84.55	164.90	642.49
38	Synthetic Fibre & Resins	485.60	1087.59	4041.96
39	Paints, Drugs & Cosmetics	601.32	1228.69	4710.95
40	Other Chemicals	3649.87	8945.15	32262.45
41	Cement	2.51	5.12	19.64
42	Other non-metallic Minerals	356.96	763.78	2882.69
43	Iron & Steel	1396.73	2661.22	10453.40
44	Non-ferrous Metals	925.30	1642.29	6613.87
45	Tractor & other Agricultural Machinery	11.55	25.88	96.17
46	Other Non-Electrical Machinery	3495.70	7829.20	29096.81
47	Electrical Machinery	2025.83	4964.93	17906.99
48	Comm. & Electronic Equipment	3033.90	10498.49	33952.20
49	Rail Equipment	13.27	25.28	99.29
50	Motor Vehicles	915.67	1744.64	6853.00
51	Motorcycles, Scooters & Bicycles	0.32	0.61	2.39
52	Other Transport Equipment	4549.01	8667.32	34045.60
53	Other Manufacturing	3125.71	6386.86	24488.00
	Total	57618.00	122846.00	464214.06

CHAPTER 5

EMPLOYMENT PERSPECTIVE

(i) LABOUR FORCE AND EMPLOYMENT PROJECTIONS

5.1 The Approach Paper to the Tenth Plan, approved by the NDC in September 2001, prescribed provision of gainful high-quality employment to the addition to the labour force over the Tenth Plan period. A subsequent assessment of unemployment situation in the base year of the Tenth Plan 2002 showed that to clear the backlog of unemployment, 35 million employment opportunities are required to be created. The Tenth Five Year Plan, however, aims at provision of gainful employment in excess of the addition to the labour force.

Recent Trends in Employment and Unemployment Situation

5.2 There was a slight decline in population growth between the periods 1983-1993/94 and 1993/94-1999/2000 from 2.0 per cent per annum to 1.9 per cent. Though growth of output in the economy accelerated between these two periods - from 5.2 per cent gross domestic product (GDP) growth to 6.7 per cent, the pace of employment growth slowed down from 2.7 per cent to 1.07 per cent as per National Sample Survey Organisation (NSSO) employment surveys (Annexures 5.1 & 5.2). Slow-down in pace of employment growth, in the nineteen nineties, is also borne out by demographic census data - growth of main workers decreased from 2.34 per cent to 0.81 (Annexure 5.3). Similar trends in deceleration of employment growth are revealed for specific segments of employment—growth of workers in establishment covered by economic census came down from 2.84 per cent annum in 1980-1990 to 1.71 in 1990-1998 (Annexure 5.4); employment in establishments covered by Employment Market Information System of Ministry of Labour grew at 1.20 per cent per

annum during 1983-1994 but decelerated to 0.53 per cent during the next five years 1994-1999. However, the latter decline was mainly due to a decrease in employment in public sector establishments, whereas the private sector showed acceleration in the pace of growth from 0.45 per cent to 1.87 per cent. (Annexure 5.5) Thus, the employment intensity of the growth process of the Indian economy is coming down (Annexure 5.6).

5.3 The decrease in employment intensity of output growth can be explained by either an increase in capital intensity or increase in labour productivity, releasing labour. Both happened partly in this period. Incremental capital output ratio (ICOR) increased greatly and also capital substituted labour. Both suggest strategies to look for labour intensive areas and technologies.

5.4 At micro level, the increase in productivity of labour should be reflected in higher growth of real wages. Some indicator of this trend is seen when the growth of real wages of rural casual male workers is seen during 1994-2000 compared to in the preceding period 1983-1994 (Annexure 5.7). However, the rise in the real wages of casual labour only cannot be a conclusive evidence either of an increase in the real income or of tightening of labour market when the incidence of unemployment has not reduced, and has rather gone up. For example, unemployment rate reduced from 8.3 per cent of labour force, measured on current daily status (CDS) basis, in 1983 to 5.99 per cent in 1993-94; however it rose to 7.32 per cent in 1999-2000. Further, youth unemployment has increased between 1993-94 and 1999-2000: among rural males in 15-29 years age group from 9.0 per cent to 11.1 per cent, and from 7.6 per cent to 10.6 per cent among rural females (Annexure 5.8). In addition, there are sharp variations in the unemployment

rate across States (Annexure 5.9). Against the all India average of 14.7 per cent unemployment among the urban male youth (15-29 years) in the year 1999-2000, while Gujarat, Haryana, Rajasthan and Punjab have 8 to 9 per cent unemployment, it is much higher in Assam (22.4 per cent), West Bengal (23.4), Bihar (24.0) and Kerala (26.6). Moreover, the incidence of unemployment is much higher among the poor. In the lowest consumption expenditure class the unemployment rate is more than twice the level compared to the highest expenditure class (Annexure 5.12).

5.5 The growth of labour force decelerated from 2.43 per cent to 1.31 per cent per annum between the periods 1983-1993/94 and 1993/94-1999/2000. However, the growth of population in the working age group (15+) has continued to accelerate despite the fall in growth of population, as the younger cohort grows older. The decline in the growth of labour force, inspite of a higher growth of population in the working age group is because a substantial part of those in the working age group have withdrawn from the labour force. While a part of the decline in labour force can be explained by an increase in the attendance at educational institutions, it cannot be ruled out that some of those in the working age group have withdrawn from labour force due to non-availability of work.

Population and Labour Force Projections

5.6 The changes in the age structure of population, given the present demographic transition of the Nation, are such as to lead to a much faster

growth of population in the working age group than the entire population, and this, given the different participation rates in different age groups will lead to a faster growth of labour force as compared to the working age population (Tables 5.1 and 5.2).

5.7 As noted earlier there was a substantial gap in the growth rates of working age population and labour force in the period 1993/1994 - 1999/2000, leading to a sharp fall in the growth of labour force to 1.31 per cent per annum from 2.43 per cent during the preceding period 1983 - 1993/94. The Planning Commission Special Group on Creation of 10 million Employment Opportunities a Year in Tenth Plan noted that the causes underlying this sharp fall need to be investigated further. One view is that withdrawal from labour force is to invest one's time in acquiring education for better returns in future, while the Special Group observes that this factor can only partially explain withdrawal from labour force, and suggests that lack of work opportunities can also lead to complete withdrawal from labour force. The decline in the rate of growth of labour force, however, is not expected to continue unabated in future. Hence the special Group adopted the higher of the two alternative labour force growth scenarios suggested by the Task Force on Employment Opportunities. Accordingly, the Group has adopted a 1.8 per cent growth rate of labour force in the Tenth Plan period (2002-07), i.e. a much slower decline in the age-specific participation rates in the period beyond (2007-12). Therefore, the projections of labour force are made here on 1.8 per cent growth (Table 5.3).

Table 5.1
Age Structure of Population

(age distribution in per cent; population in millions)

Age group	2001	2006	2011	2016
0 - 14	35.6	32.5	29.7	27.1
15 - 59	58.2	60.4	62.5	64.0
60 +	6.3	7.0	7.9	8.9
All age groups	100.0	100.0	100.0	100.0
Population	1,027.0	1,113.7	1,194.4	1,267.5

Source : Planning Commission

Table 5.2
Growth in Population and Labour Force

(per cent per annum)

	2002 - 2007	2007 - 2012	2012 - 2017
Population (All age groups)	1.63	1.41	1.20
Population (15 - 59 years)	2.41	2.08	1.70
Labour Force(1) (15 - 59 years)	2.42	2.15	1.78
Population (15 +)	2.57	2.26	1.93
Labour Force(1) (15 +)	2.51	2.25	1.92

Note :

- (1) Labour force projections here are on the basis of labour force participation rate for each quinquennial age group remaining unchanged, i.e. the changes in labour force growth in relation to population are due to changes in the age composition of the population.

Source : Planning Commission .

Table 5.3
Increase in Labour Force and Working Age Population

(million)

Basis of Scenario	2002-2007	2007-2012
Increase in Labour Force (Special Group) ¹	35.29	40.02
Increase in Working Age Population ² (15+)	55.25	55.82

- Source :** 1. Report of Planning Commission Special Group on creation of 10 million Employment Opportunities per year (2002)
2. Derived from Table 5.1

Measurement of Employment and Unemployment

5.8 In the Ninth Plan, the calculations of employment and unemployment were based on Usual Principal and Subsidiary Status basis (UPSS). The Report of the Special Group has viewed that current daily status (CDS) is a better measure to capture unemployment and underemployment, than the usual status, and therefore recommended the use of CDS basis for estimation purpose.

5.9 The rationale for using CDS as measuring employment and unemployment is the following. The Approach Paper to the Tenth Plan recommends creation of gainful employment opportunities for the entire additions to labour force in the Tenth Plan and beyond. Therefore, policies and programmes to fill the gap between requirement and availability of gainful employment opportunities are to be worked out. At any point of time, there is a large unemployed and under-employed workforce i.e., not having any gainful employment, although by using the measurement on UPSS basis, several of them are declared employed. This results in over-estimation of the level of employment. To avoid this, largely, the Special Group suggested estimation of the extent of employment and unemployment on CDS basis.

5.10 According to the NSSO employment and unemployment survey report of 1999-2000 'The usual status approach adopted for classification of the population is unable to capture the changes in the activity pattern caused by seasonal fluctuations. But the estimate obtained by adopting the current weekly or current daily status approaches are expected to reflect the overall effect caused by the intermittent changes in the activity pattern during the year. The latter (CDS) reflects also the changes,

which take place even during the week. The estimate of the employed based on current daily status gives average daily picture of employment.' Therefore the Special Group regarded the CDS measurement as the most appropriate measure to have an estimate of the gap i.e., jobs to be created on gainful basis, in order to bring out recommendations as to how they can be filled up by changes in policies and programme.

5.11 The NSSO Report also provides estimates of the likely under-employment that is hidden in the number of the employed category, calculated by the UPSS approach when they are compared with CDS. The activity pattern of the usual employment during the days within the reference week is indicated by the distribution of their activity by current daily status. The relevant results for rural and urban India are presented in Table 5.4. It is observed that the proportion of person days of the usually employed, utilised for work, is lower for females as compared to the males throughout the period 1987-88 to 1999-2000. During 1999-2000, this proportion was estimated at about 68 per cent and 79 per cent for females in the rural and urban India respectively, as against 90 per cent and 94 per cent for males in rural and urban India respectively. If the work is not available, large portion of the females withdraw from the labour force rather than report themselves as unemployed. The distribution obtained from the 1999-2000 survey is presented in Table 5.4.

PROJECTIONS OF EMPLOYMENT OPPORTUNITIES

5.12 As noted earlier, the employment generating capacity of output growth has been seen to be reduced in recent years (Annexure 5.6). The baseline scenario of growth of GDP is 6.5 per cent, as indicated in the Tenth Plan Approach Paper. Annexure 5.13 gives the employment perspective using these estimates. This scenario shows that on the 'business as usual basis' (i.e., with the present employment elasticity) the percentage of unemployed will grow up to 11.0 at the end of the Tenth Plan, giving a total unemployed labour force of 45.56 million person years. This picture is not acceptable on any socio-economic or political ground. Therefore, a much higher growth rate (8 per cent) is needed for the future along with positive policies and programmes for changing the sectoral pattern and technology in favour of labour-intensive production, if unemployment is to be tackled.

5.13 The estimates of employment and unemployment of the Tenth Plan's base year (2001-02) are given in Annexure 5.14. The estimates of unemployed for the year 2001-02 have been given around 34.85 million person years (defined on CDS basis) when the unemployment rate went up around 9.21 per cent. It also provides the estimates of addition to labour force over the Tenth Plan period as 35.29 million person years. Thus, over the Tenth

Table 5.4
Per 1000 Distribution of Person-days of Usually Employed (principal and subsidiary status workers taken together) by their Broad Current Daily Status

Current daily status	Rural						Urban					
	Male			Female			Male			Female		
	1999-00	1993-94	1987-88	1999-00	1993-94	1987-88	1999-00	1993-94	1987-88	1999-00	1993-94	1987-88
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Employed	897	909	926	676	663	638	942	949	938	791	766	716
Unemployed	53	40	27	41	30	26	27	27	37	22	24	37
Not in Labour Force	51	51	47	283	306	336	31	25	25	187	210	247
All	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

Source : NSSO

Plan, we have to deal with the problem of creating job opportunities against a potential job demand of more than 70.14 million person years (i.e., 34.85 million base period unemployment and 35.29 million new labour entry net of exits). Against this perspective, the employment objective of the Approach Paper to the Tenth Plan has to be addressed. The Approach Paper recommends providing gainful employment opportunities to all the additions in the labour force over the five year period, and reducing significantly the rate of unemployment over the Tenth Plan, so that by the end of the Eleventh Plan, the unemployment rate will be near zero.

5.14 The Tenth Plan visualises a substantially higher growth rate of 8 per cent per annum. The break-up of the aggregate growth rate is given in Annexure 5.15. Given this growth pattern and assuming the present sectoral employment elasticities, an estimate has been made of the level of employment and unemployment over the Tenth Plan. Increased employment opportunities of around 29.67 million person years (i.e., an increase from the base figure of 343.36 million to 373.03 million) will be created with the help of a 8 per cent per annum growth over the next five-year period. This 'business as usual' scenario means, an employment growth of 1.7 per cent per annum as against a labour force growth of 1.8 per cent per annum. The result: even with as high a growth as 8 per cent, the objective of providing employment opportunities to all additions to labour force will not be achieved; an additional 5.62 million employment opportunities will have to be created. This, added to the base period stock unemployment of 34.85 million, will give an unemployment rate of 9.79 per cent at the end of the Tenth Plan, an increase from 9.21 per cent at the base. This arises largely due to the near jobless growth character in many sectors of the economy especially in the organised sector, and a growing capital intensity in many of the organised sectors and even in some of the unorganised sectors including some small scale industries. The unemployment rate at the end of the Tenth Plan can even go up by a minimum one-percentage point (adding four million more unemployment) if the labour force growth increases to 2.0 per cent per annum². The answer is,

therefore, to look for a development strategy, which will revamp the activities in those sectors where the comparative advantage lies in a labour-intensive nature of production. But as the economy is now operating under the impact of globalisation, all care should be taken in the reallocation of activities between sectors and sub-sectors, so that every sector can meet the open market competition. To give a simple example, without the changes in the overall growth rate of agriculture, the sub-sector compositions can be changed by changing the cropping patterns and resources allocated between food and non-food, from less to more labour intensive sectors. Even this strategy may not always need additional investment resources. In fact, it is often said that a change in favour of labour intensive activities is accompanied by saving of capital by substitution of capital by labour and knowledge/technology. Specific programmes and projects are to be identified and launched, keeping this goal in view. In this effort, extensive discussions with Ministries and sector specialists have been undergone. At present, the awareness of the need for employment generation is generally very poor while formulating the plan programmes/policies. This applies to most of the concerned Ministries and authorities. As per the findings of the Special Group on Employment Generation, agriculture and allied sector activities have a very large employment generating potentiality. This is to be achieved not necessarily by heavy additional investment, but by reallocation of funds and choice of appropriate technologies. But to be sustainable under the present globalised system, this should be supported by appropriate policies to increase their productivity and competitiveness, which would make them viable.

5.15 Annexures 5.14 and 5.16 present the scenario of employment generation, separately for those emanating from growth per se without any change in the existing employment elasticities, i.e. implicitly assuming a 'business-as-usual' scene (with no changes in intra-sectoral composition of labour intensity of output) and for those with selective changes in policies and programmes in favour of more labour use. The sectoral estimates of these are given in Annexure 5.18. As Annexure

² Table 5.3

5.19 shows, the maximum addition to employment generated from special programmes will come from (i) agriculture and allied activities, (ii) small and medium enterprises, broad-based rural non-farm activities and some of the social services sectors like education and health. Besides, appropriate policy changes have been identified for the fast development of sectors of high labour intensity like construction, tourism, communication and information technology and financial services. There are many potential areas in the informal sectors, and especially in the self-employment area, which can provide high employment, and therefore should also be developed.

5.16 The summary Annexure 5.18 shows that, with suitable programmes and policy changes, the same 8 per cent growth rate can generate an additional 19.32 million person years of employment opportunities over the Tenth Plan period, giving a total of 50 million person years of employment opportunities over the Tenth Plan. This recommended scenario will not only absorb all additions to labour force generated over the Tenth Plan in gainful manner, but also reduce the level of unemployment by nearly half and will eliminate it completely by the end of the Eleventh Plan. The percentage unemployed will go down from 9.21 per cent to 5.11 per cent by the end of the Tenth Plan and unemployment will be eliminated by the end of the Eleventh Plan. To summarise, nearly 20 million person years of employment opportunities have to be created by selective innovative programmes and policies leading to a changed pattern of growth in favour of labour intensive sectors; the remaining 30 million will come from the normal buoyancy of growth as perceived over the recent past (1993-94 to 1999-2000), giving a total of 50 million person years over the Tenth Plan.

(ii) STRATEGIES AND POLICIES FOR EMPLOYMENT GENERATION

5.17 As already noted, the Tenth Plan aims at provision of gainful employment opportunities to the entire additions to labour force during the Tenth Plan and beyond. This is an essential condition for improving the quality of employment of an average

worker. For, if labour markets do not clear, no strategy for improving the quality of employment is likely to succeed. In a large labour surplus situation, there may be employment of a high quality but only for a select group. Hence, the first strategy to improve the quality of employment is to increase the aggregate demand for labour.

5.18 While a higher rate of economic growth is a necessary condition for increasing the demand for labour, the pursuit of growth objective in isolation may not be sufficient, at least in an immediate foreseeable future, to gainfully absorb the annual additions to labour force. Therefore, in the short-term perspective of a Five Year Plan, growth will have to be supplemented by increasing the employment content of growth in order to fulfill the employment objectives of Plan.

SECTORAL POLICY INITIATIVES FOR OPENING UP NEW EMPLOYMENT OPPORTUNITIES

5.19 There are many labour intensive sectors, where employment-generating growth can be rejuvenated if right kind of sectoral policies can be put in place. An indicative list of such sectors is given in Box 5.1.

AGRICULTURE

5.20 The food security perspective guided the sectoral policies and related programmes in agriculture during the past three decades. This ensured rich dividends in terms of agricultural output and food prices. Employment was an incidental objective. Certain agricultural crops, mainly wheat and paddy, and the parts of the country where these are produced, benefited immensely. Wages of labour improved at such locations. However, growth of employment in agriculture decelerated to a very low level in the nineties. Considering the consumption needs of our large population, agricultural production and the linked processing, distribution, trade, financial and commercial activities still have a very large potential for (i) sustaining the demand for labour and (ii) improving the quality of employment. At the sub-sector level, however, many structural changes in the pattern of growth of agriculture and its forward linked activities are required.

Box 5.1**SOME LABOUR INTENSIVE SECTORS WHICH REQUIRE POLICY INTERVENTION****☒ Agriculture and Allied Activities**

- ☞ There is a need to step up public investment in agriculture. Simultaneously, bringing additional acreage under cultivation of oilseeds and pulses by switching from cereals holds substantial potential for employment generation. Horticulture, farm management programmes, agri-clinics and seed production are other potential areas for employment generation.
- ☞ Re-generation of degraded forests, watershed development and highly labour intensive activities.
- ☞ Wasteland Development.
- ☞ Development of Medicinal Plants and Energy Plantation which have high growth and employment potential.
- ☞ Minor irrigation
- ☞ Cultivation of Bamboo and manufacturing of bamboo based products

☒ Food Processing**☒ Rural Non-Farm Activities/ Industries, including Khadi and Village Industries****☒ Small and Medium Enterprises****☒ Services Sectors**

- ☞ Health
- ☞ Nutrition
- ☞ Education
- ☞ Information technology and communication

5.21 Having more or less achieved the objectives of food security, the development perspective towards agriculture needs to undergo a change. This is necessary for improving the growth performance of the sector as also for improving the pace of labour absorption. Most of the policy constraints afflicting the sector have been spelt out, in detail, in the chapter on agriculture. The two important issues from the point of view of employment creation in this sector are diversification of agriculture and removal of control on storage, movement and marketing of agricultural produce.

5.22 Some of the initiatives that can have substantial benefits towards opening up more employment opportunities in new areas linked with the agriculture sector are mentioned as follows.

- ☒ Public investment in irrigation, power and roads should be sufficiently stepped up by reducing subsidies on fertilizers, water and power.

- ☒ The control and regulatory measure introduced earlier in an era of food deficit on marketing, storage and movement of agricultural produce (such as Essential Commodities Act, Milk and Milk Products Control Order, canalised export etc.) need to be reviewed.
- ☒ Private and co-operative sector participation in the marketing of agricultural produces should be allowed in order to break the monopolistic/oligopolistic supply structure. Also, forward trading in agricultural commodities should be permitted.
- ☒ The Minimum Support Price for foodgrains and other commodities needs to be so adjusted as to promote diversification of agriculture. This should be done both in terms of geographical coverage and crop diversification. New areas like pulses and oilseeds are more labour-intensive; shifting of cropping pattern in their favour will boost employment generation per

unit of output. A higher output of these crops is also necessary to increase the weight of these items in the average food consumption basket, necessary for meeting the nutritional requirements

Agricultural Land Use and Liberalization of Land Laws

5.23 To increase growth in agriculture, all policies for better utilisation of land and water should be pursued. For example, policies on utilisation of all types of hitherto unutilized lands, especially the cultivable and afforestable lands owned by the governments need to be given priority.

5.24 A back-ended, beneficiary-oriented subsidy scheme for reclamation of degraded lands like ravines, un-levelled lands, saline, sodic, alkaline and water-logged lands, has been contemplated by the Ministry of Agriculture at the Centre.

5.25 Some incentive for computerising land records and lowering the stamp duties substantially can avoid pseudo legal and illegal conveyance systems as well as litigation in rural areas.

5.26 Legalising the land leasing-in and leasing-out systems and promotion of contract farming through standardised contract formats enforceable on both parties will help in increasing the size of holdings and improving the viability of agri-units.

5.27 Minor irrigation and watershed development will increase the employment-generating capacity of agriculture.

5.28 The semi-arid and rain fed areas of the Central regions, which have higher potential for increasing productivity, would be the focus of attention in the Tenth Plan. These measures selected for the Tenth Plan can accelerate agricultural growth as well as trigger growth in other sectors, besides reducing poverty.

5.29 There are better social returns in promoting agro-forestry models in the rain fed or semi-arid regions, which contain most of India's marginal

lands. It is in this context that we need to have a big incentive. Similarly, tree plantations on wastelands, belonging to the poor, need to be encouraged, and the focus on farm forestry revived. The details of these policies are available in a Planning Commission Task Force Report on Greening India.

Research and Extension

5.30 More labour intensive crops like pulses and oilseeds should get the benefit of research and extension services.

5.31 An important component in agricultural diversification is animal husbandry, including dairying and poultry which hold immense promise for increasing not only rural livelihoods, but urban as well. A proper development of this sector will require attention not only to technology, processing and marketing arrangements, but also to issues of animal welfare.

5.32 Greater attention should be given to rain water harvesting and increasing the irrigation potential through scientific watershed development. These are also highly employment-intensive activities. Water harvesting techniques should be widely promoted through demonstration and dissemination of benefits. Panchayats should be actively involved in such efforts.

Women in Agriculture

5.33 The NSSO survey results show that there is high female unemployment in the rural sector. Therefore, the Tenth Plan must also focus on programmes for increasing the work opportunities and productivity of female farmers. Increasing women's access to productive land by regularising leasing and share cropping of uncultivated agricultural land by women's groups, encouraging collective efforts in bringing wastelands under cultivation, and providing policy incentives to women in low input subsistence agriculture will have immediate benefits in terms of the household's food security and women's empowerment along with additional employment generation.

Agricultural Reforms and Employment

5.34 Reforms initiated in 1991 had largely bypassed the agriculture sector. The purpose of reforms was removal of poverty, and employment-generating growth was taken to be the principal strategy for removal of poverty. In this process, the role of the agriculture sector is crucial. A few initial steps have been taken now, but this process will require close involvement of State Governments, Local Governments, Panchayats and other local authorities. Planning will need to play a proactive role through appropriate programmes.

5.35 Hopefully, the renewed WTO negotiations, and the new round of negotiations on agriculture, will be able to increase our exports by curbing the trade distorting agricultural subsidies on agriculture. And increase in agricultural exports should contribute to employment generation because they are labour using, and a more rapid growth of agriculture would increase the demand for labour in the agriculture sector.

5.36 If the reforms are implemented successfully, employment in non-cereal crops, and within cereals, in the labour intensive pulses and oilseed crops, should increase. Animal husbandry, fisheries, floriculture and horticulture, and extended areas of agriculture, have very high employment potentials but their growth has comparatively gone down in the 1990s. Agricultural reforms should give a boost to such activities, and benefits of such employment growth are expected to be more equitably distributed across regions.

FOOD PROCESSING

5.37 Food processing is an important employment generating activity. While India is the second largest producer of fruits and vegetables in the world, its food processing industry remains underdeveloped. The purpose of reforms in agriculture is to increase the income of farmers, and of those who are employed in agriculture. Given the very large proportion of our farm produces that perishes, any expansion of food processing activity should improve the off take on commercial terms of agricultural output.

5.38 The absence of an assured electricity supply and poor road connectivity are two of the major constraints in the development of the food processing industry. In addition to addressing the basic infrastructural needs of power supply and road connectivity, certain promotional measures, fiscal as well as creation of facilities specific to the sector, need to be taken simultaneously to impart dynamism to the sector.

5.39 The success of food processing industry is crucially linked to a continuous food chain starting from farming to food processing to marketing. Corporations or modern cooperative organisations are needed to develop the chain. Some of the specific issues requiring attention in order to develop a culture of food processing are :

- ☒ While the agriculture sector has been exempted from all taxes (like excise and income tax), the agricultural produces attract a number of levies like infrastructure cess, market cess, sales tax, mandi tax, turnover tax, inter-state transfer regulations, etc. At the point of conversion, i.e., value addition, excise, income tax and other taxes are levied. The packaging material used is also subject to heavy taxation. All these taxes increase the cost of food products and it becomes a food/commodity for the rich, thereby reducing its demand.
- ☒ It is necessary to facilitate contract farming with its backward and forward linkages, especially in the hinterland of proposed food parks, to be set up in the Tenth Plan period. This would enable greater value addition and consolidation of operations.
- ☒ Equally important is to provide post-harvest infrastructural facilities in the hinterland of the food parks, such as harvesting equipment, sorting, grading, packing, pre-cooling, washing operation, etc. Setting up of these facilities would improve the level of food processing, reduce post-harvest losses, contribute to value addition and generate new jobs in rural areas.
- ☒ For reducing the post-harvest losses, which are estimated at Rs.50,000 crore annually, it is necessary to take urgent steps to set up

irradiation plants, cold storages based on vapour absorption technologies, pre-cooling, etc.

- ☒ To bring our food products at par with and conforming to international safety and quality standards, it would be necessary to set up a network of quality testing/certification laboratories across the country.
- ☒ There is an urgent need to set up a retail chain for distribution of standard and hygienic quality food products. This would help in creating sustained demand for quality food products from customers.
- ☒ Synergies between the food parks and the agriculture export zones is necessary so that facilities/provisions set up for one zone may be considered for the others.

5.40 Within the Government the responsibility for development and promotion of the sector is scattered among different Ministries and Departments. An illustrative list of such Ministries and Departments, along with their areas of responsibility is given in Box 5.2. Similarly, there is a multiplicity of laws and regulations governing this sector. There is an urgent need to harmonise the working of different Ministries, as also among the provisions of various laws and regulations for the sector.

RURAL NON FARM ACTIVITIES/ INDUSTRIES, INCLUDING KHADI & VILLAGE INDUSTRIES HANDICRAFTS & HANDLOOMS AND SMALL AND MEDIUM ENTERPRISES, INCLUDING SMALL-SCALE INDUSTRIES AND INFORMAL SECTOR ESTABLISHMENTS

5.41 This group of activities is the main provider of employment outside the agriculture sector. Its importance increases with reduction of employment opportunities in traditional agriculture. In the immediate future, the strength and weakness of policies here will determine the employment scenario of the country, and its influence on social situation.

5.42 In each of these activities there are government supported institutions, which have a long experience of implementing the programmes and policies. The focus of the programmes for weaker social sections, women, unemployed youth, migrant workers, construction workers, bonded labour, child workers and other over-exploited workers, is also at such economic activities. Almost all the support through plans for development of economic and commercial infrastructure - micro-credit, cess driven worker welfare funds, social security/insurance for low income groups, vocational training, apprenticeships, rural infrastructure for electricity, transport, and industry, in the final analysis, concerns these activities.

Box 5.2

- ☒ Entire post-harvest infrastructure for all agricultural, horticultural, animal husbandry operations is under the Ministry of Agriculture
- ☒ Fruit Products Order (FPO1955) is under the Essential Commodities Act and handled by the Ministry of Food Processing Industries
- ☒ Meat and meat products, and milk products are administered by the Department of Animal Husbandry and Dairying.
- ☒ Marine products and agriculture products exports are under the export promotion authorities like MPEDA, APEDA, etc, under the Ministry of Commerce
- ☒ The National Horticulture Board (NHB) under the Ministry of Agriculture
- ☒ The Directorate of Vanaspati and Oils under the Department of Food
- ☒ Sugar, edible oil, pulses, etc, also under the Department of Food

5.43 A coherent approach to this group of activities can yield very large benefits in terms of employment and income of a majority of households. There are many administrative structures that reach these activities, but for want of a better term, all of them put together within the sweeping term 'unorganised sector', whereas what the term really implies is all the non-incorporated establishments.

5.44 This sector or group is very large in terms of workforce, it responds to competition, and is therefore vibrant. These decentralised economic activities, which are self-adjusting, contribute in no small measure to harmony and social stability in the Indian polity.

5.45 In the following section further development of these economic activities is explored. The employment related services, and governance issues pertaining to employment and workers of this category are dealt with in the chapter 3.5 on Labour Policy and Labour Welfare, in Volume II.

Rural Non-farm activities/industries, including Khadi & Village Industries (KVI)

5.46 Principal planning initiatives on rural non-farm activities are taken through the Khadi and Village Industries Commission (KVIC). The efforts needed to further improve the effectiveness of KVIC programme are:

- ☒ KVIC should focus at traditional artisan based activities because the present coverage is very small.
- ☒ Special initiatives by the KVIC for north eastern region, hilly and border areas.
- ☒ Involvement of Self Help Groups (SHGs) under KVI sector in order to widen the programme at the grass root level.
- ☒ Planning process in KVIC should involve the beneficiaries - State Khadi & Village Industries Boards, cooperative societies, etc.
- ☒ Cluster development approach should be adopted by KVIC so as to strengthen backward and forward linkages.

- ☒ R&D ties should be established between the KVIC and the National Institute of Design, National Institute of Fashion Technology, Indian Institutes of Technology etc.
- ☒ An IT-based data bank of KVIC assisted units should be created to facilitate research and information flow across KVIC establishments spread across the country.
- ☒ Policy support to village industries should be ensured.
- ☒ A Ministry of Agro and Rural Industries as separate from SSI has already been set up.
- ☒ The KVIC should play the role of a nodal agency for the whole village industry sector in the country.
- ☒ The Khadi programme has social objectives, and the subsidies/concession should be considered from this angle.
- ☒ Registration with the KVIC should enable a unit to avail of the same benefits as with the State Directorate of Industry.
- ☒ The KVIC should be given the status of an export promotion council.

Small and Medium Enterprises

5.47 A number of high-level committees have suggested that there should be uniform policy for all small and medium enterprises; it should not remain confined to the manufacturing sector alone, but should include all activities - trade, transport, and financial services.

5.48 Fiscal support is given to small industry because it is labour intensive and hence employment generating. Therefore, the fiscal incentives (excise and income tax), preference in State Government levies, sales taxes, excise and credit support, technology development and marketing support, should be linked with a criterion of employment generated.

5.49 A new 'cluster development approach' should be adopted to focus at locations, which have high employment intensity. There exists a number

of programmes for the benefit of small and micro enterprises. These include:

- ☒ Credit for modernisation
- ☒ Credit guarantee for tiny units without collateral
- ☒ Market development assistance through industry associations
- ☒ Local infrastructure development through industry associations
- ☒ Testing laboratories for product quality

5.50 Besides these enterprise-specific programmes, the general programmes aimed at the households are:

- ☒ Housing for low-income groups
- ☒ Micro-finance
- ☒ Skill Development
- ☒ Health care

5.51 If all these programmes could be focused at a particular cluster, the returns in terms of better productivity, higher income of workers and a better quality of job will be immense. In other words, rather than having multiple programmes, each having a spread over a large area, the Tenth Plan may emphasize these micro development programmes at specific clusters.

Credit for Informal Sector - Micro Credit

5.52 A major problem in all developing countries is that the formal banking system is ill suited to meeting the credit needs of the informal sector. And yet this sector accounts for the bulk of the total employment generated. The banking system must be encouraged to reach out to the enterprises in the informal sector through innovative means. This is effectively what is intended by the various targets specified for priority sector lending by commercial banks. However, priority sector lending has created a culture of mechanical lending in public sector banks in which there is little effort at credit appraisal of lendings made to priority sectors. The Narasimham Committee suggestion of limiting priority

sector lending to a more precisely defined target group was not accepted.

5.53 Banking practices and procedures need to be reviewed to enable banks to adopt a more proactive approach to lending for economically viable activities in the informal sector. The cooperative credit structure can play a major role in extending credit to the informal sector but it has become very weak in most States.

5.54 A great deal of informal sector activities can be more effectively serviced by non-bank financing intermediaries, which are perhaps better able to handle such intermediations, charging interest rates, which cover the high cost of managing an inherently more risky informal sector loan. They are also able to enforce claims on collateral. It is necessary to review the regulatory constraints on commercial banks, which may prevent them from lending to such non-bank financial intermediaries for on lending to finance informal sector activity.

5.55 Another important mechanism through which banks can meet the credit needs of the informal sector is the self help groups (SHGs), which provide micro credit for informal sector activities. A pilot project linking SHGs to banks was launched in 1992. It was envisaged that NGOs could help build up capacity among the poor to organize themselves into SHGs and approach the banks for financing. In 1992-93, a total of 255 SHGs were linked with banks under this project. The number had expanded to 1,21,744 as on September 30, 2000. The programme has provided credit to 1.9 million poor families. More than 85 per cent of the SHGs are exclusively women's groups.

5.56 The experience thus far has been very encouraging. Recovery rates of SHGs are very high (over 90 per cent) reflecting the impact of peer pressure in ensuring loan recovery. Impact studies of micro credit extended by SHGs show very positive outcomes in terms of the effectiveness of the loans reaching the poor and in improving their income levels³. An important aspect of the programme is that it envisages a process of graduation whereby families can begin informal

³ NABARD, Mumbai (2000); Micro Finance for Rural People An Impact Evaluation

sector activities through micro credit extended by SHGs but can, in due course, access larger amount of loans directly from the banks.

5.57 The Reserve Bank of India has taken a number of steps to encourage bank lending to SHGs as a part of mainstream banking activity. Credit extended by commercial banks to SHGs is treated as part of priority sector lending in order to encourage banks to engage in this type of activity. Banks have also been given considerable flexibility to determine procedures and design loan products for SHGs responding to local conditions. A micro finance development fund has also been established in NABARD to give training to SHGs members, partner NGOs, banks and government agencies,

provide start up funds to micro finance institutions and meet their initial operating deficits, and meet the cost of formation and nurturing of SHGs. The programme of providing credit to SHGs, which has made a good start, is a potentially important mechanism for expanding credit to the informal sector and should be greatly expanded in future.

SERVICES SECTORS

Health and Nutrition Services

5.58 Access to quality health services of the population at large is one of the main indicators of social development. The existing facilities in the areas of health and nutrition services are highly

Box 5.3

MICRO FINANCE

The rural poor in the unorganised sector has yet not been able to come out of the clutches of moneylenders charging usurious interest rates. The credit needs of the rural poor are characterised by the absence of any clear distinction between production and consumption purposes. The needs are small, but often arise at unpredictable times and are usually of an emergent nature. Meeting these credit needs as and when they arise is crucial, if their dependence on unorganised credit agents is to be reduced. However, it is a fact that borrowing from informal agents is very convenient, though the terms are harsh. The credit needs of the rural poor are at present only partially met by the formal credit agencies and a majority of the rural poor continues to depend on the informal sources of credit.

A study conducted by Pricewaterhouse Coopers, a firm of Chartered Accountants, reveals the following pattern of credit usage by the rural poor.

- ☒ 63 percent of total credit availed by the rural poor is used for consumption purposes.
- ☒ Only 37 percent of the total credit availed by the rural poor is for productive use.
- ☒ The overall share of organised sector in credit flow to the rural poor is around 16 per cent.

The study gave the following reasons for this distortion:

- ☒ Non-availability of credit for consumption needs from the organised sector.
- ☒ Very high transaction cost to the borrowers from the organised sector.
- ☒ Rigidity of terms and conditions for a loan from organised sector.
- ☒ Delay in sanction of loans by the organised sector.
- ☒ Very high rate of defaults under the Government Sponsored Programmes has led to reluctance on the part of the banks to extend credit to rural poor.

Non-availability of credit from the organised sector, like commercial banks and developmental banks, limits the credit flows to the unorganised sector and accordingly limits the productivity improvement in this sector.

Source: Planning Commission (2002); Report of Special Group on Targeting Ten Million Employment Opportunities per year.

inadequate, especially in rural areas. The implications of poor health services or non-availability of these services at a reasonable cost can be economic as well. Data from NSSO indicate that escalating cost of health services is one of the reasons for indebtedness not only among poor but also among the middle-income group. There are sharp inter-state/inter-district variations in availability and utilisation of health care services. Considerable expansion is needed to provide minimum level of access to every citizen. Thus, in terms of the need for services, this sector affords promise of immense employment opportunities. There is also a very large scope for more efficient use of the available infrastructure, which will enable increased use of health services, and associated demand for health and related workers.

5.59 During the Tenth Plan the effort would be to universalise access at least to primary health care facility, not only in terms of creating physical infrastructure but also in terms of equipping each health care centre with adequate medical and para medical staff. The State will be required to play an important role in providing these services at affordable cost. However, within the Government sector there have been persistent gaps in manpower and infrastructure especially at the primary health care level in remote, rural, tribal and urban slum areas where health care needs are greatest. Also, as it is today, there exists a mismatch between personnel and health infrastructure. Expansion of health facility and its adequate manning as per the existing norms will create demand for educated and skilled manpower for this sector.

5.60 The critical constraint of course is availability of resources with the State Governments and local authorities. The initiatives at collection of user charges in public services, and risk pooling through insurance should supplement the resources of the Government. New initiatives to improve the efficiency of the public health delivery system will also augment the resource base. Still, a large part of the health care is procured from private establishments. However, outside the government, the capability to manage hospitals has remained confined to a few corporate groups.

5.61 On the other hand, the medical insurance industry has not evolved to a reasonable level of professionalism, which can inspire confidence among the buyers of insurance. Insurance mechanisms, designed especially for the low-income groups, need to be developed. Introduction of health care support as a part of the social security insurance of workers in the unorganised sector will help in reducing risk to the individual and also make available resources for investment.

5.62 An associated issue is the need for creation of facilities for training para medical staff

Education Services

5.63 Out of approximately 200 million children in the age group 6-14 years, only 120 million are in schools and net attendance in the primary level is only 66 per cent of enrolment. To achieve education for all, the Sarva Shiksha Abhiyan has been launched. The process of integrating our educational system with the economic needs of the people and of the nation must begin at the primary school stage itself. Assertion of the dignity of labour and vocationalisation of curricula are essential to ensure that a disjunction does not take place between the educational system and the work place.

5.64 Universalising access to primary education and improvement of basic school infrastructure in the Tenth Plan would mean targeting the provision of one teacher for every group of 40 children for primary and upper primary schools, opening of a primary/alternative schooling facility within one km of every habitation, provision of free textbooks to all SC/ST children and girls at the primary and upper primary school, management and repair of school buildings through school management committees, provision of opportunities for non-formal and alternative education for out of school children in the most backward areas and from un-reached segments of the population in response to local needs and demands articulated at the grass root level.

5.65 Mere establishment of schools without hiring teachers happens in many parts of the

country, especially in rural areas. It is therefore essential that control over schools and teachers be transferred to local bodies which have a direct interest in teacher performance. States should be encouraged to implement the 73rd and 74th Amendments of the Constitution, which facilitate the transfer of management of primary and upper primary schools to panchayats/local bodies. Planning, supervision and management of education would have to be through local bodies at district, block and village levels. Efforts should also be made for social mobilisation of local communities for adult literacy campaigns and for promotion of primary education.

5.66 Laws, rules and procedures regarding facilitation of educational institutions must be modernised and simplified so that honest and sincere individuals and organisations can set up universities, colleges and schools. Controls on fees, teacher salaries, infrastructure, and staff strength must be replaced by a strong regulatory framework. The regulatory system must also put the greatest emphasis on fraud detection and punishment while letting normal individuals function more freely.

Vocational Training Services

5.67 There is a very large unmet need for imparting vocational training to the new entrants to labour force as only about 5 per cent or so enter the world of work with any kind of formal vocational training. If the employers, the educational infrastructure and labour administration can join, this gap can be filled.

5.68 Outturn from schools at 10+ stage has so far been a small fraction of those in the 15 to 17 years age group. However, after the introduction of compulsory education in 6-14 years age group, which is the target in the Tenth Plan, the utilisation of youth in occupations appropriate for educated persons has to be considered. The educated youth can take up better occupations than manual work or petty business. To bring them to the mainstream of economic activities, imparting of some production and professional skills is essential. The present approach is to put most of the youth through a higher

technical, medical or management education system. Simultaneous with the incidence of rising unemployment among those with higher education, is also shortage of trained technicians, paramedics, accounts, insurance, legal and other commercial assistants. These requirements are met at present by employing those who acquire the requisite skills through 'hands-on' experience. And such opportunities are restricted to those youth who somehow find an entry point in a good establishment.

5.69 As part of education, vocationalisation schemes have been tried. But, these have not succeeded because requisite equipments, and teachers, who have requisite work experience, are not available. Moreover, as a part of school education, the vocational stream carries a lower priority among the students. The other approach has been the apprenticeship scheme, whereby educated or trained youth can be placed in establishments. Establishments are required to pay a stipend to trainees. However, the number of seats in this has remained rather small. Further promotion of vocational training as a part of entrepreneurial activity can provide employment opportunities

Information Technology

5.70 The potential contribution of information technology to employment generation is both direct and indirect. The indirect impact of IT is far greater than the direct impact. In the USA, it is estimated that for every direct job created in the IT industry, three to four jobs are created by indirect ones. This does not include the non-IT jobs created by the growth of other sectors of the economy under the stimulus of information technology.

5.71 It is assessed that IT will contribute to approximately 0.2 million jobs per year and around one million at the end of the Tenth Plan as additional direct employment.

5.72 The real employment potential of Information and Communication Technology (ICT) will be realised when such services support the community, social and personal services required by the Indian masses. This is the issue of digital

divide, on which adequate policy attention has not so far been focussed in India. Many efforts have been made at the use of ICT in education, health, nutrition, housing, real estate, banking, insurance and other personal services. However, not all of them have been designed with the perspective of a low budget consumer. The cost of research on technology keeps the cost high. The real purpose of planning for ICT, which is to narrow and eliminate the digital divide, will be defeated if the issue is not considered in its proper perspective.

Tourism; Domestic and International

5.73 Development of tourism needs to be taken up on priority basis as India has large untapped tourism potential, which can be successfully harnessed for the benefit of development of areas, that have remained underdeveloped despite being potential destinations of tourist attractions. The employment impact of development of tourist destinations can be substantial as the activity in itself is labour intensive and also has extensive forward and backward economic linkages.

5.74 The focus during the Tenth plan would be to encourage public-private partnership in development of tourist centres in which the government would be the active facilitator and catalyst, with the ultimate goal of creating world-class infrastructure and innovative products.

Housing, Real Estate Development and Construction

5.75 The real estate development and construction are linked activities and are employment intensive too. Unfortunately, development and growth of housing and the real estate sector has been severely constrained by outdated laws and policies governing land development and rent control which have pushed the market underground and spawned a host of undesirable practices.

5.76 The construction activities are very much influenced by the real estate developments. The recent repeal of the Land Ceiling Act, likely to be followed by the States, to free land market will

largely boost the real estate activities. The proposed repeal of the Rent Control Act will further encourage the growth of this sector. In a package proposed in the Tenth Plan to give incentives to the cities and States for urban sector development, there has been a proposal for recommending selective freedom to convert rural land for urban use, reduction of stamp duty on transfer of property and laws facilitating private development of township - all of which will increase the real estate growth, and thereby generate increased demand for construction.

5.77 It is noticed that in the organised and mechanised segment, there has been a very low employment elasticity and, at this point of time, very little contribution to the employment generation in this sector, whereas in the unorganised segment employment elasticity is very high. But unfortunately, their wage rates are very low because of low productivity in this segment along with, heavy exploitation of labour by the employers in the absence of proper legislative safeguards.

5.78 Both the large mechanised activities and the small and medium ones have their own respective roles and will survive alongside. In the area of bridges, major irrigation and dam construction, high-rise buildings etc., the large mechanised construction activities will be unavoidable. But at the same time, in the areas like rural road building, low cost housing, minor irrigation etc., the small construction units with minimum improvement in mechanisation can serve the purpose and fulfill the need for generating more jobs.

Road Transport and Road Construction

5.79 Transport and allied activities provide employment to around 15 million persons. The largest share in this is of those engaged in transport of freight and passengers by road. It has potential for three to four million additional employment opportunities during the Tenth Plan period. With the completion of various stretches of the National Highways Development Project, the traffic flows, and thereby the employment opportunities, can expand much more than this projection.

5.80 The activity is highly decentralised and work conditions are strenuous; it carries a high risk. Since the administration of this activity is with the State transport authorities, the conditions of employment do not get any significant attention. There are however sufficient resources generated in transport activity. Just like construction workers, the welfare measures for transport workers need attention.

Distributive and Retail Trade

5.81 The Group of activities 'trade, hotels, and restaurants' is estimated to provide employment opportunities to around 41 million persons. The importance of trade in providing an outlet to newly emerging industries - processed food products, milk and milk products, khadi and village industries products, etc., has been noted earlier. The large organisations producing consumer products and consumer durables have established their own retail chains - as for example KVIC, National Dairy Development Board (NDDDB), shoe industry etc. But product-specific stores have a large share of overhead expenditure. Other large corporate firms, which deal in group of personal toiletry, edible oil, food products, and automobiles etc., have evolved direct arrangements with retail trade, bypassing the wholesale trade.

5.82 Given the large employment potential, there has been a keen discussion on policies concerning distributive and retail trade. A better-

organised retail trade can open up a large number of gainful employment opportunities to youth, either as self-employed or as shop managers, supervisors, and assistants. So far the organised retail trade establishments have remained confined to public sector-government owned societies, bazaars, and emporia. But many of these failed as direct financial support or purchase price preference from Government reduced. The private corporate sector should be encouraged to set up retail chains in small and medium towns and metros. Requisite changes in laws concerning rents, land use, property acquisition, and bank finance policies may be made so that the prime retailing activity does not remain confined to the property owners (also the local governments), which keeps the entry cost at exorbitant levels. In the process, the gainful and productive employment to those who work in shops suffers since the fixed cost uses up the bulk of the resources of the new ventures.

(iii) CREATION OF ADDITIONAL EMPLOYMENT OPPORTUNITIES BY TAKING UP LABOUR INTENSIVE ACTIVITIES

5.83 The exercises done, during the formulation of the Tenth Five Year Plan, have brought out the need for developmental initiatives in certain areas. The Planning Commission's Special Group on creation of employment opportunities has estimated the potential for employment from these

Table 5.5
"Programme Generated" Incremental Employment over Tenth Plan

Developmental Initiative	Employment Opportunities (Million)
Agriculture & Allied Activities	3.55
Greening the Country through Agro Forestry	3.50
Energy Plantation for Bio-Mass Power Generation	2.01
Rural Sectors and Small & Medium Enterprises	7.06
Education and Literacy	1.70
Employment through Information and communication Technology (ICT) Development	0.70
Health, Family and Child Welfare Services	0.80
Total	19.32

(Table 5.5).

5.84 These projections have been made in consultation with the concerned sectoral ministries. The details at the sub-sector level are given in Annexure 5.19.

5.85 In the agriculture sector, the switching of acreage from cereals to oilseeds and pulses increases the requirement for labour. The National Watershed Development Project for rain-fed areas creates direct employment through activities relating to conservation and development of land and water resources such as bunding, check dams, water harvesting structures, nurseries, etc. The on-farm water management is a new programme, for the eastern States, comprising installation of shallow tube wells and pump-sets, low lift irrigation, installation of diesel pump-sets and construction of dug wells. The area under horticulture would be increased. Agri-clinics will provide the services of trained agricultural graduates for the purposes of seed certification, seed production and distribution. Skilled manpower would also be required for maintenance and operation of farm machinery including tractors.

5.86 Ten million hectares of degraded forest is proposed to be re-generated during the Tenth Plan. India is one of the eight identified global centres for plant diversity. Projects can be taken up in medicinal plants to produce a whole range of therapeutics, food supplements, cosmetics, toiletries and nutraceuticals, and veterinary medicine. Substitution of timber by bamboo is a viable alternative, though it requires development of bamboo culture.

5.87 Production of bio-mass for energy includes cultivation of trees, such as Casuarina, equistifolia, and bush crops such as prosopis, juliflora, and plantation of Casuarina trees on marginal wastelands. Such plantations can support 10 to 12 MW power plants. Production of bio-fuel-ethanol from sugarcane plantations is also suggested.

5.88 In the rural sectors, Pradhan Mantri Gram Sarak Yojana (PMGSY), Sampoorna Gramin Rozgar Yojana (SGRY), Swarnajayanti Gram Swarozgar Yojana (SGSY) are expected to create incremental employment opportunities to the extent of 2.86 million. The rural employment generation programme of KVIC, PMRY and new initiatives at development of clusters of small and medium enterprises are expected to create additional 4.2 million employment opportunities during the Tenth Plan.

5.89 Expansion of elementary education, training of teachers and manpower requirement at resource centres will create 1.7 million additional work employment opportunities during the Tenth Plan period. Development of Information and Communication Technology and Health and Child Care services will enable creation of an additional 1.5 million employment opportunities.

5.90 These initiatives are required for specific developmental needs and, apart from two (SGRY and SGSY), these are not in the category of special employment programmes. The details are indicated in the respective chapters.

5.91 The sectoral policy initiatives have been discussed in the earlier sections to stimulate growth of output of these sectors. On the basis of employment trends observed in the past, the growth of these sectors, corresponding to 8 per cent GDP growth target of the Tenth Plan should enable a creation of 30 million additional employment opportunities. But this would mean an increase in the number of unemployed persons. Unemployment rate will increase from 9.2 per cent to 9.8 per cent in 2002. (Annexure 5.14) The creation of additional employment opportunities by taking up labour intensive activities is therefore required to reduce the incidence of unemployment to 5.1 per cent. Priority will have to be given in implementing the projects in the developmental initiatives identified above

Annexure 5.1

Past and Present Macro Scenario on Employment and Unemployment on CDS Basis

(Person years)

	(Million)			Growth per annum (%)	
	1983	1993-94	1999-2000	1983 to 1993-94	1993-94 to 1999-2000
ALL INDIA					
Population	718.20	894.01	1003.97	2.00	1.95
Labour Force	261.33	335.97	363.33	2.43	1.31
Workforce	239.57	315.84	336.75	2.70	1.07
Unemployment Rate (%)	(8.3)	(5.99)	(7.32)		
No. of Unemployed	21.76	20.13	26.58	-0.08	4.74
RURAL					
Population	546.61	658.83	727.50	1.79	1.67
Labour Force	204.18	255.38	270.39	2.15	0.96
Workforce	187.92	241.04	250.89	2.40	0.67
Unemployment Rate (%)	(7.96)	(5.61)	(7.21)		
No. of unemployed	16.26	14.34	19.50	-1.19	5.26
URBAN					
Population	171.59	234.98	276.47	3.04	2.74
Labour Force	57.15	80.60	92.95	3.33	2.40
Workforce	51.64	74.80	85.84	3.59	2.32
Unemployment Rate (%)	(9.64)	(7.19)	(7.65)		
No. of Unemployed	5.51	5.80	7.11	0.49	3.45

Note : All estimates are on CDS (Current Daily Status basis)
 Figures in brackets denote percentage

Source : NSSO & Population Census

Present Sectoral Employment Scenario (1999-2000)

Sectors	Employment Elasticity 1983 to 1993 -1994	Employment Elasticity 1993-94 to 2000	Employment in Million								% of organised sector to total employment	% of public sector to total Emp.	% of public sector to total Organised	% of Private sector to total Organised	Absolute Employment % Composition	Sectoral GDP Growth % 1983 to 1993-94	Sectoral GDP Growth % 1983 to 1993-94
			Total		Organised		Current Daily Status (CDS)		Private Sector								
			1983	1993-94	1999-2000	1999	1999	1999	1999	1999							
			4	5	6	7	8	9	10	11							
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
1. Agriculture	0.70	0.01	151.35	190.72	190.94	0.52	0.87	1.39	0.73	0.27	37.16	62.84	56.70	2.90	3.10		
2. Mining & Quarrying	0.59	-0.41	1.74	2.54	2.26	0.93	0.09	1.01	44.69	41.15	91.41	8.59	0.67	6.20	4.70		
3. Manufacturing	0.38	0.33	27.69	35.00	40.79	1.57	5.18	6.75	16.55	3.95	23.25	76.75	12.11	6.00	7.80		
4. Electricity, Gas & Water Supply	0.63	-0.52	0.83	1.43	1.15	0.96	0.04	1.00	96.96	83.48	95.91	4.09	0.34	8.40	6.80		
5. Construction	0.86	0.82	7.17	11.02	14.95	1.11	0.07	1.18	7.90	7.42	93.97	6.03	4.44	4.90	6.30		
6. Trade, Hotels and Restaurants	0.68	0.62	18.17	26.88	37.54	0.16	0.32	0.49	1.31	0.43	33.54	66.46	11.15	5.60	9.20		
7. Transport, Storage & Communication	0.55	0.63	6.99	9.88	13.65	3.08	0.07	3.15	23.08	22.56	97.81	2.19	4.05	6.10	8.70		
8. Financing, Insurance, Real Estate and Business Services	0.45	0.64	2.10	3.37	4.62	1.30	0.36	1.65	35.71	29.14	78.34	21.66	1.38	10.10	8.40		
9. Community, Social and Personal Services	0.68	-0.25	23.52	34.98	30.84	9.79	1.70	11.49	37.26	31.74	85.21	14.79	9.16	5.70	8.40		
All	0.52	0.16	239.57	315.84	336.75	19.42	8.70	28.11	8.34	5.77	69.06	30.94	100.00	5.20	6.70		

Source : National Accounts ; CSO
 NSSO : Various Rounds
 DGE&T, Ministry of Labour

Annexure 5.3A

Workforce Increase Between 1981-1991 & 1991- 2001 (Census Based)

Heads	1981	1991	% growth 1981-91	2001	% growth (1991-2001)
1. Population (million)	683.33	846.30	2.16	1025.25	1.94
2. Participation Rates (%) (Main workers)	33.50	34.10	0.18	30.50	-1.11
3. Work Force (million) (Main workers)	228.92	288.59	2.34	312.70	0.81
4. Marginal Worker (%) participation Rates	3.20	3.40	0.61	8.70	9.85
5. No. of Marginal Workers (million)	21.87	28.77	2.78	89.20	11.98

Source : Population Census (1981, 1991 & 2001)

Annexure 5.3B

**Growth in Workforce for Major States 1991-2001 (Census Based)
(Main Workers)**

States	Workforce Growth	States	Workforce Growth
Andhra Pradesh	0.19	Madhya Pradesh	0.47
Assam	0.13	Maharashtra	1.41
Bihar	0.72	Orissa	-0.81
Gujarat	1.46	Punjab	2.53
Haryana	2.83	Rajasthan	2.28
Himachal Pradesh	1.00	Tamil Nadu	0.38
Karnataka	1.13	Uttar Pradesh	0.11
Kerala	-0.08	West Bengal	1.16
		All India	0.81

Source : Population Census (1991 & 2001)

Growth of Workers - Economic Census

	1980	1990	1998
Rural*			
Workers (million)	24.20	32.20	38.10
Growth Rate (%)		2.88	2.15
Urban			
Workers (million)	29.00	38.20	42.50
Growth Rate (%)		2.81	1.34
Combined			
Workers (million)	53.20	70.40	80.60
Growth Rate (%)		2.84	1.71

Note : * The Rural Sector in Economic Census excludes farm sector and plantation

Source : Economic Census

Total Employment and Organised Sector Employment Growth rate (per cent p.a.)

Heads	1983 to 1993-94	1993-94 to 1999-2000
Total Population	2.00	1.95
Total Labour Force	2.43	1.31
Total Employment	2.70	1.07
Organised Sector Employment*	1.20	0.53
Public Sector	1.52	(-) 0.03
Private Sector	0.45	1.87

Note : * Organised Sector Employment growth rates correspond to the periods 31.3.1983 to 31.3.1994 and 31.3.1994 to 31.3.1999

Source : DGE&T, Ministry of labour

Annexure 5.6

Sectoral Employment Elasticities on CDS Basis

Sectors	Employment Elasticity		
	1983 to 1987-88	1983 to 1993-94	1993-94 to 1999-2000
Agriculture	0.87	0.70	0.01
Minings and Quarrying	1.25	0.59	-0.41
Manufacturing	0.59	0.38	0.33
Electricity, Gas and Water Supply	0.30	0.63	-0.52
Construction	2.81	0.86	0.82
Trade, Hotels and Restaurant	0.87	0.68	0.62
Transport, Storage and Communication	0.47	0.55	0.63
Financing, Insurance, Real Estate and Business Services	0.49	0.45	0.64
Community, Social and Personal Services	0.52	0.68	-0.25
ALL	0.68	0.52	0.16

Note : Elasticity may change after adjustment of workers of Repair services

Source : NSSO (For estimating employment growth rates) and NAS (for estimating GDP growth rates)

Annexure 5.7

Growth of Average Daily Wage Earnings in Rural India (at 1993-94 prices)

(per cent per annum)

	Rural Male		Rural Female	
	1987-88 to 1993-94	1993-94 to 1999-00	1987-88 to 1993-94	1993-94 to 1999-00
Public Works	1.55	3.83	1.90	5.04
Casual Labour In Agriculture	1.36	2.80	2.34	2.94
Casual Labour In Non Agriculture	1.33	3.70	1.32	5.07
Casual Labour In All Activities	0.77	3.59	1.95	3.19

Source : NSSO

**Unemployment Rate among the Youth (15-29 years) on CDS Basis
(1999-2000)**

Age Groups (year)	Unemployment Rate (per cent of labour force)	
	Male	Female
	Rural India	
15-19	13.10 (9.00)	12.80 (8.30)
20-24	11.70 (10.30)	12.10 (8.20)
25-29	9.20 (7.70)	7.70 (6.50)
15-29	11.10 (9.00)	10.60 (7.60)
	Urban India	
15-19	19.00 (16.20)	18.00 (18.60)
20-24	17.10 (17.00)	25.90 (28.50)
25-29	10.30 (9.30)	13.10 (15.50)
15-29	14.70 (13.70)	19.10 (21.20)

Note : The figures in parentheses give the corresponding rates for NSS 50th Round (1993-94)

Source : NSSO

Annexure 5.9

**Current Daily Status Unemployment Rates for Each State and U.T.
(1999-2000)**

States	Unemployment Rate (per cent of labour force)					
	Rural			Urban		
	Male	Female	Persons	Male	Female	Persons
1	2	3	4	5	6	7
Andhra Pradesh	8.10	8.10	8.10	7.20	8.90	7.60
Assam	6.40	12.50	7.40	9.90	21.90	11.90
Bihar	7.20	6.20	7.00	8.70	13.50	9.30
Gujarat	5.10	4.20	4.80	4.00	5.40	4.20
Haryana	5.30	1.80	4.70	4.50	4.90	4.50
Himachal Pradesh	3.40	9.00	2.40	7.00	11.90	7.80
Karnatakka	4.40	4.00	4.30	5.30	5.90	5.40
Kerala	20.00	26.10	21.70	15.50	28.20	19.10
Madhya Pradesh	4.00	3.50	3.80	7.20	5.70	7.00
Maharashtra	6.30	6.90	6.50	7.70	10.00	8.10
Orissa	7.60	5.60	7.10	9.80	8.20	9.50
Punjab	4.20	1.70	3.70	4.80	5.30	4.90
Rajasthan	3.30	1.90	2.80	4.70	3.50	4.50
Tamil Nadu	14.30	12.30	13.50	9.00	8.60	8.90
Uttar Pradesh	4.00	2.10	3.60	6.30	5.00	6.20
West Bengal	15.20	25.10	17.00	10.00	13.90	10.60
All India	7.20	7.00	7.20	7.30	9.40	7.70

Source : NSSO

**Current Daily Status Unemployment Rate among the Youth
(Age 15-29) for Each State and U.T.
(1999-2000)**

(Rural)

State/U.T	Unemployment Rate (per cent of labour force)		
	Male	Female	Persons
Andhra Pradesh	10.80	8.70	9.90
Assam	12.30	24.90	14.60
Bihar	11.50	8.80	11.00
Gujarat	6.80	6.40	6.70
Haryana	9.00	2.40	8.10
Himachal Pradesh	8.10	2.80	6.10
Karnatakka	6.00	5.60	5.80
Kerala	32.30	45.80	36.30
Madhya Pradesh	5.40	4.00	4.90
Maharashtra	11.30	8.90	10.40
Orissa	12.60	8.40	11.30
Punjab	8.00	3.60	7.00
Rajasthan	5.00	3.30	4.40
Tamil Nadu	19.70	15.30	18.10
Uttar Pradesh	6.80	2.00	6.10
West Bengal	23.00	39.10	26.60
All India	11.10	10.60	11.00

Source : NSSO

**Current Daily Status Unemployment Rate among the Youth
(Age 15-29 Years) for Each State and U.T.
(1999-2000)**

(Urban)

State/U.T	Unemployment Rate (per cent of labour force)		
	Male	Female	Persons
Andhra Pradesh	14.30	16.70	14.80
Assam	22.40	42.70	26.60
Bihar	24.00	28.00	24.40
Gujarat	8.00	11.40	8.50
Haryana	8.00	9.90	8.30
Himachal Pradesh	16.80	37.50	20.50
Karnataka	10.40	10.30	10.50
Kerala	26.60	50.40	34.30
Madhya Pradesh	14.90	12.30	14.60
Maharashtra	15.60	21.10	16.50
Orissa	26.80	20.10	25.50
Punjab	8.90	13.90	9.50
Rajasthan	8.40	10.40	8.80
Tamil Nadu	15.50	15.60	15.60
Uttar Pradesh	12.40	12.70	12.50
West Bengal	23.40	27.20	24.00
All India	14.70	19.10	15.40

Source : NSSO

**Unemployment Rates by Household Monthly Per Capita Expenditure Class
(1999-2000)**

Monthly Per Capita Expenditure Class (Rs.)		Unemployment Rate (CDS) per cent of labour force	
Rural	Urban	Rural	Urban
0-225	0-300	11.31	9.61
225-255	300-350	9.62	9.67
255-300	350-425	8.12	8.20
300-340	425-500	7.46	9.20
340-380	500-575	6.56	9.20
380-420	575-665	6.18	8.63
420-570	665-775	6.48	8.19
470-525	775-915	6.14	7.18
525-615	915-1120	5.60	6.65
615-775	1120-1500	6.06	5.68
775-950	1500-1925	5.57	4.67
950 & above	1925 & above	5.25	4.10
All	All	7.21	7.65

Source : NSSO Survey, 55th Round (1999-00)

Annexure 5.13A

**Low Growth Scenario (6.5% Growth over 10th Plan Period).
Projection of Employment Opportunities on CDS basis**

Items	Unit	1999-2000	2001-2002	2006-2007
Labour Force (1.8% per annum growth)	Million	363.33	378.21	413.50
Employment	Million	336.75	343.36	367.44
No. of unemployed	Million	26.58	34.85	45.56
Unemployment rate	Percentage	7.32	9.21	11.00

Annexure 5.13B

**Low Growth Scenario with Recommended Programmes
& Policy Changes on CDS basis**

Items	Unit	1999-2000	2001-2002	2006-2007
Labour Force	Million	363.33	378.21	413.50
Employment	Million	336.75	343.36	375.00
No. of unemployed	Million	26.58	34.85	38.50
Unemployment rate	Percentage	7.32	9.21	9.30

Note : CDS : Current Daily Status

**Employment Scenario from 8% Growth per annum and Extrapolated Industrial Structure
(Based on Actual Elasticity (1994-2000) -CDS & 1.8% p.a. Growth in L.F.)**

	Unit	1999- 2000\$	2001\$\$	2002\$\$	2007	2012	Employment Growth over 10th plan per annum
Labour Force (1.8% p.a. Growth)	million	363.33	371.52	378.21	413.50	451.53	1.8%
Employment ** #	million	336.75	340.82	343.36	373.03	403.52	1.7%
(Unemployment Rate)	(%)	7.32	8.26	9.21	9.79	10.63	
No. of Unemployed	million	26.58	30.70	34.85	40.47	48.01	3.0%

Note : ** Based on 8% Growth in GDP during 2002-07
Current Daily status basis
\$ 1999-2000 figures related to NSS 55th (July, 1999-June, 2000) Rd.
\$\$ Based on 5.2% GDP Growth during 2000-01 and 2001-02
Source : Planning Commission

Employment Opportunities Sector-wise over the Tenth Plan*

(per cent per annum)

Sectors	GDP Gr. 2000-01 (%)		GDP Gr. 2001-02 (%)		High Growth 8% SG	Projected Elasticity* 2000-02 & (1993-94) (1.1.1994) (1.1.2000)	CDS Emp. (1999-00)	CDS Emp. (2000-01 to 2002-07)	Projected Employment#		Rate of Growth in Employment (%)				
	QE	SG	AE	SG					Empl. 2000-01 (1.4.2001)	Empl. 2001-02 (1.4.2002)	Empl. 1999-2000	Empl. 2000-01 to 2002	Empl. 2001 to 2002	Empl. 2002 to 2007	
1. Agriculture	-0.20	0.20	5.70	3.40	4.20	0.01	190.72	190.94	190.95	191.01	191.42	0.02	0.00	0.03	0.04
2. Minings and quarrying	3.30	3.70	1.40	1.10	4.70	-0.41	2.54	2.26	2.22	2.21	2.01	-1.91	-1.52	-0.46	-1.93
3. Manufacturing	6.70	5.60	3.30	2.60	10.00	0.33	35.00	40.79	41.73	42.09	49.51	2.58	1.85	0.85	3.30
4. Electricity, Gas and Water Supply	6.20	4.70	5.20	3.70	8.30	-0.52	1.43	1.15	1.11	1.09	0.88	-3.55	-2.44	-1.92	-4.32
5. Constuction	6.80	5.50	2.90	2.80	8.30	0.82	11.02	14.95	15.80	16.16	22.46	5.21	4.51	2.30	6.81
6. Trade, hotels and restaurant	3.80	6.90	6.30	5.80	8.00	0.62	26.88	37.54	39.56	40.99	52.22	5.72	4.28	3.62	4.96
7. Transport, Storage & Communication	8.20	6.90	5.80	5.80	10.30	0.63	9.88	13.65	14.39	14.92	20.43	5.53	4.35	3.67	6.49
8. Financing, Insurance, Real Estate and Business Services	2.90	9.10	7.50	11.10	10.00	0.64	3.37	4.62	4.96	5.32	7.25	5.40	5.82	7.11	6.40
9. Community, Social & Personal Services	6.00	7.80	6.00	7.00	7.60	-0.25	34.98	30.84	30.09	29.57	26.86	-2.08	-1.95	-1.74	-1.90
All Sectors	4.00	5.20	5.40	5.20	8.00	0.21	315.84	336.75	340.82	343.36	373.03	1.07	0.97	0.75	1.67

ROG in employment has been projected by taking into account observed sectoral elasticities based on CDS Employment during 1994-2000 and sectoral growth in GDP at 5.2% for 2000-01 and 2001-02, & 8% during 2002-07

* Observed Elasticity during 1994-2000 based on CDS

QE = Quick estimates

AE = Advance estimates

S.G = Special Group Estimates

Note : 1. Projected employment is based on sectoral employment elasticities and sectoral growth in GDP

2. Projections may not be adjusted for Repair Services because of 3-digit data on workers distribution

Source: Planning Commission

**Employment Scenario on * 8% Growth per annum and Changed
Industrial Structure on the basis of proposed Policy and
Programmes in the Tenth Plan**

	Unit	1999-2000	2001-2002	2006-2007	2011-2012	Percentage per annum
Labour Force	Million	363.33	378.21	413.50	453.52	1.80
Employment	Million	336.75	343.36	392.35	451.53	2.70
Unemployment Rate	(%)	7.32	9.21	5.11	0.44	
No. of Unemployed	Million	26.58	34.85	21.15	1.99	-9.50

Note : Special Group estimates,
* on CDS basis

Source : Planning Commission

Implicit Movement in Labour Productivity (output per labour)

(Per cent per annum)

	1983 to	1993-94 to	Projected	
	1993-94	1999-2000	2001-2002	2006-2007
(A) Based on 1994-2000 Elasticities				
GDP (growth)	5.20	6.70	5.20	8.00
Work Force	2.70	1.07	0.98	1.67
Employment Elasticities	0.54	0.16	0.19	0.21
Labour Productivity	2.30	5.60	4.20	6.20
(B) Based on 1994-2000 Elasticities with changes in policies and programmes				
Workforce	2.70	1.07	0.98	2.70
Employment Elasticities	0.54	0.16	0.19	0.34*
Labour Productivity	2.30	5.60	4.20	5.20

Note : *Implicit employment elasticity including employment on special programmes

Source : Planning Commission

Estimates of Generation of Sectoral Employment Opportunities over the Tenth Plan

Sectors	Sectoral GDP Growth (%) 10th Plan	Base Employment (CDS) (million) 2001-2002	Increased Employment Opportunities Over Tenth Plan (million)			
			on Estimated Employment Elasticities	Programme and Policy Based**	Total Incremental	Total Employment 2007
Agriculture & Allied (Including Rural activity)*	4.20 4.20	191.01 (55.63)	0.41	9.06	9.47	200.48 (51.09)
Mining & Quarrying	4.70	2.21 (0.64)	-0.20		-0.20	2.01 (0.51)
Manufacturing & SSI Pradhan Mantri Rozgar Yojana (PMRY) and Rural Employment Generation Programme (REGP)	10.00	42.09 (12.26)	7.42	4.20	11.62	53.71 (13.70)
Electricity, Gas & Water Supply	8.30	1.09 (0.32)	-0.21		-0.21	0.88 (0.22)
Constructions	8.30	16.16 (4.71)	6.30		6.30	22.46 (5.72)
Trade, Hotel & Restaurant	8.00	40.99 (11.94)	11.23		11.23	52.22 (13.28)
Transport, Storage & Communications	10.30	14.92 (4.35)	5.51		5.51	20.43 (5.21)
Financial Institutions, Real Estate & Business Services	10.00	5.32 (1.55)	1.93		1.93	7.25 (1.84)
Community Services, Social & Personal Services	7.60	29.57 (8.61)	-2.71	3.20	0.49	30.06 (7.64)
Sampoorna Gramin Rozgar Yojana (SGRY)				1.29	2.09	2.09
Swaranjayanti Gram Swarojgar Yojana (SGSY)				0.80		
Pradhan Mantri Gram Sadak Yojana (PMGSY)				0.77	0.77	0.77
Aggregate	8.00	343.36	29.67	19.32	48.99	392.35

Note: Brackets denote percentage composition to total.

** Detailed breakup is given in Annexure 5.19.

Estimates on person years basis.

Source: Planning Commission

"Programme-Generated" Incremental Employment, Over the 10th plan

(million person years)

(a) Agriculture & Allied	
1. Diversion to oilseeds and pulses:	0.35
2. National Watershed Development Project for Rainfed Areas (NWDPPRA)	0.50
3. Horticulture	1.20
4. On Farm Management	1.25
5. Agriculture Clinics and Seed production	0.15
6. Training and employment of tractor drivers	0.10
	----- > 3.55
(b) Greening the country through Agro Forestry	
1. Joint Forest Management (JFM)	1.50
2. Development of medicinal plants	0.50
3. Bamboo Development	1.50
	----- > 3.50
(c) Energy Plantation for Biomass power Generation	
1. Energy Plantation Prosopis and Casuarina	1.22
2. Ethanol (Biofuel from sugarcane plantation)	0.79
	----- > 2.01
(d) Rural Sectors and SMEs	
Prime Minister's Rojgar Yojana (PMRY-SSI)	1.65
Cluster Development	0.55
Rural Employment Generation Programme (REGP-KVIC)	2.00
Sampoorna Gramin Rojgar Yojana (SGRY)	1.29
Pradhan Mantri Gram Sadak Yojana (PMGSY)	0.77
Swarnajayanti Gram Swarajgar Yojana (SGSY)	0.80
	----- > 7.06
(e) Education and Literacy	
1. Education	1.53
2. Mid day meals	0.06
3. DIET, BRC, CRC, Engineering Staff SPO, DPO	0.09
	----- > 1.70
Employment through ICT Development	0.70
Health, Family and Child Welfare	0.80
GRAND TOTAL	19.32

Source : Report of the Special Group

**Employment Elasticities for the period 1993-94 to 1999-2000 & implicit over the Tenth Plan
by Changes in Sectoral Composition on CDS Basis**

Sectors	Growth of Employment (%) 1994-2000	GDP Growth (%) 1994-2000	Elasticities 1994-2000*	Elasticities assumed in the Tenth Plan	
				With policy changes including Special employment programmes	Without policy changes
1. Agriculture & Allied (including Rural activities)	0.02	3.10	0.006****	0.23	0.01
2. Mining & quarrying	-1.91	4.70	-0.41	-0.41	-0.41
3. Manufacturing	2.58	7.80	0.33	0.50	0.33
4. Electricity, gas and water supply	-3.55	6.80	-0.52	-0.52	-0.52
5. Construction	5.21	6.30	0.82	0.82	0.82
6. Trade, hotels & restaurants	5.72	9.20	0.62	0.62	0.62
7. Transport, storage and communication	5.53	8.70	0.63	0.63	0.63
8. Financing, insurance, real estate and business services	5.40	8.40	0.64	0.64	0.64
9. Community, social & personal services	-2.08	8.40	-0.25	0.04	-0.25
Total	1.07	6.70	0.16	0.338***	0.21**

Note : *Based on actual observed elasticities (1994-2000)

** Based on Growth and without Policy changes

*** Based on Growth and Policy changes over the 10th Plan

**** Approx to 0.01

Source : Planning Commission

CHAPTER-6

GOVERNANCE AND IMPLEMENTATION

6.1 The issue of governance has in the recent times emerged at the forefront of the development agenda. Good governance is one of the most crucial factors required if the targets of the Tenth Plan are to be achieved. It is also this factor, or rather lack of it, which could be the cause of immense disappointment and missed development opportunities.

6.2 Governance relates to the management of all such processes that, in any society, define the environment which permits and enables individuals to raise their capability levels, on one hand, and provide opportunities to realise their potential and enlarge the set of available choices, on the other. These processes, covering the political, social and economic aspects of life impact every level of human enterprise, be it the individual, the household, the village, the region or the national level. It covers the State, civil society and the market, each of which is critical for sustaining human development. The State is responsible for creating a conducive political, legal and economic environment for building individual capabilities and encouraging private initiative. The market is expected to create opportunities for people. Civil society facilitates the mobilisation of public opinion and peoples' participation in economic, social and political activities.

6.3 The universally accepted features of good governance are the exercise of legitimate political power; and formulation and implementation of policies and programmes that are equitable, transparent, non-discriminatory, socially sensitive, participatory, and above all accountable to the people at large. There could however be aspects of governance that are contextually driven and geared to address the local concerns.

6.4 Experience shows that while good governance can help secure human well being and sustained development, it is equally important to recognise that poor governance could well erode the individual capabilities, as well as institutional and community capacities to meet the needs of sustenance.

6.5 In India, there are a number of regions, or States within a region, or even districts within a State, where development outcomes, in terms of social indicators, do not match with the available resources and the inherent potential of the people. States that are rich in minerals are not necessarily industrially developed, and those with rich cultivable lands and assured irrigation are often lagging behind in agricultural development. There are States in the country that have been able to achieve significant gains in overall development, while others have squandered opportunities despite their natural advantage and favourable initial conditions. There are attainments in all aspects of governance that one could legitimately be proud of and yet there are as many challenges to be faced. Even in States where development has been relatively better, there are instances of loose or poor governance. These are manifested, for example, in:

- Poor management of economies, persisting fiscal imbalances, disparities in the pace and level of development across regions and across districts;
- Denial of basic needs of food, water and shelter to a substantial proportion of the population;
- Threat to life and personal security in the face of inadequate State control on law and order;

- Marginalisation, exclusion or even persecution of people on account of social, religious, castes or even gender affiliations;
- Lack of sensitivity, transparency and accountability in many facets of the working of State machinery, particularly those that have an interface with the public;
- Lack of credibility – the gap between the intent and the actions – of some institutions in society;
- Inadequate system of incentives/disincentives for people (particularly for a civil servant), subversion of rules, evasion of taxes and failure in getting timely justice;
- Existence of a significant number of voiceless poor with little opportunities for participating even in institutions of local self-governance, despite a visible movement towards decentralisation through the Panchayati Raj institutions; and
- Deterioration of physical environment, particularly in urban areas.

6.6 All such outcomes can be easily related to the failure of one or more aspects of governance - political, economic or civic. In most cases, it is equally easy to diagnose and define what could be the ideal requirement or institutional arrangement for addressing specific concerns. What is, however, important is the need to undertake an analysis of changing governance standards as against a cross-sectional study of purely static ailments in the system. It necessitates facing and addressing questions such as, why is it that governance standard may have declined in some places over time? Why, for instance, some States have succeeded in turning around their institutional capacities to govern effectively while others have failed?

CONCEPTUALISING GOVERNANCE – AN ALTERNATIVE FRAMEWORK

6.7 A useful approach to examine the issues of governance, whether it is restricted to political,

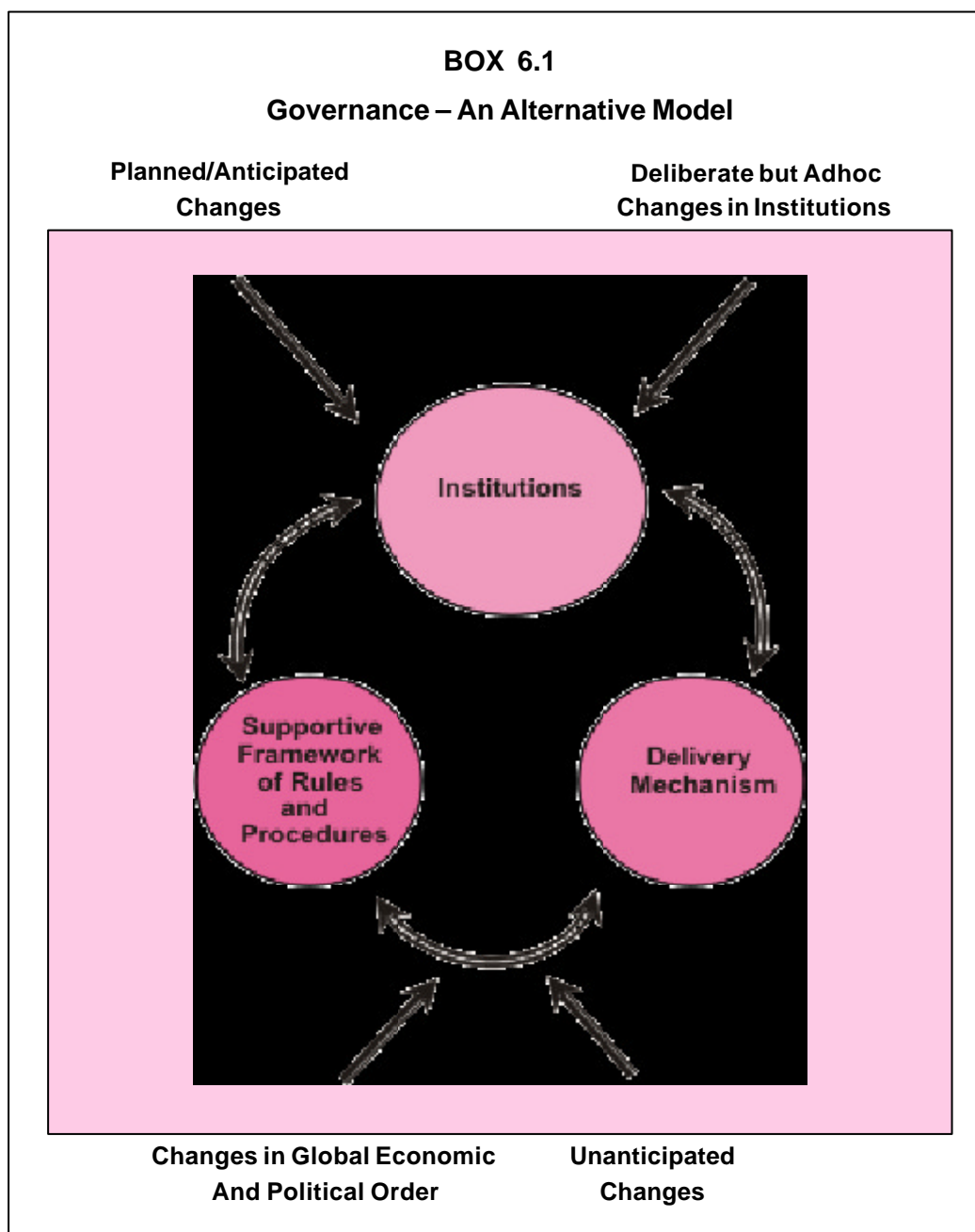
economic or civic governance or looked at holistically, is to view the process of intermediation as involving a continuous interplay of three elements, each representing a specific set of deliberate arrangements. These include:

- **Institutions** – adopted or created arrangements, both formal and informal, to bring about predictability, stability and efficiency in managing the social, economic or political transactions in any society; (For example, the institution of Parliament, the judiciary, or the civil administration.)
- **The Delivery Mechanism** – including the executive apparatus adopted or evolved by the institutions for implementing the agenda and the objectives for which the said institutions have been created; (For example law courts, hospitals, police stations or the Collector's office); and
- **The Supportive and Subordinate Framework of Legislations, Rules, and Procedures** - formulated for delivering and meeting the stated responsibilities of the concerned institutions.

6.8 Efficient governance requires efficient institutions. The efficiency and effectiveness of institutions, in turn, depends on their adopted delivery mechanism and the supportive framework of rules and procedures, each of which has to work in harmony with the other to discharge the functions for which the institutions have been created. Only then would one expect the institutions to fulfill their stated objectives and carry out their assigned responsibilities in managing the affairs of the society. More importantly, with the changing context – domestic as well as global – a change in the profile and requirements of society and development, there has to be a capacity for evolution, a continuous adaptation in each of these elements (Box 6.1). The case of planning institutions and policy 'think tanks' is a good example for illustrating this point.

6.9 Successful implementation of development programmes requires adequate funds, appropriate policy framework and effective institutional capacity to deliver. Past experience in the country has shown that availability of resources is no panacea for tackling poverty, disparities and backwardness. It is a necessary, but not a sufficient condition. The determining factor, it turns out, is the institutional capacity to formulate viable need-based schemes/projects with efficient delivery systems to utilise optimally the available resources.

The case of rural development programmes in the Central Government may be considered in this connection. Excessive compartmentalisation of the executive into Ministries/Departments has ensured that such programmes are not only spread over a host of Ministries which encourages a narrow sectoral approach to conceiving, formulating and implementing schemes, but also prevents mutual synergies that are inherent in most social sector programmes to benefit the plan initiatives. The duplication of delivery structures and the procedural



hurdles invariably curtail the flow of assistance to the targeted beneficiaries. The Mid-Term Appraisal of the Ninth Plan, for instance, points out that an amount of at least Rs. 400 billion per annum flows for rural development by way of Central and State schemes in sectors like health and family welfare; social justice and empowerment; watershed development and agriculture; tribal development; subsidies on food and kerosene; and through schemes of rural development. This is in addition to public investment in infrastructure like roads and power which also directly benefits the rural poor. All this is directed to about 50 million poor families who, on an average, are thus being allocated roughly Rs. 8,000 per annum. This amount is sufficient to buy nearly 3 kg. of foodgrain per day at the average rate of Rs. 7.50 per kg., potentially permitting them to overcome their state of deprivation significantly. The reason that this money is not being directly transferred to the targeted poor, and is being spent on State run development schemes, rests on the assumption that such initiatives are likely to build capacities, raise income levels and have multiple spin-off effects in the long run. The fact that benefits are not percolating at the desired pace is a reflection on the governance of these schemes.

6.10 In a general sense, the ability to effectively target schemes/programmes towards the most deserving depends critically upon the quality of governance. The better the levels of governance, the more precise can be the targeting. The corollary of this is that in the absence of acceptable levels of governance, it would be preferable to eschew targeted programmes in favour of more generally applicable schemes.

6.11 The macro-economic management of the economy at the Centre and in the States, in general, and that of public expenditure, in particular, also highlights the deficiencies in governance practices resulting from the inertia in the relevant institutions and their practices. An efficient macro-economic management of the economy is a necessary condition for mobilising public resources to fund the development process. It is equally important for providing a stable economic environment for

encouraging and sustaining private enterprises. Constitutionally, the federal structure of the Indian polity places greater responsibilities on the Central Government to raise and allocate the resources needed for undertaking, among others, regionally balanced development in the country. These resources are allocated among the States on the recommendations of the Finance Commission – a statutory body for assessing and recommending the flow of resources to meet the non-plan or the revenue requirements of the States – and the Planning Commission, which has been assigned the responsibility of preparing medium-term national plans in consultation with the Central and State Governments and allocating resources to undertake planned activities. In the past, with the elected governments lasting their full terms, the tenure of the Government and the term of the Finance Commission were co-terminous. With the changing political environment - premature dissolution of the lower house of the Parliament, coalition governments and different political parties forming governments in the States and at the Centre – the working together of such institutions concurrently and in consonance with each other cannot be taken for granted any more. For instance, the tenure of the 13th Lok Sabha, hence the Government, the Tenth Five Year Plan of the country and the term of the award of 11th Finance Commission are only loosely overlapping. These developments have a bearing on the macro-economic management at the Centre, as well as in the States. Institutional changes have to be, therefore, thought of to address the resulting issues and provide continuity and harmony in the working of these bodies. Similarly, there are good reasons to devise new instruments that ensure continuity of basic policies on which there is consensus across political parties. An important example, in this context, is the Bill on Fiscal Responsibility that binds the Government of the day to follow the accepted principles on fiscal consolidation (Box 6.2). It has already been introduced by the Central Government in the Parliament, and there are good reasons for similar bills to be introduced in the State legislatures.

6.12 Corruption is the most endemic and entrenched manifestation of poor governance in

Indian society, so much so that it has almost become an accepted reality and a way of life. The underpinnings of this social phenomenon, which afflicts most developed and developing societies including India, have been reduced into a formulation that equates corruption with monopoly power plus discretion without accountability and low government salaries. In other words, it suggests that when a relatively low paid government servant enters a situation where he/she enjoys both monopoly and discretionary power without any or limited accountability, he/she has an incentive to restrict his/her assigned functions and duties, and in the process, seek and charge a monopoly price for services rendered.

6.13 There are many public activities, given that the society till very recently had an administered and a regulated economy, where institutional arrangements are such that officials have monopoly, as well as discretionary powers vested in them. This includes a range of activities involving interface with State utilities; State agencies responsible for licensing, including motor vehicle licenses, passports, trade licenses; and tendering of publicly instituted works. Procedural and legal hurdles that an individual has to confront in almost every interface with the public authorities also compound the problem.

6.14 It turns out that efficient and effective governance, be it the case of the executive, the judiciary or the legislature, requires the institutions, the delivery mechanism that they adopt and the framework of supportive rules, regulations and procedures to continuously evolve in harmony with each other and in response to the changing context. It makes the issue of governance context specific to time and the stage of development in any society. With the acceptance of market liberalism and globalisation, it is expected that the State yields to the market and the civil society in many areas where it, so far, had a direct but distortionary and inefficient presence. It includes areas where the State, for instance, had entered as a producer of such goods and services that are also produced in the private sector. It also includes the role of the State as a development catalyst where, perhaps, civil society presently has better institutional capacity. At the same time, with the growth of markets and the presence of an aware and sensitive civil society, many developmental functions as well as functions that provide stability to the social order have to be progressively performed by the market and the civil society organisations. It means extension of the market and the civil society domain at the expense of the State in some areas. It also implies an increase in the area of their respective overlaps.

Box 6.2

Fiscal Responsibility Bill – 2000-01

The Central Government introduced the Fiscal Responsibility Bill in the Parliament in its Winter Session in 2000. It is, presently, under examination before it is taken up in the Parliament for enactment. Though Article 292 of the Constitution already provides for fiscal austerity, an explicit legislation is, perhaps, necessary in an era of coalition politics. The key features of the Bill are:

- The fiscal deficit, defined as the excess of total expenditure - including loans, net of repayments - over revenue receipts plus certain non-debt capital receipts, to be 2 per cent of the GDP by 2006 from 5.1 per cent of GDP budgeted for 2000-01;
- The revenue deficit, defined as the difference between revenue receipts and revenue expenditure, to be zero by 2006 from 3.6 per cent of GDP budgeted for 2000-01;
- Total internal and external liabilities at 50 per cent of GDP by 2011 from the present level of about 56 per cent of GDP;
- Prohibition of borrowings by Central Government from RBI after 2004, except under special well-defined circumstances; and
- Expenditure cuts, whenever there is a shortfall of revenues vis-à-vis the budgeted expenditure.

ISSUES AND STRATEGIES FOR THE TENTH PLAN

6.15 The issue of improving governance in the country has to be addressed at multiple levels, in view of the current context. Government can neither have a completely minimalist role nor an entirely proactive one. It has to be directed at building personal capabilities and community capacities for human development through all possible means. The focus has to be on creating a conducive environment for growth and development in the country and, above all, improving the efficiency of resource use, particularly in the public sector. There are, however, aspects of governance and the contingent instruments that have to be taken up on priority. Some of these are described below.

- (i) **People's Participation:** The involvement and participation of the people at all stages of planning, implementation and monitoring is a pre-requisite for good governance. Very often plans are misplaced because they are not reflective of the actual requirements of the people and are not culturally and socially sensitive to the ethos of the people for whom they are meant. People must feel a sense of ownership of such plans/programmes and must participate and even contribute towards them. The trend of expecting the government to do everything for them must come to an end. Programmes and schemes where people participate have been known to be much more successful. This could be done by involving the people through PRIs, local bodies, self help groups, women's groups, user groups, associations, trade unions etc.
- (ii) **Decentralisation:** The enactment of the 73rd & 74th Constitutional Amendment Bills, 1992 has paved the way for the creation of statutory institutional structures for realising the goals of self-governance, under the Panchayati Raj and urban local bodies systems. The explicit objective of this initiative for democratic decentralisation of governance is to accelerate the socio-economic development within a participatory framework at the grass-root level, which must be carried forward in letter and in

spirit. This has been discussed in greater detail in volume III, chapter 5.

- (iii) **Right to Information:** To a great extent, the task of the development administration would become easier if steps are taken to make available information, as a matter of right, to the citizens. The right to information has to be the starting point for much of the reforms proposed. The right to information is so important because very often people do not even know what programmes and schemes are available and what they are entitled to. Also, policy and procedural reforms can be effective only when people know that such changes have been made. The Right to Information Act must be enacted expeditiously and implemented in letter and in spirit.
- (iv) **Reforms of the Revenue System :** Besides there being a governance aspect to the delivery of schemes and services, resource mobilisation should also be viewed from the governance perspective. Unfortunately the revenue system as evolved in India is perceived to be one of the most oppressive and corrupt systems of government. As a result of mal-administration and corruption in the revenue system, not only is there a loss of revenue but it also encourages the people to participate in the black/parallel economy. It is therefore not only necessary to have reasonable tax rates, but equally important to reform the tax administration to make it more transparent, equitable, and user-friendly. There is a need for a review of the system of rewards and punishments and also the procedures used for the same. The district revenue administration also needs to be revisited. With the passage of time, the function of actual revenue collection has become minimal but what is left, are the powers that enable the collection of revenue. These powers should be reviewed and only those which need to be retained should be separately notified, clearly mentioning the authority and the responsibility.
- (v) **Mobilisation of Other Resources :** An important aspect of mobilising resources for funding the development plans relates to

the ability of the system to identify and tap resources. This is an area of managing public resources and is linked to identifying and addressing such administrative and policy practices that come in the way of effecting economy in the expenditure, particularly in the area of non-developmental activities of the State. An important issue is that of the subsidies, both direct and implicit, which are estimated to form a substantial proportion of GDP. The definition, magnitude, utility and justification of these subsidies merit reconsideration, all the more since it is the area with the highest potential for savings. The application and targeting of these subsidies must be made consistent with the governance capabilities. Pension liability of the government is the fastest growing component of current expenditure and has been dwelt on at length in chapter 2. At present, these liabilities are unfunded and represent a claim on the general revenues. There is evidence that the management of pension accounts leaves much to be desired and the government may be paying considerably more than is justified. The next area relates to the public provisioning of infrastructure services that, hitherto, has been funded in such a manner that the public at large has got used to not paying economic charges for these services. Some of these services are power, water supply, irrigation, transport and, even higher education. While equity considerations are, no doubt, important insofar as these subsidies are concerned, it is at the same time a fact that it is the better-off sections of the society that consumes such services are the major beneficiaries. It will be a priority, in the Tenth Plan to improve the fiscal health of the government, both at the Centre and at the State levels by making necessary corrections in the subsidy and the pricing regime for public provisioning of services.

(vi) **Civil Society** : The role of civil society in the development of the nation cannot be overstated. Several thousands of civil society organisations, including voluntary organisations (VOs), non profit making companies, corporate bodies, cooperatives and trusts are

actively involved in economic and social development. They have thus to be recognised as partners in development. The strengths of the voluntary sector, namely their advocacy skills, organisational skills and being closer to the people should be used to the advantage of all concerned. During the Tenth Plan it is proposed to:

- (a) involve VOs in the task of planning, and implementation and being the interface with the public, especially at the cutting edge;
- (b) develop core competencies and professionalism in the voluntary sector;
- (c) broaden the base and scope of voluntarism by encouraging its growth in States and regions where the same has been weak;
- (d) create an enabling environment for greater involvement of the voluntary sector, especially in backward areas where the State machinery is found wanting;
- (e) review the working of the mother NGO concept and based on that consider alternative modalities of funding VOs, for greater transparency and accountability; mechanisms have to be evolved for ensuring that funds from public/private/external sources reach the VOs which are serving the poor and disadvantaged;
- (f) build appropriate data bases, carry out documentation, research and dissemination of innovative development models evolved by VOs;
- (g) promote a symbiosis between VOs and PRIs so that they can complement each other and avoid conflict, this could be done by giving suitable representation to VOs in the planning committees of the PRIs;
- (h) monitoring and evaluation, especially of the 11 monitorable targets of the Tenth Plan; and
- (i) initiate a shift towards increasing the financial contribution of civil society to the development process.

(vii) Civil Service Reforms must be aimed at improving transparency, accountability, honesty, efficiency and sensitivity in public administration at all levels. The solution to the problem of corruption has to be more systemic than any other issue of governance. Merely shrinking the economic role of the State by resorting to deregulation, liberalisation and privatisation is not necessarily the solution to addressing the problem. All such procedures, laws and regulations that breed corruption and come in the way of efficient delivery system will have to be eliminated. The following are some of the steps that will need to be taken in this regard to improve the efficiency of the system.

- (a) *Enforcing the right to information.* This must be the starting point and has been described in point (iii) earlier.
- (b) *Greater transparency in policies and procedures.* The processes and the outcomes of policies, entitlements and procedures must be transparent, widely shared and well displayed.
- (c) *Minimising discretion.* It is believed that less discretion would lead to a more equitable and less corrupt system.
- (d) *Those who have the authority must also be made accountable.* Prevalent institutional arrangements have to be reviewed and changes made so that those vested with authority are also made accountable.
- (e) *Revamping the system of rewards and punishments.* The present system of incentives in public life, which makes corruption a high-return-low-risk activity, need to be changed. There has to be an incentive structure that rewards and promotes merit, at the same time disciplines and punishes malfunction and misconduct. Public examples will have to be made of people convicted or charged for misconduct/corruption.
- (f) *Review of the functions of the Government and shedding of the redundant ones.* The functions of the Government change from

time to time. We have come a long way from the days of famine management and quotas for industrial raw materials etc. The opening up of the economy and globalisation have brought in many changes. It is necessary to review the situation and identify departments and functions within departments that were once essential, but are now redundant and would need to be done away with. A good example is the office of the Cane Commissioner in the Cooperative Department which has become infructuous with the change in the cooperative law. In a bid to enhance the productivity of bureaucracy, it is important to make certain that each employee is performing relevant tasks.

- (g) *Improve professionalism.* The induction of professionals/specialists into the administrative system, on contractual appointments should be examined and suitable policy changes made in the entry policy.
- (h) *Capacity building and training.* The system of pre-service and in-service capacity building for all cadres and ranks must continue where it exists and be introduced where it does not. Training should be demand driven and relate to technical, managerial and information technology related areas.
- (i) *Rightsizing the Government.* It is a well recognised fact that the existing structure and size of the government needs a review. The Expenditure Reforms Committee has reviewed a number of central departments in this regard. Their decisions need to be implemented. Surplus staff in the Government is a serious problem and corrective steps cannot be postponed. There is need to urgently identify the surplus staff, set up an effective redeployment plan and a liberal system for exit. Recruitment policies need to be realigned in a manner so that only functional posts are filled and the other

vacancies are either allowed to lapse or filled through redeployment. There has to be a two per cent reduction in the staff strength per year, over the Tenth Plan period. Since the expenditure on staff has increased to unsustainable levels, there is a need for effecting changes in the service conditions, at least, for the fresh recruits. A shift towards a contributory pension system for the new employees could be a starting point. Alternative ways of carrying out a job/activity must be examined and assigned to the Government only if considered essential.

- (j) *Stability of tenure.* For any constructive, innovative and sustainable work to be done, there has to be a minimum stability of tenure, especially of the middle and senior level officers.

(viii) Procedural Reforms cover all aspects of government's interface with the public. Often private initiatives, entrepreneurial energies and innovations are snuffed out by the maze of red-tapism and procedural and legal hurdles that come in the way of development. Elimination of unnecessary procedural controls and regulations that stifle entrepreneurial energy, breed corruption and affect the common man will be a priority area of improving governance. Although various governments from time to time have announced 'single window clearance' procedures and 'investor assistance cells', they have rarely been effective. The primary reason for this is that the problem is not only of inadequate coordination, but also relates to fragmented and often arbitrary exercise of various powers of government, vested in a number of functionaries, through a complex system of delegation of authority. It is compounded by the fact that the rules and regulations are seldom transparent. Rationalisation of such rules, notifying them in a comprehensive and transparent manner, assigning responsibilities, determining accountability of each functionary, clearly laying down time limits for taking decisions and providing administrative and legal recourse in

case of malafide dilatoriness will be necessary to address this problem.

- (ix) Programme/Project Formulation :** One of the most common reasons for the failure of programmes and schemes is the faulty and incomplete design of the programme/project/scheme. Care must be taken to formulate programmes, projects and schemes in a more systematic and professional manner. Various alternatives for achieving the same purpose must be considered and the most appropriate one selected. Programmes/projects/schemes must have clear goals and objectives; strategies and action plans; and well defined delivery mechanisms. Benchmarks and indicators for reviewing and assessing the impact must be carefully determined. Responsibilities for implementation at various stages must be clearly identified.

- (x) Project Based Reform Linked Support :** One way of improving the delivery system relates to enhancing the scope of project based assistance to States and development agencies/institutions. The recent experience has been that project-based assistance, particularly in the area of infrastructure – roads and bridges, power and irrigation has been more effective in meeting its objectives. It is also more amenable to monitoring and better targeting. Such assistance has to be essentially viewed as an input that meets strategic gaps in the development effort of the State Governments which, once met, should enable the States to sustain their efforts. Some examples of reform linked support are the Accelerated Irrigation Benefit Programme (AIBP), Accelerated Power Development and Reform Programme (APDRP), Urban Incentive Facility and the Rashtriya Sam Vikas Yojana (RSVY).

- (xi) Synergy and Coordination** between different public and para-statal agencies engaged in development is critical for obtaining the maximum benefit from limited resources, for minimising overheads, checking duplication of efforts and using resources and person-power

optimally. Moreover, excessive loading of responsibilities on some branches of civil administration, for instance, the District Collectorate which has been reported to be overseeing 167 development schemes at the block level in one instance, not only undermines the overall institutional capacity to deliver but also compromises on the quality of public interventions in what are critical areas of human development.

(xii) Monitoring : Another aspect that has a direct bearing on improving the delivery system and also the efficacy and efficiency of public spending relates to the issue of monitoring. There is a general perception and perhaps rightly so, that in the absence of adequate monitoring and evaluation of plan programmes and other non-plan activities, there is a considerable amount of wastage, leakages and spill-over of programmes over successive plans, leading to a less than optimal use of the scarce public resources in the development process. This is on account of the fact that the existing mechanisms for monitoring and evaluation have neither been adequately used by the agencies responsible for implementing various programmes nor has there been any visible effort to improve and strengthen these mechanisms over time. The Planning Commission has recently taken steps to address this issue in consultation with the Central Ministries. It has initiated a practice of holding of Quarterly Performance Review meetings under the concerned Members in the Planning Commission. The objective is to review from time to time the performance of the Central Ministries' plan programmes and schemes, both from the physical and financial points of view, correlate the two, identify constraints and bottlenecks, and suggest remedial measures. Special attention is however to be given to the design and delivery mechanism of individual schemes with a view to improving the accountability and efficacy of plan spending. Similar initiatives need to be taken by the Central and State Governments. In order to make monitoring focused and useful, clearly defined indicators (inputs and output indicators)

must be identified, with clear time-frames at the project/scheme formulation stage itself.

(xiii) Rationalisation of Centrally Sponsored Schemes (CSSs) and Central Sector Schemes (CSs) Using Zero Based Budgeting (ZBB): Centrally Sponsored Schemes were originally to be formulated only where an important national objective such as poverty alleviation was to be addressed, or the programme has a regional or inter-State character or is in the nature of pace setter, or is for the purpose of survey or research. However, the CSSs have proliferated enormously, and in the terminal year of the Ninth Plan there were as many as 360 CSSs and 2247 CSs. Many of these have similar objectives and target the same population. Certain generic components, like information, education and communication (IEC) are repeated in a number of schemes. This also leads to multiplicity of the implementing machinery and lack of synergy and coordination. CSSs rarely follow a project approach and usually do not have benchmarks or performance indicators. The Tenth Plan strategy clearly aims at improving efficiency or public assets and the quality of expenditure of the public sector through rationalisation of the Central Sector and Centrally Sponsored Schemes by way of convergence, weeding out and transfer to the States. In the terminal year of the Ninth Plan, the Planning Commission carried out a Zero Based Budgeting (ZBB) exercise for all the Central Ministries/ Departments with the above purpose in mind. As a result of this exercise, of the 360 CSSs in operation in the Ninth Plan, Planning Commission recommended weeding out of 48 schemes, merger of 161 schemes into 53 schemes, and retaining the remaining 135 schemes, implying a carrying forward of 188 CSSs to the Tenth Plan. Similarly, of the 2247 Central Sector Schemes in operation in the Ninth Plan, Planning Commission recommended weeding out of 539 schemes, merger of 1001 schemes into 233 schemes, and the retaining remaining 689 schemes, implying a carrying forward of 922 CSs to the Tenth Plan.

It has been decided upon that this exercise will be a regular feature for the Planning Commission and the States will also be encouraged to undertake such reviews of their schemes. Besides the above, the following strategies will be followed in the Tenth Plan:

- (a) a new CSS will be permitted only in exceptional circumstances. Efforts will be made to modify existing schemes or take up the activities in the State sector rather than start a new CSS.
- (b) monitoring of CSs and CSSs including tracking State-wise flow of funds and assessing physical and financial targets under different schemes will be essential
- (c) as far as possible, all new CSSs should be conditional on reforms in that sector
- (d) there should be flexibility between components of a scheme; and
- (e) wherever possible, the macro management or cafeteria approach should be used for a group of schemes. This provides the states a basket of schemes to choose from, and selection of the schemes most suited to their requirements.

(xiv) Empowerment of the Marginal and the Excluded has been demonstrated, in many cases, to be among the important means to establish countervailing forces or pressure groups in society to resist bad governance, and check the deterioration in governance standards and personal exploitation by others. The vested interests in any system often have stakes in maintaining the status quo of such under-privileged groups. The only way to break these informal but deliberate and often stubborn arrangements is by equipping the marginalised in the society to fight for their legitimate rights. This requires not only legislative initiatives through acts of positive discrimination, for instance, by undertaking reservation for women in the legislative bodies at all levels, but it also requires directing explicitly the public developmental efforts at addressing the economic insecurities of the

targeted segments of the population. It requires the dissemination of information and free access to all. Mention has been made to the importance of the Right to Information in para (iii) earlier. There is a need to identify a system to ascertain whether information is reaching these groups or not. What is required most of all is the capacity building of the individuals through human development strategies, involving the access to education, basic health care facilities and opportunities of livelihood. The media and the voluntary sector also have a very important role to play in exposing and bringing up front issues of bad governance and graft.

(xv) Judicial Reform : There is an urgent need to bring about judicial reforms with a view to speeding up the process of delivering justice. Alternatives to the regular delivery mechanism through a hierarchy of alternate courts like Family Courts, Lok Adalts, Nyaya Panchayats etc., need to be resorted to more often.

(xvi) Using Information Technology (IT) for Good Governance : Electronic-governance (E-governance) is fast emerging as an important tool for achieving good governance especially with regard to improving efficiency, transparency and making interface with government user friendly. E-governance denotes the application of IT to the processes of government functioning in order to bring about better governance which has been termed as SMART (simple, moral, accountable, responsive, and transparent). So far the emphasis has been on providing connectivity, networking, technology upgradation, selective delivery systems for information and services and a package of software solutions. In the Tenth Plan it is proposed to focus on the re-engineering of procedures and rules which are in fact the core of any effective programme of E-governance. The master plan for E-governance for the Tenth Plan emphasises the need for a focused vision about the objectives of introducing E-governance. The range and standards of delivery to be achieved within well defined time

frames will need to be clearly laid down. Due attention will be given to the sustainability, inter-activity and standardisation of any E-governance activities. Resources will be raised both from the public and private sectors. Within the ambit of E-governance, it will be necessary to develop G2G, G2C, G2B functionalities*. One of the major initiatives envisaged in the IT sector is to take IT to the masses. Creation of softwares for establishing an inter-face with the diverse Indian languages used in India poses a real challenge. In the Tenth Plan the endeavour will be to develop suitable software and technologies to enable people to interact and use computers in local languages. Internet accessibility and content creation in local languages will be promoted. Innovative and cost effective solutions, at the same time, have to be found to make available the required band-width in remote and rural areas.

The Path Ahead

6.16 Good governance is perhaps the single most important factor in ensuring that the objectives of the Tenth Plan are achieved. In view of the above, it will be important that all the players are on board and that there is a realization of the need and a willingness to undertake the reforms and other policy steps mentioned in para 6.15 above. Steps will have to be taken to address issues relating to improved people's participation, effective decentra-

lization of governance, involvement of civil society, especially voluntary organizations and the crucial Right to Information. Civil service reforms aimed at improving transparency, accountability, efficiency, fair play and honesty; procedural reforms for public-government inter-face to rid the system of unnecessary rules, procedural regulations and controls; reforms of the revenue system and mobilisation of resources; and judicial reforms with a view to hasten the process of delivery of justice will be required to be taken up in all earnestness. Systematic and professional programme/project formulation; project based reform linked plan support; synergy and coordination between different government departments and agencies; rationalisation of Centrally Sponsored Schemes and Central Schemes using Zero Based Budgeting; and more effective monitoring and evaluation will have to be encouraged and supported. Empowerment of the marginal and the excluded should be pursued with a view to equip them to act as pressure groups to resist bad governance and check the deterioration in governance and exploitation of the public. E-governance and IT will have to be given a big push to increase transparency, fair play and make systems faster and user friendly.

* G2G : Government to Government
 G2C : Government to Citizen
 G2B : Government to Business

CHAPTER – 7

DISASTER MANAGEMENT: THE DEVELOPMENT PERSPECTIVE

7.1 Five Year Plan documents have, historically, not included consideration of issues relating to the management and mitigation of natural disasters. The traditional perception has been limited to the idea of “calamity relief”, which is seen essentially as a non-plan item of expenditure. However, the impact of major disasters cannot be mitigated by the provision of immediate relief alone, which is the primary focus of calamity relief efforts. Disasters can have devastating effects on the economy; they cause huge human and economic losses, and can significantly set back development efforts of a region or a State. Two recent disasters, the Orissa Cyclone and the Gujarat Earthquake, are cases in point. With the kind of economic losses and developmental setbacks that the country has been suffering year after year, the development process needs to be sensitive towards disaster prevention and mitigation aspects. There is thus need to look at disasters from a development perspective as well.

7.2 Further, although disaster management is not generally associated with plan financing, there are in fact a number of plan schemes in operation, such as for drought proofing, afforestation, drinking water, etc., which deal with the prevention and mitigation of the impact of natural disasters. External assistance for post-disaster reconstruction and streamlining of management structures also is a part of the Plan. A specific, centrally sponsored scheme on disaster management also exists. The Plan thus already has a defined role in dealing with the subject.

7.3 Recently, expert bodies have dwelt on the role of the Planning Commission and the use of plan funds in the context of disaster management. Suggestions have been made in this regard by the Eleventh Finance Commission, and also the High

Powered Committee on Disaster Management. An approach on planning for safe development needs to be set out in the light of these suggestions.

7.4 This chapter reflects the considerations outlined above. It briefly outlines the global context and the Indian experience of disasters, sets out the institutional and financial arrangements for disaster management and the response towards these in the country, looks at directions for improvement, and concludes with a strategy to facilitate planning for safe national development in the Tenth Plan period.

THE GLOBAL CONTEXT

7.5 There has been an increase in the number of natural disasters over the past years, and with it, increasing losses on account of urbanisation and population growth, as a result of which the impact of natural disasters is now felt to a larger extent. According to the United Nations, in 2001 alone, natural disasters of medium to high range caused at least 25,000 deaths around the world, more than double the previous year, and economic losses of around US \$ 36 billion. These figures would be much higher, if the consequences of the many smaller and unrecorded disasters that cause significant losses at the local community level were to be taken into account. Devastations in the aftermath of powerful earthquakes that struck Gujarat, El Salvador and Peru; floods that ravaged many countries in Africa, Asia and elsewhere; droughts that plagued Central Asia including Afghanistan, Africa and Central America; the cyclone in Madagascar and Orissa; and floods in Bolivia are global events in recent memory. However, what is disturbing is the knowledge that these trends of destruction and devastation are on the rise instead of being kept in check.

7.6 Natural disasters are not bound by political boundaries and have no social or economic considerations. They are borderless as they affect both developing and developed countries. They are also merciless, and as such the vulnerable tend to suffer more at the impact of natural disasters. For example, the developing countries are much more seriously affected in terms of the loss of lives, hardship borne by population and the percentage of their GNP lost. Since 1991, two-third of the victims of natural disasters were from developing countries, while just 2 per cent were from highly developed nations. Those living in developing countries and especially those with limited resources tend to be more adversely affected. With the alarming rise in the natural disasters and vulnerability per se, the world community is strengthening its efforts to cope with it.

7.7 As a number of the most vulnerable regions are in India, natural disaster management has emerged as a high priority for the country. Going beyond the historical focus on relief and rehabilitation after the event, we now have to look ahead and plan for disaster preparedness and mitigation, in order that the periodic shocks to our development efforts are minimized.

THE INDIAN EXPERIENCE

Regional Vulnerabilities

7.8 Physical vulnerability relates to the physical location of people, their proximity to the

Box 7.1

INDIA'S KEY VULNERABILITIES

Coastal States, particularly in the East Coast and Gujarat are vulnerable to cyclones.

4 crore hectare land mass is vulnerable to floods.

68 per cent of net sown area is vulnerable to drought.

55 per cent of total area is in Seismic Zones III - V, and vulnerable to earthquakes.

Sub-Himalayan/Western Ghat is vulnerable to landslides.

hazard zone and standards of safety maintained to counter the effects. For instance, some people are vulnerable to flood only because they live in a flood prone area. Physical vulnerability also relates to the technical capacity of buildings and structures to resist the forces acting upon them during a hazard event.

7.9 The extent to which a population is affected by a calamity does not purely lie in the physical components of vulnerability, but is contextual also to the prevailing social and economic conditions and its consequential effect on human activities within a given society. Research in areas affected by earthquakes indicates that single parent families, women, handicapped people, children and the aged are particularly vulnerable social groups. The geo-physical setting with unplanned and inadequate developmental activity is a cause for increased losses during disasters. In the case of India, the contribution of over-population to high population density, which in turn results in escalating losses, deserves to be noted. This factor sometimes tends to be as important as physical vulnerability attributed to geography and infrastructure alone.

7.10 The continent of Asia is particularly vulnerable to disaster strikes. Between the years 1991 to 2000 Asia has accounted for 83 per cent of the population affected by disasters globally. While the number of people affected in the rest of the world were 1,11,159, in Asia the number was 5,54,439.¹ Within Asia, 24 per cent of deaths due to disasters occur in India, on account of its size, population and vulnerability. Floods and high winds account for 60 per cent of all disasters in India. While substantial progress has been made in other sectors of human development, there is need to do more towards mitigating the effect of disasters.

7.11 Many parts of the Indian sub-continent are susceptible to different types of disasters owing to the unique topographic and climatic characteristics. About 54 per cent of the sub-continent's landmass is vulnerable to earthquakes while about 4 crore hectares is vulnerable to periodic floods. The

1. World Disasters Report, IFRC, 2001

decade 1990-2000, has been one of very high disaster losses within the country, losses in the Orissa Cyclone in 1999, and later, the Gujarat Earthquake in 2001 alone amount to several thousand crore of Rupees, while the total expenditure on relief and reconstruction in Gujarat alone has been to the tune of Rs 11,500 crore.²

7.12 Similarly, the country has suffered four major earthquakes in the span of last fifty years along with a series of moderate intensity earthquakes that have occurred at regular intervals. Since 1988, six earthquakes have struck different parts of the country. These caused considerable human and property losses.

Table 7.1
Major Earthquakes in India, 1988-2001

Date	Location	Magnitude
August 21, 1988	Bihar-Nepal Border	6.4
October 20, 1991	Uttarkashi, Uttar Pradesh	6.6
September 30, 1993	Latur- Osmanabad, Maharashtra	6.3
May 22, 1997	Jabalpur, Madhya Pradesh	6.0
March 29, 1999	Chamoli, Uttar Pradesh	6.9
January 26, 2001	Bhuj, Gujarat	7.7

Source : Indian Meteorological Department and US Geological Survey

Economic Losses Due to Disasters

7.13 Disasters lead to enormous economic losses that are both immediate as well as long term in nature and demand additional revenues. Also, as an immediate fall-out, disasters reduce revenues from the affected region due to lower levels of economic activity leading to loss of direct and indirect taxes. In addition, unplanned budgetary allocation to disaster recovery can hamper development interventions and lead to unmet developmental targets.

2. As on 11-12-2000, Gujarat Earthquake : A Case Study, NCDM, 2002, New Delhi

Box 7.2

Global Losses Through Natural Disasters

According to Reinsurance Company 'Munich Re' costs associated with natural disasters has gone up 14 fold since the 1950s. Each year from 1991 to 2000, an average of 211 million people were killed or affected by natural disasters - seven times greater than the figure for those killed or affected by conflict. Towards the end of the 1990s, the world counted some 25 million 'environmental refugees'- for the first time more people had fled natural hazards than conflict.

Source: World Disasters Report, 2001

7.14 Disasters may also reduce availability of new investment, further constricting the growth of the region. Besides, additional pressures may be imposed on finances of the government through investments in relief and rehabilitation work.

7.15 In the recent earthquake in Gujarat, more than 14,000 lives were lost, ten lakh houses were damaged and the asset loss has been indicated to be worth 15,000 crore. Tables 7.2 to 7.5 give an indication of the magnitude of the damage and losses incurred by the country in recent natural disasters.

7.16 The dimensions of the damage, as evident in the tables and the diagram 7.1 emphasise the point that natural disasters cause major setbacks to development and it is the poorest and the weakest that are the most vulnerable to disasters. Given the high frequency with which one or the other part of the country suffers due to disasters, mitigating the impact of disasters must be an integral component of our development planning and be part of our poverty reduction strategy.

INSTITUTIONAL ARRANGEMENTS

7.17 The country with its federal system of Government has specific roles for the Central and State Governments. However, the subject of disaster management does not specifically find

Table 7.2
Damage due to Natural Disasters in India

Year	People affected (Lakh)	Houses & buildings, partially or totally, damaged	Amount of property damage/loss (Rs Crore)
1985	595.6	2,449,878	40.06
1986	550.0	2,049,277	30.74
1987	483.4	2,919,380	20.57
1988	101.5	242,533	40.63
1989	30.1	782,340	20.41
1990	31.7	1,019,930	10.71
1991	342.7	1,190,109	10.90
1992	190.9	570,969	20.05
1993	262.4	1,529,916	50.80
1994	235.3	1,051,223	10.83
1995	543.5	2,088,355	40.73
1996	549.9	2,376,693	50.43
1997	443.8	1,103,549	n.a.
1998	521.7	1,563,405	0.72
1999	501.7	3,104,064	1020.97
2000	594.34	2,736,355	800.00
2001	788.19	846,878	12000

Source : Annual Reports, NDM Division, Ministry of Agriculture

Table 7.3
Annual Damage due to Heavy Rains, Landslide and Floods

S. No	Year	Districts affected	Villages affected (No)	Population affected (Lakh)	Crop Area affected (Lakh Ha.)	Houses Damaged (no.)	Human life loss (no.)	Cattle loss (no.)	Estimated value of loss to houses (Rs. in crore)	Estimated value of Public properties (Rs. in crore)
1	1999	202	33,158	328.12	8.45	884,823	1,375	3,861	0.72	-
2	2000	200	29,964	416.24	34.79	2,736,355	3,048	102,121	631.25	389.72
3	2001	122	32,363	210.71	18.72	346,878	834	21,269	195.57	676.05

Source : Annual Reports, Natural Disaster Management Division, Ministry of Agriculture

Table 7.4
Damage due to Cyclone in Orissa in October '2000

Date of occurrence	Total no of districts	Districts affected	Villages affected (No)	Population affected (Lakh)	Crop Area affected (Lakh Ha)	Houses Damaged (no.)	Human life loss (no.)	Cattle loss (no.)
17-18.10.99	30	4	5,181	37.47	1.58	331,580	199	10,578
29-30.10.99	30	12	14,643	129.22	18.43	1,828,532	9,887	444,531

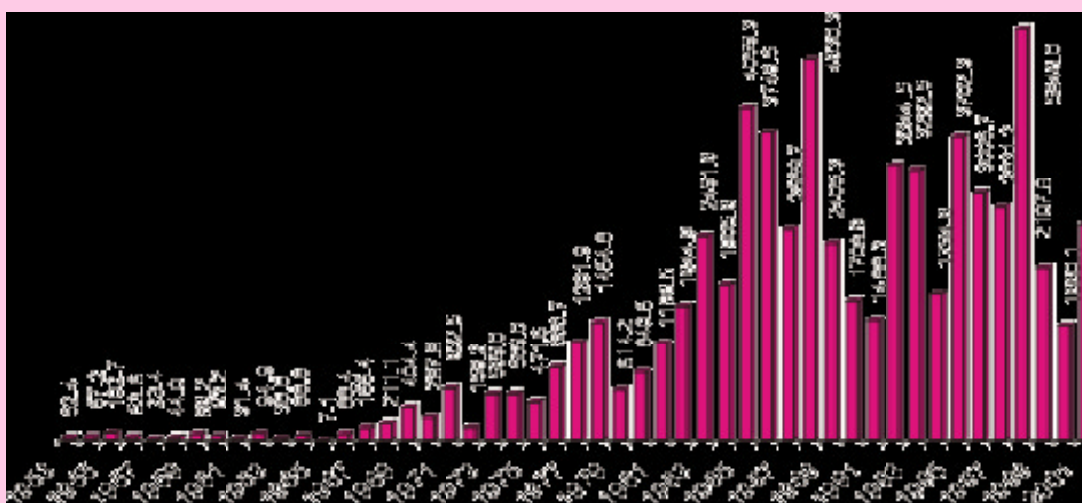
Source : Annual Reports, Natural Disaster Management Division, Ministry of Agriculture

Table 7.5
Losses due to Droughts: 1999-2001

S.No	Year	Districts affected	Villages affected (No)	Population affected (Lakh)	Damage to crops area (Lakh Ha)	Estimated value of damaged crops (Rs crore)	Cattle population affected (in lakh)
1	1999	125	-	369.88	134.22	6.44	345.60
2	2000	110	54,883	378.14	367.00	371.87	541.67
3	2001	103	22,255	88.19	67.44	NA	34.28
TOTAL		338	77,138	836.21	568.66	378.31	921.55

Source: Annual Reports, Natural Disaster Management Division, Ministry of Agriculture

Figure 7.1
Cumulative Annualised Flood Damage (Rs. in crore)



Source: Central Water Commission.

mention in any of the three lists in the 7th Schedule of the Indian Constitution, where subjects under the Central and State Governments as also subjects that come under both are specified. On the legal front, there is no enactment either of the Central or of any State Government to deal with the management of disasters of various types in a comprehensive manner.

7.18 The country has an integrated administrative machinery for management of disasters at the National, State, District and Sub-District levels. The basic responsibility of undertaking rescue, relief and rehabilitation measures in the event of natural disasters, as at present, is that of the State Governments concerned. The Central Government supplements the efforts of the States by providing financial and logistic support.

Central Level

7.19 The dimensions of response at the level of the Central Government are determined in accordance with the existing policy of financing relief expenditure and keeping in view the factors like:

- (i) the gravity of a natural disaster;
- (ii) the scale of the relief operation necessary; and
- (iii) the requirements of Central assistance for augmenting financial resources and logistic support at the disposal of the State Government.

7.20 The Contingency Action Plan (CAP) identifies initiatives required to be taken by various Central Ministries and Public Departments in the wake of natural calamities. It sets down the procedures and determines the focal points in the administrative machinery to facilitate launching of relief and rescue operations without delay.

7.21 The Ministry of Home Affairs is the nodal Ministry for coordination of relief and response and overall natural disaster management, and the Department of Agriculture & Cooperation is the nodal Ministry for drought management. Other

Ministries are assigned the responsibility of providing emergency support in case of disasters that fall in their purview as indicated in Table 7.6.

Table 7.6
Ministries Responsible for Various
Categories of Disasters

Disaster	Nodal Ministry
Natural Disasters Management (other than Drought)	Ministry of Home Affairs
Drought Relief	Ministry of Agriculture
Air Accidents	Ministry of Civil Aviation
Railway Accidents	Ministry of Railways
Chemical Disasters	Ministry of Environment & Forests
Biological Disasters	Ministry of Health
Nuclear Disasters	Department of Atomic Energy

The following decision-making and standing bodies are responsible for disaster management at the Central level:

- Union Cabinet, headed by the Prime Minister.
- Empowered Group of Ministers, headed by the Deputy Prime Minister
- National Crisis Management Committee (NCMC), under the chairmanship of the Cabinet Secretary.
- Crisis Management Group (CMG): under the chairmanship of the Central Relief Commissioner comprising senior officers from the various Ministries and other concerned Departments which reviews contingency plans, measures required for dealing with a natural disaster, and co-ordinates the activities of the Central Ministries and the State Governments in relation to disaster preparedness response and relief.
- Technical Organizations, such as the Indian Meteorological Department (cyclone/earthquake), Central Water Commission (floods),

Building and Material Promotion Council (construction laws), Bureau of Indian Standards (norms), Defence Research & Development Organization (nuclear/biological), Directorate General Civil Defence provide specific technical support to coordination of disaster response and management functions.

- The setting up of a National Disaster Management Authority (NDMA) is being contemplated by the Ministry of Home Affairs as the proposed apex structure within the government for the purpose. Amongst other major organisational initiatives, it is proposed to:
 - (a) establish a specialised and earmarked response team for dealing with nuclear/biological/chemical disasters;
 - (b) establish search and rescue teams in each State;
 - (c) strengthen communication systems in the North Eastern Region.

State Government

7.22 The responsibility to cope with natural disasters is essentially that of the State Government. The role of the Central Government is supportive in terms of supplementation of physical and financial resources. The Chief Secretary of the State heads a state level committee which is in overall charge of the relief operations in the State and the Relief Commissioners who are in charge of the relief and rehabilitation measures in the wake of natural disasters in their States function under the overall direction and control of the state level committee. In many states, Secretary, Department of Revenue, is also in-charge of relief. State Governments usually have relief manuals and the districts have their contingency plan that is updated from time to time.

District and Local Level

7.23 The district administration is the focal point for implementation of all governmental plans and activities. The actual day-to-day function of administering relief is the responsibility of the Collector/District Magistrate/Deputy Commissioner who

exercises coordinating and supervising powers over all departments at the district level. Though it may not be a common phenomenon, there exists by and large in districts also a district level relief committee consisting of officials and non-officials.

7.24 The 73rd and 74th constitutional amendments recognise Panchayati Raj Institutions as 'Institutions of self-government'. The amendment has also laid down necessary guidelines for the structure of their composition, powers, functions, devolution of finances, regular holding of elections and reservation of seats for weaker sections including women. These local bodies can be effective instruments in tackling disasters through early warning system, relief distribution, providing shelter to the victims, medical assistance etc.

7.25 Other than the national, state, district and local levels, there are various institutional stakeholders who are involved in disaster management at various levels in the country. These include the police and para-military forces, civil defence and home-guards, fire services, ex-servicemen, non-government organisations (NGOs), public and private sector enterprises, media and HAM operators, all of whom have important roles to play.

Armed Forces

7.26 The Indian Armed Forces are supposed to be called upon to intervene and take on specific tasks only when the situation is beyond the capability of civil administration. In practice, the Armed Forces are the core of the government's response capacity and tend to be the first responders of the Government of India in a major disaster. Due to their ability to organize action in adverse ground circumstances, speed of operational response and the resources and capabilities at their disposal, the Armed Forces have historically played a major role in emergency support functions such as communications, search and rescue operations, health and medical facilities, transportation, power, food and civil supplies, public works and engineering, especially in the immediate aftermath of disaster. Disaster management plans should incorporate the role expected of them so that the procedure for deploying them is smooth and quick.

External Linkages

7.27 The Government of India is a member of various international organisations in the field of disaster response and relief. While, as a policy, no requests for assistance or appeals are made to the international community in the event of a disaster, assistance offered suo moto is accepted. Linkages exist with the following organisations:

- a) UN Office for Coordination of Humanitarian Affairs (UN OCHA), which has been made responsible by UN General Assembly mandate for all international disaster response.
- b) United Nations Development Programme (UNDP), responsible for mitigation and prevention aspects of disaster management.
- c) UN Disaster Assessment and Coordination (UNDAC) System.

Streamlining Institutional Arrangements for Disaster Response

7.28 Institutional arrangements for disaster response are the heart of disaster management systems. There is no dearth of personnel, both civilian and military, experienced in handling situations arising out of natural disasters. However, there certainly is a pressing need for improvement and strengthening of existing institutional arrangements and systems in this regard to make the initial response to a disaster more effective and professional. Most of the resources and expertise needed already exist with the Government. What needs to be streamlined is how they should be integrated, trained and deployed. Some of the areas where improvement is urgently needed are:

- a) Integrated planning for disasters, including the integration of relevant Armed Forces formations into disaster management planning at all levels from District to State and Central Government.
- b) Setting up of a modern, permanent national command centre or operations

room, with redundant communications and data links to all State capitals. The national command centre or operations room needs to be manned on a 24-hour basis by professionals to cater for instant integrated response. There needs to be a properly equipped operations room at the State level as well.

- c) Establishment of a national stand by, quick reaction team composed of experienced professionals, both military and civilian, drawn from Central and State Government staff to respond immediately by flying in a matter of hours an experienced response team to the locations when a disaster strikes. This team can be organized and run professionally on the same lines as the United Nations Disaster Assessment and Coordination (UNDAC) teams.
- d) Creation of urban search and rescue capacity at all levels, by establishing a fully equipped Search and Rescue unit, as part of the fire service in all State capitals, with trained staff and modern equipment such as thermal imagers, acoustic detection devices etc. This is of immediate relevance since a major weakness exposed in the Gujarat earthquake was a lack of specialised urban search and rescue capability in India.
- e) Media policy geared to handling the growing phenomenon of real time television reporting, which generates enormous political pressures on a government to respond rapidly and efficiently. This needs attention since the effect is going to increase, not decrease in future.
- f) Closer interface with and better understanding of the international system for disaster response, and putting in place, systems for dealing with international assistance once it comes in e.g., customs, immigration, foreign policy implications etc. A greater appreciation is needed of the speed and automation of modern international response to a natural disaster. Closer interaction is required between of

the Ministry of External Affairs and the relevant inter-national agencies concerned with disaster response.

- g) Standard procedures for dealing with domestic humanitarian and relief assistance from non-government sources. Procedures and systems need to be set out to avoid confusion and ensure best utilisation of the assistance being offered, just as in the case of systems for international assistance.
- h) Modern unified legislation for disaster management. In view of the current division of responsibilities between the State and Central Government into state, central and concurrent lists, there is a need to create a body of legislation dealing with response to natural disasters and other emergencies, clearly delineating responsibilities and powers of each entity and specifying what powers or actions would need to be triggered on declaration of a disaster by the Government of India or a State Government. This legislation should also incorporate the current legislation dealing with chemical emergencies that has been created by the Ministry of Environment so that all emergencies are dealt with under one law. The legislation should include clear definitions of what constitutes a disaster at a national level.

FINANCIAL ARRANGEMENTS

Financing of Relief Expenditures

7.29 The policy arrangements for meeting relief expenditure related to natural disasters are, by and large, based on the recommendations of successive finance commissions. The two main windows presently open for meeting such expenditures are the Calamity Relief Fund (CRF) and National Calamity Contingency Fund (NCCF). The Calamity Relief Fund is used for meeting the expenditure for providing immediate relief to the victims of cyclone, drought, earthquake, fire, flood and hailstorm. Expenditure on restoration of

damaged capital works should ordinarily be met from the normal budgetary heads, except when it is to be incurred as part of providing immediate relief, such as restoration of drinking water sources or provision of shelters etc., or restoration of communication links for facilitating relief operations. The amount of annual contribution to the CRF of each State for each of the financial years 2000-01 to 2004-05 is as indicated by the Finance Commission. Of the total contribution indicated, the Government of India contributes 75 per cent of the total yearly allocation in the form of a non-plan grant, and the balance amount is contributed by the State Government concerned. A total of Rs. 11,007.59 crore was provided for the Calamity Relief Fund from 2000-05.

7.30 Pursuant to the recommendations of the Eleventh Finance Commission, apart from the CRF, a National Calamity Contingency Fund (NCCF) Scheme came into force with effect from the financial year 2000-01 and would be operative till the end of the financial year 2004-05. NCCF is intended to cover natural calamities like cyclone, drought, earthquake, fire, flood and hailstorm, which are considered to be of severe nature requiring expenditure by the State Government in excess of the balances available in its own Calamity Relief Fund. The assistance from NCCF is available only for immediate relief and rehabilitation. Any reconstruction of assets or restoration of damaged capital should be financed through re-allocation of Plan funds. There is need for defining the arrangements in this regard.

7.31 The initial corpus of the National Fund is Rs.500 crore, provided by the Government of India. This fund is required to be recouped by levy of special surcharge for a limited period on central taxes. An amount of about Rs.2,300 crore has already been released to States from NCCF. A list of items and norms of expenditure for assistance chargeable to CRF/NCCF in the wake of natural calamities is prescribed in detail from time to time.

Financing of Disaster Management Through Five Year Plans

7.32 Although not specifically addressed in Five Year Plan documents in the past, the Government of India has a long history of using funds from the Plan for mitigating natural disasters. Funds are provided under Plan schemes i.e., various schemes of Government of India, such as for drinking water, employment generation, inputs for agriculture and flood control measures etc. There are also facilities for rescheduling short-term loans taken for agriculture purposes upon certification by the District/State administration. Central Government's assets/infrastructure are to be repaired/rectified by the respective Ministry/Department of Government of India. Besides this, at the occurrence of a calamity of great magnitude, funds flow from donors, both local and international, for relief and rehabilitation, and in few cases for long-term preparedness/preventive measures. Funds for the latter purposes are also available from multilateral funding agencies such as the World Bank. These form part of the State Plan.

7.33 There are also a number of important ongoing schemes that specifically help reduce disaster vulnerability. Some of these are: Integrated Wasteland Development Programme (IWDP), Drought Prone Area Programme (DPAP), Desert Development Programme (DDP), Flood Control Programmes, National Afforestation & Eco-development Programme (NA&ED), Accelerated Rural Water Supply Programme (ARWSP), Crop Insurance, Sampurn Grameen Rozgar Yojana (SGRY), Food for Work etc.

Initiatives Proposed by Various Bodies Regarding Financing Under the Plan

7.34 References have recently been made to the role of the Plan in disaster management by the High Power Committee (HPC) on Disaster Management, as well as by the Eleventh Finance Commission. The HPC was constituted in 1999 and submitted its Report in October 2001. The HPC took an overview of all recent disasters (natural as well as manmade) in the country and identified

common response and preparedness mechanisms on the basis of a series of consultations with a number of government, non-government, national and international agencies and media organisations. An important recommendation of the Committee was that at least 10 per cent of plan funds at the national, state and district levels be earmarked and apportioned for schemes which specifically address areas such as prevention, reduction, preparedness and mitigation of disasters.

7.35 The Eleventh Finance Commission too paid detailed attention to the issue of disaster management and, in its chapter on calamity relief, came out with a number of recommendations, of which the following have a direct bearing on the Plan:

- (a) Expenditure on restoration of infrastructure and other capital assets, except those that are intrinsically connected with relief operations and connectivity with the affected area and population, should be met from the plan funds on priority basis.
- (b) Medium and long-term measures be devised by the concerned Ministries of the Government of India, the State Governments and the Planning Commission to reduce, and if possible, eliminate, the occurrences of these calamities by undertaking developmental works.
- (c) The Planning Commission, in consultation with the State Governments and concerned Ministries, should be able to identify works of a capital nature to prevent the recurrence of specific calamities. These works may be funded under the Plan.

PLANNING FOR SAFE NATIONAL DEVELOPMENT

7.36 Development programmes that go into promoting development at the local level have been left to the general exercise of planning. Measures need also to be taken to integrate disaster mitigation efforts at the local level with the general exercise of planning, and a more supportive environment created for initiatives towards managing of disasters

at all levels: national, state, district and local. The future blue-print for disaster management in India rests on the premise that in today's society while hazards, both natural or otherwise, are inevitable, the disasters that follow need not be so and the society can be prepared to cope with them effectively whenever they occur. The need of the hour is to chalk out a multi-pronged strategy for total risk management, comprising prevention, preparedness, response and recovery on the one hand, and initiate development efforts aimed towards risk reduction and mitigation, on the other. Only then can we look forward to "sustainable development."

Disaster Prevention And Preparedness Measures

Information and Research Network

7.37 Disaster prevention is intrinsically linked to preventive planning. Some of the important steps in this regard are:

- (a) Introduction of a comprehensive process of vulnerability analysis and objective risk assessment.
- (b) Building a robust and sound information database: A comprehensive database of the land use, demography, infrastructure developed at the national, state and local levels along with current information on climate, weather and man-made structures is crucial in planning, warning and assessment of disasters. In addition, resource inventories of governmental and non-governmental systems including personnel and equipment help in efficient mobilisation and optimisation of response measures.
- (c) Creating state-of-the-art infrastructure: The entire disaster mitigation game plan must necessarily be anchored to frontline research and development in a holistic mode. State-of-the art technologies available worldwide need to be made available in India for upgradation of the disaster

management system; at the same time, dedicated research activities should be encouraged, in all frontier areas related to disasters like biological, space applications, information technology, nuclear radiation etc., for a continuous flow of high quality basic information for sound disaster management planning,

- (d) Establishing Linkages between all knowledge-based institutions: A National Disaster Knowledge Network, tuned to the felt needs of a multitude of users like disaster managers, decision makers, community etc., must be developed as the network of networks to cover natural, manmade and biological disasters in all their varied dimensions,

Capacity Building, Training & Education

7.38 Personnel involved in the exercise have to draw upon knowledge of best practices and resources available to them. Information and training on ways to better respond to and mitigate disasters to the responders go a long way in building the capacity and resilience of the country to reduce and prevent disasters. Training is an integral part of capacity building as trained personnel respond much better to different disasters and appreciate the need for preventive measures. The directions in this regard are:

- (a) The multi-sectoral and multi-hazard prevention based approach to disaster management requires specific professional inputs. Professional training in disaster management should be built into the existing pedagogic research and education. Specialised courses for disaster management may be developed by universities and professional teaching institutions, and disaster management should be treated as a distinct academic and professional discipline, something that the American education system has done successfully. In addition to separate diploma/degree courses in disaster management, the subject needs to be discussed

and taught as a specific component in professional and specialised courses like medicine, nursing, engineering, environmental sciences, architecture, and town and country planning.

- (b) The focus towards preventive disaster management and development of a national ethos of prevention calls for an awareness generation at all levels. An appropriate component of disaster awareness at the school level will help increase awareness among children and, in many cases, parents and other family members through these children. Curriculum development with a focus towards dissemination of disaster related information on a sustained basis, covering junior, middle and high schools may be worked out by the different school boards in the country.
- (c) Training facilities for government personnel involved in disaster management are conducted at the national level by the National Centre for Disaster Management (NCDM) at the Indian Institute of Public Administration, in New Delhi which functions as the nodal institution in the country for training, research and documentation of disasters. At the State level, disaster management cells operating within the State Administrative Training Institutes (ATIs) provide the necessary training. Presently, 24 ATIs have dedicated faculties. There is a need for strengthening specialised training, including training of personnel in disaster response.
- (d) Capacity building should not be limited to professionals and personnel involved in disaster management but should also focus on building the knowledge, attitude and skills of a community to cope with the effects of disasters. Identification and training of volunteers from the community towards first response measures as well as mitigation measures is an urgent imperative. A programme of periodic drills should be introduced in vulnerable areas to enable prompt and appropriate

community response in the event of a disaster, which can help save valuable lives.

7.39 Capacity building for effective disaster management therefore needs to be grounded and linked to the community and local level responders on the one hand and also to the institutional mechanism of the State and the Nation on the other.

Community Level Initiatives

7.40 The goal of any disaster management initiative is to build a disaster resistant/resilient community equipped with safer living and sustainable livelihoods to serve its own development purposes. The community is also the first responder in any disaster situation, thereby emphasising the need for community level initiatives in managing disasters. To encourage such initiatives, the following are required:

- (a) Creating awareness through disaster education and training and information dissemination are necessary steps for empowering the community to cope with disasters.
- (b) Community based approach followed by most NGOs and Community Based Organisations (CBOs) should be incorporated in the disaster management system as an effective vehicle of community participation.
- (c) Within a vulnerable community, there exist groups that are more vulnerable like women and children, aged and infirm and physically challenged people who need special care and attention especially during disaster situations. Efforts are required for identifying such vulnerable groups and providing special assistance in terms of evacuation, relief, aid and medical attention to them in disaster situations.

7.41 Management of disasters should therefore be an interface between a community effort to mitigate and prevent disasters as also an effort from

the government machinery to buttress and support popular initiatives.

Strengthening of Plan Activities

7.42 Given the pervasive nature of disasters and the widespread havoc caused by some of them, planned expenditure on disaster mitigation and prevention measures in addition to the CRF is required. The Central Sector Scheme of Natural Disaster Management Programmes has been implemented since 1993-94 by the Department of Agriculture and Co-operation with the objective to focus on disaster preparedness with emphasis on mitigation and preparedness measures for enhanced capability to reduce the adverse impact of disasters. The major activities undertaken within this scheme include the setting up of the National Centre for Disaster Management (NCDM) at the Indian Institute of Public Administration, creation of 24 disaster management faculties in 23 states, research and consultancy services, documentation of major disaster events and forging regional cooperation. The Eighth Plan allocation of Rs 6.30 crore for this scheme was increased to Rs. 16.32 crore in the Ninth Plan. Within this scheme, NCDM has conducted over 50 training programmes, training more than 1000 people, while 24 disaster management centres with dedicated faculty have been established in the states. Over 4000 people have been trained at the State level. In addition, some important publications and audio-visual training modules have been prepared and documentation of disaster events has been done.

7.43 Though limited in scope and outlays, the Scheme has made an impact on the training and research activities in the country. Creation of faculties in disaster management in all 28 states is proposed to be taken up in the Tenth Plan in addition to community mobilisation, human resource development, establishment of Control Rooms and forging international cooperation in disaster management. There is also an urgent need for strengthening the disaster management pedagogy by creating disaster management faculties in universities, rural development institutes and other organisations of premier research.

7.44 Sustainability is the key word in the development process. Development activities that do not consider the disaster loss perspective fail to be sustainable. The compounded costs of disasters relating to loss of life, loss of assets, economic activities, and cost of reconstruction of not only assets but of lives can scarcely be borne by any community or nation. Therefore, all development schemes in vulnerable areas should include a disaster mitigation analysis, whereby the feasibility of a project is assessed with respect to vulnerability of the area and the mitigation measures required for sustainability. Environmental protection, afforestation programmes, pollution control, construction of earthquake resistant structures etc., should therefore have high priority within the plans.

7.45 The aim of a mitigation strategy is to reduce losses in the event of a future occurrence of a hazard. Structural mitigation may comprise construction of individual disaster resistant structures like retrofitted or earthquake-resistant buildings or creation of structures whose function is primarily disaster protection like flood control structures, dykes, levees, infiltration dams etc.

7.46 Mitigation measures on individual structures can be achieved by design standards, building codes and performance specifications. Building codes, critical front-line defence for achieving stronger engineered structures, need to be drawn up in accordance with the vulnerability of the area and implemented through appropriate techno-legal measures.

7.47 Mitigation measures need to be considered in land use and site planning activities. Constructions in hazardous areas like flood plains or steep soft slopes are more vulnerable to disasters. Necessary mitigation measures need to be built into the design and costing of development projects.

7.48 Insurance is a potentially important mitigation measure in disaster-prone areas as it brings quality in the infrastructure & consciousness and a culture of safety by its insistence on following building codes, norms, guidelines, quality materials

in construction etc. Disaster insurance mostly works under the premise of 'higher the risk higher the premium, lesser the risk lesser the premium', thus creating awareness towards vulnerable areas and motivating people to settle in relatively safer areas.

THE PATH AHEAD

7.49 For addressing natural calamities such as floods and drought, there already exist a number of plan schemes under which a lot is being done and can be done. State Governments need to make full use of the existing plan schemes and give priority to implementation of such schemes that will help in overcoming the conditions created by the calamity. In some cases this implies possible diversion of the funds from other schemes to those schemes the implementation of which will help meeting the situation. There may also be need in a crisis situation for certain re-appropriations/reallocations among the different departments.

7.50 The Planning Commission will aim at responding quickly to the needs of the Central Ministries/Departments/States in matters relating to the Plan for meeting situations arising out of natural disasters, by enabling adjustment of schemes to meet the requirements as far as possible. A mechanism will be evolved to take expeditious decisions on proposals which involve transfer of funds from one scheme to another, or any other change which involves departure from the existing schemes/pattern of assistance, new schemes and relaxation in procedures, etc. in the case of natural disasters.

7.51 As the first responder in any disaster situation, however, each State needs to build a team

of dedicated trained, skilled personnel, make provision for specialised equipments, efficient communication network, and relevant, intelligent and easily accessible database. There is also a need to consider creation of a plan scheme in each state basically to meet the minimum requirements for strengthening communications and emergency control rooms, thereby improving coordination and response to disasters. No new institutional structures need be created in such a scheme.

7.52 In particular, with regard to major disasters, it is also necessary for disaster mitigation components to be built into all development projects. In order to save larger outlays on reconstruction and rehabilitation subsequently, a mechanism would need to be worked out for allowing components that specifically help projects coming up in highly disaster prone areas withstand the impact of natural disasters as part of approved project cost for projects financed under the Plan.

7.53 The message for the Tenth Plan is that in order to move towards safer national development, development projects should be sensitive towards disaster mitigation. With the kind of economic losses and developmental setbacks that the country has been suffering year after year, it makes good economic sense to spend a little extra today in a planned way on steps and components that can help in prevention and mitigation of disasters, than be forced to spend many multiples more later on restoration and rehabilitation. The design of development projects and the process of development should take the aspect of disaster reduction and mitigation within its ambit; otherwise, the development ceases to be sustainable and eventually causes more hardship and loss to the nation.

CHAPTER 8

POLICY IMPERATIVES AND PROGRAMMATIC INITIATIVES

POLICY IMPERATIVES

8.1 The targets that have been set for the Tenth Plan, both as far as economic growth and social development are concerned, are no doubt ambitious. However, the achievement of these targets is essential to realise the extent of improvement in the well-being and quality of life of our people that is desirable. The single most pressing issue that confronts us is the prospect of rapidly increasing unemployment in the country and the consequence that it can have on the social fabric. All available analysis indicates that to provide gainful employment to our growing labour force will not only require the economy to grow at the 8 per cent target rate of growth, but also to achieve the sectoral configuration that has been outlined in earlier chapters. Achievement of these targets will require significant departures from our present ways for doing things. The necessary measures have been discussed in detail in the appropriate sections of this Plan Document. It is, nevertheless, felt necessary to bring together the wide range of initiatives and policy reforms that have been judged essential for attaining the desired results. This compilation should prove useful if for no other reason than that it would convey the magnitude of the tasks ahead of us. Every arm of the Government, whether at the Centre or in the States, has to take the measures that fall within its jurisdiction if the overall synergies of these various policy changes are to be fully realized.

8.2 The compilation is structured on the basis of the coverage that these policies have. Some of them affect the way the entire economic system functions, while others are more limited in scope, and impinge either upon the budgetary process of Government or on specific sectors. It should not, however, be thought that the order in which these

policy changes have been put indicate any kind of prioritisation. They are all equally important since in any integrated economic system the cross-linkages can be substantial, and quite often not easily measurable. It is re-emphasised that the success or failure of the Tenth Plan hinge critically upon the adoption of the policies outlined in the following sections.

8.3 ECONOMY-WIDE POLICY MEASURES

- Simplifying **laws and procedures for investment**.
- Eliminating **inter-state barriers** to trade and commerce.
- Reforming **development financial institutions** for long-term financing of small and medium enterprises.
- Removal of Government and Reserve Bank of India restrictions on **financing of stocking and trading**.
- Repeal of Sick Industrial Companies Act, introduction and strengthening of bankruptcy and foreclosure laws to facilitate **transfer of assets**.
- Calibration of the **cost of borrowed funds**, for enhancing competitiveness.
- Reform of **labour laws**.
- The policy of **disinvestment** of public sector undertakings, should be pursued so as to enable the realisation of Rs.16,000 crore per annum, to finance the plan.
- **The Essential Commodities Act** is an anachronism in a modern competitive economy. It should be repealed and replaced by an emergency act that can

be applied by notification for a limited period of time to a specified commodity in a specified region. There should be no delegation of authority, to issue notifications from the Centre to States.

- Integration of various laws applicable to food, such as the Prevention of Food Adulteration Act (PFA) 1955, and the Weights and Measures Act 1976 into a unified and modern **Food Act**. This Act should provide for a single food regulatory authority for the entire food sector, including food processing.
- Encouraging **Foreign Direct Investment** so as to achieve the annual target of US\$ 7.5 billion.

PUBLIC FINANCES

8.4 Policy Imperatives regarding public finances have to be taken up at three levels, the Central level, the State level and some policies have to be addressed at both the Central and State levels.

8.4.1 At Central Level

- Comprehensive computerisation of the income tax system and universal usage of tax identification numbers in monetary transactions must be made mandatory for facilitating improved enforcement of the **income-tax administration**.
- Exemptions under **corporate tax** should be progressively eliminated.
- The current policy of moving progressively to a truly **single excise rate** should continue to be pursued while tightening up much more on existing exemptions, particularly those for small enterprises, for improving tax compliance.
- The coverage of the **service tax** must be expanded continuously under the union excise system so that much greater tax buoyancy can be achieved through increased coverage of the economy as a whole.

- Alignment should be made of **customs tariff rates** with average Asian rates.
- **Exemptions and concessions** that distort the tariff structure should be eliminated.
- Implementation should be ensured of the recommendations of the **Expenditure Reforms Commission**, for example, regarding progressive reduction in fertilizer subsidy as well as elimination of petroleum subsidy.
- **Food subsidy** should be better targeted through the targeted public distribution system and specific programmes for the poor like Food for Work Programme, Mid-day Meals, Nutritional Support to Pre-School Children and Women etc.
- Curtailment of **pay and allowances bill** of the government must be pursued on a continuous basis, as, in the wake of the implementation of Fifth Pay Commission's recommendations, downsizing has become most crucial to reducing non-plan revenue expenditure.
- Improvement of the **operational efficiency** of railways and power sector units and other public sector units should be targeted with a view to eventually eliminating all budgetary support and generating adequate internal resources.

8.4.2 At State Level

- Reduction in **staff strength** must be pursued through adoption of a policy of net attrition and constitution of a **pension and amortisation fund** to make committed payments like terminal benefits and debt servicing self-financing.
- Reduction in expenditure on **administrative and establishment cost** should be followed-up seriously.
- Privatisation of **State public sector units** especially those which are making losses and do not serve any social or economic objectives must be carried out.

- Switching over to **ad valorem rates of royalty** on minerals through the Centre's initiative should be pursued.
- Enactment of a **Fiscal Responsibility and Budget Management Bill** under which borrowings shall be restricted to attain a non-rising debt to GDP ratio from current levels in order to reduce the burden of interest payments.
- **Restricting borrowings** to the level of current outstanding debt to GDP ratio or lower, so as to attain a non-rising outstanding debt to GDP ratio, thereby reducing the burden of interest payments, should be targeted.
- Improvement in the **internal resources of State's PSUs** must be aimed at, by implementing power sector reforms and reducing the burden of contingent liabilities on State budgets, through a legislative or administrative ceiling on the issue of State guarantees.

8.4.3 At Central and State Levels

- The extension of **Value Added Tax (VAT)** to the State level must be taken up at the earliest for facilitating its integration with the Central VAT and bringing about harmonisation of tax rates levied by different tax jurisdictions.
- **User charges** must be raised to cost-recovery levels and made acceptable by a communication campaign to convince the general public that such a system would be in their own overall interest.
- An improvement in the **Tax/GDP ratio** of Centre and States through inclusion of services in the tax base, removal of tax exemptions and concessions, harmonisation of tax rates, tightening of tax administration, and adopting an integrated VAT regime is urgently called for.

8.5 IMPROVING GOVERNANCE

- In order to have a realistic plan outlay, the concept of **core plans** which take into

consideration (a) the trend of aggregate actual resource mobilisation for the State Plan in the last three years, and (b) a realistic and conservative estimate of resources available for financing the Plan, will be followed through the Tenth Plan.

- To a large extent, the task of the development administration would become easier if steps are taken to make available information, as a matter of right, to the citizens. **The right to information** has to be the starting point for much of the reforms proposed.
- As a result of maladministration and corruption in the revenue system, not only is there a loss of revenue but it also encourages the people to participate in the black/parallel economy. It is therefore necessary to undertake **reforms in the revenue system**, not only to have reasonable tax rates, and equally importantly, to reform the tax administration in order to make it more transparent, equitable, and user-friendly.
- **Civil Service Reforms** must be aimed at improving transparency, accountability, honesty, efficiency and sensitivity in public administration at all levels. Box 8.1 gives some of the important components of Civil Service Reforms.
- **Procedural reforms** to cover all aspects of government's interface with the public are essential. Often private initiatives, entrepreneurial energies and innovations are snuffed out by the maze of red-tapism and procedural and legal hurdles that come in the way of development.
- One of the most common reasons for the failure of programmes and schemes is the faulty and incomplete design of the programme/project/scheme. Care and attention must be taken to **formulate programmes, projects and schemes** in a more systematic and professional manner.

Box 8.1**Important Components of Civil Services Reforms**

- The processes and the outcomes of policies, entitlements and procedures must be made *transparent*, widely shared and well displayed.
- It is believed and as such should be followed, that less *discretion* would lead to a more equitable and less corrupt system.
- Prevalent institutional arrangements will have to be reviewed and changes made so that those vested with *authority* are also made *accountable*.
- The present system of *rewards and punishments* in public life, which makes corruption a high-return-low-risk activity, needs to be changed.
- It is necessary to review the situation, and identify departments and functions within departments that were once essential, but are now *redundant* and would need to be done away with.
- The induction of *professionals/specialists* into the administrative system, on *contractual appointments* should be examined and suitable policy changes made in the entry policy.
- Pre-service and demand driven in-service *capacity building* for all cadres and ranks should be made a regular feature.
- *Contributory Pension System* for the new employees must be seriously considered.
- *Alternative ways of carrying out a job/activity* must be examined and assigned to Government only if considered essential.
- *Stability of tenure* is essential and should be ensured for any constructive and sustainable work

- **Project based assistance** will need to be encouraged, as this will also help in improving the delivery system.
- It is essential to strengthen the existing mechanisms for **monitoring and evaluation**, in order to make sure that plans are being implemented as envisaged and the impact is also as planned.
- **Rationalisation of Centrally Sponsored Schemes (CSSs) and Central Sector Schemes (CSs) using Zero Based Budgeting** has to be a regular exercise. (i) A new CSS will be permitted only in exceptional circumstances, only when an existing one can not be modified. (ii) Monitoring and tracking State-wise flow of funds and assessing physical and financial targets under different CSSs and CSs will be essential. (iii) As far as possible CSSs

should be conditional on reforms in that sector. (iv) There should be flexibility between components of a scheme.

- It is necessary to create a proper climate for development by ensuring **law and order**, a sense of security and **speedy justice**.
- Some major initiatives envisaged in the IT sector are to take up an ambitious programme of **E-Governance** and take **IT to the masses**. Creation of software for establishing an interface with the diverse Indian languages used in India poses a real challenge. In the Tenth Plan the endeavour will be to develop suitable software and technologies to enable people to interact and use computers in local languages. Internet accessibility and content creation in local languages will also be promoted.

8.6 CREATING THE PRODUCTIVE BASE

- Currently, Power, Coal, Petroleum & Natural Gas, Atomic Energy and Renewable energy are under different ministries. Hence, presently, the energy policy is typically an aggregation of policies of these different sub-sectors rather than an integrated perspective with a set of priorities for each sub-sector as is the international practice. During the Tenth Plan it is proposed to develop **an integrated energy policy framework**. An Apex Committee on Energy with a secretariat, consisting of experts in energy, economics, finance, management, environment, legal disciplines will be set up, to approve policy guidelines and oversee implementation on a regular basis, considering the capital intensive nature of investments in this sector. A key role of this committee would be to manage the trade-offs in the interplay of divergent forces among the different sub-sectors, consistent with the overall policy goals of economic efficiency, energy security, increasing access and protecting the environment.
- In view of the paramount importance of power sector reforms, the earlier Accelerated Power Development Programme has been modified to include a strong reform component. Under the new **Accelerated Power Development and Reform Programme**, it is proposed to include a 50 per cent investment component while the balance will constitute a reform-driven incentive stream. The incentive stream is proposed to be distributed to the reforming States as a matching contribution equal to the reduction in cash losses achieved by SEBs/Utilities. It is proposed to cover all urban and industrial areas in the country under this programme.
- An early enactment of the **Electricity Bill** is imperative. The Draft Electricity Bill which has been introduced in Parliament, will replace the existing three laws relating to electricity. The new bill will open up the power sector to allow greater competition in each segment of the electricity value chain under independent regulation. This is crucial for the power sector.
- The **Coal Mines (Nationalisation) Amendment Bill 2000** proposes to permit private sector participation in non-captive coal mining by making suitable amendments to the Coal Mines (Nationalisation) Act, 1973. An early enactment of this legislation is essential.
- **An independent regulatory authority** will be set up to ensure fair competition and a level playing field in each segment of the **coal** production and supply chain, resolution of disputes and allocation of coal blocks for exploration and mining.
- Similarly, with the dismantling of Administered Price Mechanism (APM), an **independent regulatory mechanism** will be established for the downstream **oil and natural gas sector** to ensure competition and a level playing field in the petroleum and gas sectors.
- It is proposed to dismantle the holding company structure of **Coal India Limited** to provide autonomy to individual coal producing companies for promoting competitiveness and revival/disinvestment/closure of selected coal producing PSUs. Further, to encourage competition and promote **private sector participation** it is proposed to: (i) de-block coal blocks held by the Coal India Limited; (ii) permit trading of coal by removing it from the List of Essential Commodities; and (iii) amend the Coal Bearing Areas (Acquisition & Development) Act, 1957. Such steps would essentially de-regulate the sector and permit free interplay of market forces.
- **Dismantling and Deregulation of APM in the Oil & Natural Gas Sector** is crucial. The price of all petroleum products will become market determined w.e.f.

- 1.4.2002, with subsidy on kerosene under public distribution and LPG for domestic cooking to be met from the budget. These subsidies will be phased out over three to five years during the Tenth Plan.
- **Ethanol blended petrol** (5 per cent gasohol) will be introduced by the end of 2002, in 8 sugar-producing States and, thereafter, in the rest of the country, in a phased manner. Efforts will be made to raise the percentage of blending of ethanol with diesel, as also ethanol with petrol. Development of bio-diesel will also be encouraged.
 - **The structure of the Indian Railways** is an impediment to efficiency and innovation and also diverts attention from their main activity. It is therefore proposed that the railways will concentrate on provision of rail services only and other non-core peripheral activities will be spun-off.
 - Simultaneously, a **Railway Tariff Regulatory Authority** is required to oversee the pricing of passenger and freight traffic services in order to make the pricing rational and transparent as also competitive.
 - Presently, there is weak accountability and poor monitoring of **maintenance of roads**. It is proposed to explore ways to contract out maintenance activities to the private sector and include operation and maintenance in construction contracts as well.
 - Removal of legal hurdles for entry and growth of **private operators in the road transport sector** is also desirable.
 - In order to have a level playing field among all **ports** and to infuse competitive pricing, tariffs could be internally determined, independently by the major ports as well as by the minor ones. The present Regulatory Authority (i.e. Tariff Authority for Major Ports) could be restructured as an appellate body to take care of various stake-holders' interests.
 - Early enactment of the legislation enabling the conversion of **port trusts** into corporate entities is another proposal in the Tenth Plan.
 - In order to exploit the full potential of the civil aviation sector, especially in view of the increasingly important role of the private sector in providing airport infrastructure and air transport services, there is need for a **regulatory framework for the civil aviation sector** as a whole. The regulatory body would monitor the airport charges, quality of services and the performance of airport infrastructure.
 - **Opening up of the Civil Aviation Sector** is necessary to overcome capacity constraints. International routes could be auctioned to private Indian operators and foreign airlines could be allowed to participate for providing domestic air services. Foreign equity share for the domestic sector could also be increased for improving competitive efficiency.
 - **Leasing of four metro airports** to private sector participants must be expedited.
 - **Reorganisation of the Indian Postal system** is also in the priority list of the Tenth Plan. It will be undertaken through:
 - Replacement of the **Indian Postal Act, 1898** by a forward looking legislation to facilitate the envisaged reforms, ensure convergence and adopt new technology.
 - Making the Department of Post **self-financing**, by reviewing the policy of blanket subsidy. Universal Postal Service Obligation (UPSO) would be clearly defined and adopted., ensuring that items under UPSO, used by the common people are affordable and costs of other services are determined on commercial lines.
 - An independent **regulatory authority** is envisaged to be set up which, besides other regulatory functions, would also look after tariff fixation.

- The policy of **opening of post offices** is envisaged to be reviewed and, where essential, new post offices would be opened only through re-deployment of staff.
 - **Extra departmental employees**, which constitute about half of the work force, would be encouraged to become **franchisees** of the Department for running outlets as privately owned multi-product/multi-service centres. A contributory pension scheme needs to be a major element of the strategy in this regard.
 - In keeping with the times, it is proposed to give post offices/outlets a new look and run these as **multi-product / multi-services centers**, for which a comprehensive programme of networking and computerisation is envisaged.
- It is proposed to develop a credible road map for **corporatization** of the Department of Posts as 'India Post' within the Tenth Plan.
 - To achieve the targets of teledensity in line with the objectives laid out in the New Telecom Policy, 1999, the **Telecom sector** must be treated as an **infrastructure** sector for the next decade or so.
 - With a view to ensuring optimum growth in the coming years, Government's broad **policy of taxes and regulation for the telecom sector** has to be promotional in nature. Revenue generation should not be a major determinant of macro policy governing the sector. The licence fees need to be aligned to the cost of regulation and administration of Universal Service Obligation (USO).
 - The policy governing **spectrum allocation and licencing** has to be so designed that this scarce resource is used optimally. Spectrum pricing needs to be based on relative demand and supply over space and time in a dynamic manner so as to promote spectrum efficient technology.
 - The **USO levy** needs to be determined and collected as a separate levy to maintain complete transparency and accountability. Its rate may be increased to meet increased demands. Internet Service Providers who have been permitted to provide internet telephony also need to contribute, since they are an integral part of the communications network.
 - A comprehensive **national hardware development policy** will be formulated by December, 2002, in line with our goal of making India an IT super power.
 - In spite of opening of FM radio to the private sector, the benefits of this new and high quality broadcast service have failed to reach many rural areas. The Tenth Plan proposes that local communities and non-profit organizations such as universities, NGOs etc., be allowed to set up **low power FM community radio stations**, for educational, cultural and economic development of local communities.
 - Though the **film sector** has been given the status of an industry, **financing** basically continues to be through illegal and underworld sources. The Tenth Plan would aim at putting in place a plan of action to ensure easy availability of funds through institutional means.
- ## 8.7 SOCIAL JUSTICE
- **A National Charter for Social Justice** will be instituted, based on the principles of social harmony, to ensure social justice to disadvantaged groups like scheduled castes, scheduled tribes, other backward classes and minorities with a view to protecting their rights and interests.
 - **A National Policy for Empowering the Tribals of India** will be formulated along-with a National Plan of Action to operationalise the same. The main objective will be

to solve the unresolved issues and persisting problems of tribals and bring them on par with the rest of society.

- Effective implementation of the **People With Disabilities Act** and Rehabilitation of Disabled during the Plan period.
- Early finalisation and adoption of **National Policy on Rehabilitation and Resettlement**.
- **Public Distribution System** should be restricted to distribution of rice and wheat. Kerosene and sugar should be removed from the system. State level schemes could be evolved for distribution of coarse cereals under PDS.
- **Minimum Support Prices** should encourage diversification of agricultural production, keeping in mind the interest of consumers.
- **Food Corporation of India** should intervene in the market by timely sales and purchases to maintain stability in food prices. The buffer stocking agency could also take resort to exports and imports of food grains, as required.
- **Decentralised procurement and distribution** by States should be encouraged. States could take their own decisions regarding issue prices, and the quantum of food grains could be supplied through PDS etc. The national food subsidy could be distributed among the States according to a prescribed formula.

8.8 INVIGORATING RURAL INDIA

- **Regulating ground water use** on a sustainable basis in order to avoid indiscriminate drawal of ground water will be a priority in the Tenth Plan, as over-exploitation of ground water is causing various complications like sharp fall in the water table.
- The **Agriculture Produce Marketing Act** is to be amended for reduction of mandi taxes and ending Government's monopoly.

- **Integrated agriculture markets** are in private and cooperative sectors for providing better amenities to producers.
- **Kisan Credit Cards** are to cover all farmers for easy and quick flow of credit, within the Tenth Plan.
- Central assistance for the co-operative sector will be made, conditional on the States adopting **Multi-State Cooperative Act, 1984** for functional and financial autonomy.
- All restrictions on **agri-trading, agri-industry and exports** will need to be removed.
- The ban on **futures contracts** in all agricultural products should be lifted. The existing policy of pan-seasonal pricing of wheat and rice under the Public Distribution System provides a disincentive for future trading. This needs to be modified to encourage private storage.
- **Reforms for Agro-forestry** are essential if diversification of agriculture through agro-forestry is to be encouraged. There will have to be a policy environment in which the farmers are assured of a remunerative price; restrictions on felling, transport and marketing of agro-forest produce from private holdings are removed; and ban on export of primary and unprocessed wood products is lifted.
- In view of the tremendous potential of the **khadi and village industries** to generate employment in rural areas, it would be essential to make them sustainable and economically viable. A shift from the rebate policy to Market Development Assistance is recommended for bringing in incentives for production of high quality marketable goods along with the process of branding products.

8.9 IMPROVING THE QUALITY OF LIFE

- **Financing essential health care** will have to be reviewed. Initially health care services

were provided free of cost to all in government institutions. However, in view of the demographic transition, dual disease burden and escalating costs, this policy will have to be modified. In the Tenth Plan, there will be continued commitment to provide certain services, free of cost, to all viz. essential primary health care; emergency life saving services; services under national disease control programmes; and the national family welfare programme. Efforts will be made to provide other health care services at a subsidised cost to people below poverty line. People above poverty line would have to pay user charges for diagnostic and therapeutic services. Health finance options for different income groups will be explored. In order to encourage healthy lifestyles, a no claim bonus/adjustment of the premium could be incorporated, based on the previous year's claims.

- In view of the marked differences in the health indices, health care infrastructure and its utilisation, not only between States but also between districts, it is imperative to assess **district-specific health, nutrition and family planning needs** and plan accordingly. This is a shift from the earlier centralised planning approach.
- Service providers in the health, family welfare and nutrition sectors will be given appropriate training and reoriented, so that they are able to **screen individuals** in order to determine their specific needs, provide for those, and carefully monitor the impact.
- **A National Policy and Charter for Children** will be formulated to ensure protection of their rights as enshrined in the Constitution and to seek partnership with all the concerned.

8.10 IMPARTING DYNAMISM TO INDUSTRY AND SERVICES

- Policy reforms for **village and small scale industries** will have to be given priority.

- Phased **dereservation of small scale industries**, in view of the implications of the WTO regime, will have to be carried out.
- The approach to **tourism** in the Tenth Plan has shifted from a sector seen only as a foreign exchange earner to a sector having a dynamic role in alleviating poverty and generating employment. An integrated inter-sectoral investment Plan for tourism to enhance the efficiency of public investment in tourism will be drawn up. It will be necessary to remove barriers to the growth of tourism and leverage private investment by expediting and integrating critical policies. A regulatory framework for the protection of the tourism industry, the consumer and the environment is suggested. The Tenth Plan also proposes to develop a unique brand image for India.
- A review of various legislations governing **property transactions** and consolidating them into one comprehensive law will be required.
- **The Urban Land (Ceiling & Regulation) Act, 1976**, though repealed by the Centre, might be replicated in the various States that are yet to repeal the Act, which needs to be done urgently.
- Amendments to the **Rent Control Act** will be needed to remove the rent controller's draconian powers over the disposition of the rented property. The statutes giving the rent controller power to virtually divest the owners of their natural right to their properties should be deleted. The Rent Control Act must focus on ensuring a level playing field in terms of rent (adjustment) negotiations and reasonable period for vacation of property.
- Out-dated State legislation, allowing states to arbitrarily **requisition** property 'in the public interest', for questionable use, should be repealed.
- **The Indian Stamp Act, 1899 and the Indian Registration Act, 1908** would

- need to be amended for delinking the process of registration from payment of stamp duty, and to liberate the registration process from the requirement of various 'no objection' certificates.
- **Rationalise tax rates** pertaining to the **real estate sector** will need to be carried out. States should reduce stamp duties from the present range of 13-26 per cent to a level of 3-5 per cent and also make them uniform across States.
 - The principles of law applicable to statements made in a prospectus, should also apply to sale of property. This will facilitate institutionalisation of conveyances (and authorised persons) that can investigate **title cross-linkages** between municipal authorities, electricity boards, and taxation departments, land registries and collectorates might facilitate these through hyperlinks.
 - Private participation in the provision of **municipal services** must be encouraged as this would provide benefits of access to skills required for improving urban services. Pricing municipal services would ensure sufficient funds for maintenance and expansion of municipal services.
 - Simplification and modernization of the current **registration system** for land/property titles is important. The Registration and Other Related Laws (Amendment) Act 2001 should be notified for this at the earliest.
 - A time-bound programme for auctioning of all **vacant government land** might be drawn up and implemented.
 - The Haryana model should be drawn upon to promote **public as well as private development in housing**.
 - The market **conversion of rural land into urban usage** within the parameters of defined municipal development plan should be allowed.
 - A Regulatory Commission is to be set up for reviewing **zoning regulations** on a continuous basis.
 - A system for **deemed approval of plans** for development/re-development of real estate by the registered/authorised architects operating on a self-regulatory basis for speeding up the process of securing approvals should be put in place.
 - The **Land Acquisition Act, 1894** should be amended for speeding up the process of acquisition, and to delink the process of taking over possession of land from that of determining compensation. The Act might be modified to focus solely on acquisition of land for public goods (e.g. roads, defense) and public utilities (power lines, irrigation dams/canals), and exclude commercial purposes such as housing.
 - Encouragement should be given to the pension, provident fund and insurance sectors to invest in **real estate**.
 - Encouragement should also be provided for creation of **Real Estate Mutual Funds/ Real Estate Investment Trusts**.
 - Trade in **mortgage-backed securities** should be promoted.
 - The present stipulation of 100 acres for **FDI in integrated townships** might be relaxed to 50 acres or less, as such vast expanse of land may not be available in urban areas. FDI in the real estate sector may be permitted with a lock in period of three years and there should be no repatriation of dividend during the construction period in any case. There might not be any restriction on repatriation thereafter.
 - A grading system should be developed among **real estate developers** for preventing fly-by-night operators.

PROGRAMMATIC INITIATIVES

8.11 Although the Tenth Plan aims at a substantial enhancement in the role of the private

sector, nevertheless the government will continue to play an important role in a number of critical areas, both as a facilitator and as a direct provider of services and facilities. In order to make the latter function more effective and in tune with the objectives of the plan, a number of programmes and schemes are to be initiated or given a changed focus during the Tenth Plan period. A brief summary of some of these initiatives is given in this section.

Regional Disparities

8.12 One of the primary objectives of the Tenth Plan is to strive for regional balance. The widening regional disparities and pockets of deprivation and poverty have been a cause for concern for some time now. It is imperative to tackle the development problems of those areas which, despite existing efforts, continue to be characterised by high poverty, low growth and poor governance, if we are to have an equitable and balanced growth.

8.13 Against this backdrop, the first **National Human Development Report** (NHDR) was brought out as a prelude to the Tenth Plan. It is expected that the NHDR will provoke debate among States and encourage introspection on the development strategy that each State has to follow. In order to track developments between States and of States, subsequent NHDRs will be prepared from time to time.

8.14 With a view to addressing this problem, a new initiative in the form of the '**Rashtriya Sam Vikas Yojana**' (RSVY) will be operationalised in the Tenth Plan. It aims at focused developmental programmes, primarily to fill gaps, for backward areas which would help reduce imbalances, speed up development and help these areas to overcome poverty, besides facilitating the States to move up the ladder of reforms.

8.15 The strategy is to assist in the development process through additional grants under the RSVY, only if the concerned State Government undertakes an agreed set of reforms. Development experience in the Ninth Plan has shown that funds are not the only bottleneck in the development

process. Reforms in the administrative and fiscal structure, in policies related to the day to day life of the ordinary people and in the way financial and administrative powers are delegated, will have a multiplier effect on the economies of the concerned regions. More often, it pertains to the way in which existing rules and regulations are used / interpreted in the delivery of services and the working of the local economy which perpetrates the problem of access to services and deny equity to the poor and under privileged. Under the RSVY it is proposed to provide funds to all the States subject to their agreeing through a Memorandum of Agreement (MoA), to a mutually decided set of reforms. Each of the reforms should have objectively verifiable indicators/milestones and well defined time frames.

8.16 The RSVY will be a cent per cent grant so as to act as an incentive for States to take up reforms. This would be in addition to the existing flow of funds under ongoing schemes. Release of funds will be performance based.

8.17 It is proposed to have a Special Plan For Bihar, by far one of the most backward states. Flow of funds will be conditional on implementing a mutually agreed set of reforms and will be provided for identified thrust areas, such as power, irrigation, watershed development, connectivity etc., in order to mitigate some of the problems caused by the bifurcation of the State. The aim is to use innovative delivery systems so that the prevailing bottlenecks in these sectors can be overcome and basic infrastructure provided for the future development of the State.

8.18 There will also be a Special Plan for the Koraput, Bolangir, Kalahandi (KBK) Districts Of Orissa, another pocket of endemic poverty and deprivation. The objective of this component is to ameliorate the continuing poverty and difficult living conditions in the KBK districts of Orissa by concerted action in identified critical areas which would ensure drought proofing, and provide livelihood support, better health facilities as well as specific assistance to the disadvantaged groups. The aim is to use the additional funds in a projectised

manner so that visible results are available in the field in a time-bound manner. Like for Bihar, funding would be linked to implementing a mutually agreed set of reforms.

8.19 Studies have shown that there are vast variations not only between States but also within States, and between districts. One hundred most backward districts will be taken up under RSVY for special attention. It is proposed to take up 25 districts on a pilot basis in the first year i.e. 2002-03, 35 in the next year and the remaining 40 districts in 2004-05. State Governments will be required to prepare plans for the identified districts, to include schemes which would help to fill critical gaps or those which could serve as catalysts for future development of the district. The district authorities would be expected to use existing institutions, non-government organisations and innovative delivery systems so that maximum benefit could be derived from the additionality provided under this scheme. Release of funds to districts will also be contingent on them agreeing to certain administrative and procedural conditions/reforms.

8.20 In order to provide a quality reference document on the development profile of States, make an inter-State comparison and help to determine strategies for accelerating growth, the Planning Commission initiated the practice of preparation of **State Development Reports**. It is envisaged that these Reports, prepared in coordination with States every five years, will help them formulate their development agendas as well as make inter-State comparisons.

8.21 **A Best Practices Manual of Successful Governance Initiatives and Implementation** is proposed to be prepared by the Planning Commission in coordination with Human Resource Development Centre and United Nations Development Programme, in order to identify and highlight models of effective implementation and delivery of public services in the Government sector. The manual aims at documenting success stories for sharing both at the national level as well as between State Governments.

8.22 The Planning Commission's **Project Preparation Facility** was set up in response to the problems of less developed States which are unable to prepare projects of the requisite standard to attract institutional and external funding. It provides financial assistance for preparation of detailed project reports by professional consultants to be submitted by the States for external funding. This will help the less developed States in accessing institutional and external resources.

AGRICULTURE AND RURAL DEVELOPMENT

8.23 Social mobilisation as a key to self-employment through **Swarnjayanti Gram Swarozgar Yojana (SGSY)** is a new approach that is being promoted and encouraged in the Tenth Plan. The SGSY is conceived as a process-oriented programme for the poor with focus on formation of self help groups (SHGs). It is a holistic programme operating largely through SHGs, with provision of micro-finance, training and capacity building. Development of infrastructure, establishment of marketing linkages and better monitoring and timely evaluation are important components of the programme.

8.24 Assured wage employment through **Sampoorna Grameen Rozgar Yojana (SGRY)** for 100 days in identified backward districts is another new strategy that is being promoted in the Tenth Plan. The SGRY focuses on generation of wage employment, creation of durable rural assets and infrastructure and provision of food security to the rural poor. The identification, selection and execution of works under the programme would be a part of a long-term strategy for creating infrastructure, developing watersheds and drought proofing. The programme lays emphasis on empowerment of panchayats and involvement of women and weaker sections in decision-making and execution of works.

8.25 Employment guarantee for the most distressed through **Jai Prakash Rozgar Guarantee Yojana (JPRGY)** is a new programmatic initiative

in the Tenth plan, for providing employment guarantee to the unemployed in the most distressed districts of the country. A Task Force has been constituted to design and implement a programme which will have both wage and self employment components.

8.26 A coordinated approach to **land use policy and development of wastelands** will be a new initiative. All programmes relating to conservation, development and management of land resources, especially schemes relating to water-sheds and wastelands development, scattered in different Departments, as well as institutional infrastructure relating to land in rural areas need to be brought under the purview of the Department of Land Resources in the Ministry of Rural Development. Pursuant to this, it is proposed to set up the Lok Nayak Jai Prakash Narayan Land and Watershed Mission whereby all watershed and soil conservation related schemes implemented by different Departments except those handled by the Ministry of Environment and Forests would be brought under the purview of the Mission.

8.27 In view of the vast tracts of waste and degraded lands remaining unutilised, and their immense potential, a new scheme for **Greening of Wastelands** through people's participation will be taken up in the Tenth Plan. The basic thrust of the new initiatives would be on distribution of Government wasteland to communities or landless rural poor. The land allottees would be provided financial assistance for development of the wastelands. Propagation of tree crops suitable to the agro-ecological zones, medicinal plants, bamboo, bio-fuels and plant varieties that address food and nutritional requirements of the rural poor would be taken up on these wastelands. Special focus will be given to medicinal plants in view of the growing demand for the same. Production of bio-fuel species will be encouraged since they will provide a sustainable alternative to mineral fuel and help reduce imports.

8.28 The completion or revival of **old irrigation projects/systems** will be a priority as there are a

number of very old incomplete irrigation projects some of which even date back to the pre-Fifth Plan period. Accelerated Irrigation Benefit Programme is also targeting completion of old projects as a first step. Attention will be given to restoration of the potential lost due to dilapidation of major, medium and minor irrigation systems, especially tanks, through extension, modernisation and renovation.

8.29 Community participation in **maintenance of irrigation projects** will be encouraged. While government constructs irrigation projects, due to lack of maintenance they get silted/damaged and do not carry the design discharge, causing problems to tail-enders. If the community, through water users associations, maintains these systems, they will be more equitably managed and also better maintained.

8.30 Since the agriculture sector is the core of the Tenth Plan and the bulk of the new employment opportunities are going to arise in this sector, **improving agricultural productivity and creating employment opportunities** in this sector are crucial. An integrated approach will have to be adopted towards this, some pre-requisites / components are indicated in Box 8.2.

8.31 Universalisation of **Joint Forest Management (JFM)** will be the main focus in the forest sector. Forest areas in the proximity of population centers/villages are reported to have degraded faster due to indiscriminate drawal of forest produce, grazing, encroachment, etc., as compared to forests away from habitations and located in inaccessible areas. The concept of Joint Forest Management based on the principle of partnership and equity share has shown remarkable results in regeneration of degraded forests and also improving the economy of the forest dependent populace. It is proposed to cover all forest fringe villages under JFM in a phased manner during the Tenth Plan. The formation of Forest Development Agencies in each district as federations of JFM Committees would provide them technical and financial support.

Box 8.2**An Integrated Approach to Improvement in Agriculture Sector**

- Utilising waste and degraded lands (described in more detail above)
- Macro-management approach to centrally sponsored schemes
- Improving credit flows and simplifying procedures
- Diversification of the cropping pattern by, inter-alia, cultivating medicinal and aromatic plants, bio-fuels, horticulture, agroforestry, oil-seeds, pulses, etc.
- Precision farming with a view to ensuring optimal utilization of inputs
- Organic farming
- Integrated nutrient management
- Integrated pest management using biological controls
- Improvised implements and machinery
- Contract farming
- Leasing-in and leasing-out
- Revamping the extension system by extending Krishi Vigyan Kendras, making use of print media, IT, private initiatives like agri-clinics etc.
- Use of frontier technologies especially bio-technology
- Improved storage systems and cold chains for facilitation, preservation and exports
- Conservation and upgradation of native breeds of livestock through selective breeding
- Creation of disease free zones
- Improvement of the quality of milk to meet international standards, particularly as India is now a member of the WTO.
- Extension of the 'Operation Flood' to uncovered, hilly and backward areas.
- Production of feed and fodder have to be increased substantially.

INDUSTRY AND SERVICES

8.32 Focussing on **village, small and food processing industries** is seen as a key strategy, given the tremendous potential for higher growth in this unorganised sector. To enable them to remain competitive in the market led economy and meet the objectives of the Plan, the following will be stressed:

- Adequate credit from financial institutions
- Funds for technology upgradation and modernisation
- Adequate infrastructure facilities

- Modern testing facilities and quality certification labs
- Modern management practices and skill upgradation
- Marketing assistance
- Level playing field at par with the organised sector.

8.33 Revamping the **Coir Industry** will be a priority since the sector is projected to grow at 12 per cent. Besides the normal facilities/conditions provided to other village and small industries, the thrust would be on product diversification,

development of new products, initiating trade information service, R&D for coir and spreading the coir units to non-traditional States for full utilization of the available coir husk.

8.34 Reorienting the **wool and wool products** will also be important, keeping in mind the tremendous scope for employment generation in this sector. It is proposed to set up a technology mission to improve productivity of wool per sheep and work out methodologies for the diversification of products by mixing angora and pashmina wool.

8.35 World class **tourist circuits and destinations** will be developed to enhance the competitiveness of the tourism product. Health tourism will also be encouraged.

8.36 A new scheme for **Development of Export Infrastructure & Allied Activities** intends to establish a mechanism for seeking the involvement of the State Governments in the development of export infrastructure and allied activities through assistance linked to export performance, which will result in concomitant growth in the infrastructure necessary for promotion of exports at the State level. Under this scheme, projects for development of complementary infrastructure for exports; creation of new export promotion industrial parks and augmentation of facilities in the existing ones, development of minor ports; setting up of common facility centers for trade; equity participation in infrastructure projects including the setting up of Special Economic Zones projects of national regional importance; and activities permitted as per Export Development Fund in relation to North East and Sikkim would be taken up.

8.37 **Market Access Initiative** is another new scheme through which it is proposed to put in place an instrument which is not only WTO compatible but would also mitigate the negative effects of the various handicaps faced by the exporters vis-à-vis their counterparts in competing countries. The broad scope of the scheme covers identification of prioritywise research areas relevant to trade and commerce; sponsoring research studies; dissemination and discussions on the result of such studies; trade promotion for market survey/studies;

assistance to exporters and export trade council for participation in international departmental store promotion programmes, promotion of India, Indian products and Indian brands etc. State Governments' efforts at carrying out export potential surveys of the States for identified product groups would also be supported.

8.38 **Research and Development in automotive industry** will be implemented in partnership with the industry and would result in strengthening of the testing and certification facilities in the Automotive Industry in accordance with safety and environmental regulations. In addition to the upgradation of existing facilities, two new facilities are proposed to be set up in the Tenth Plan. The new testing facilities would include critical developmental facilities which are not available at present.

8.39 The **Industrial Cluster Development Scheme** will identify Industrial Clusters with high growth potential for need-based and specifically designed interventions. The main emphasis of the scheme would be on making strategic interventions in existing clusters to convert static local efficiency into dynamic competitiveness. Efforts will be made to create a conducive climate for the development of inter-firm cooperation; promotion of innovation and collective learning; creation of suitable customized infrastructure support and service network; and setting up common facilities, assisting appropriate technology transfer, information sharing and quality improvement.

8.40 The **Technology Upgradation Scheme** aims at improving the competitiveness of the Indian industry vis-à-vis global players. To compete effectively, it is intended to assist/upgrade Indian companies to procure benchmark technology.

8.41 The **Technology Upgradation Fund Scheme** is expected to sustain and improve the textile industry's competitiveness and overall long-term viability. This will provide a focal point for modernisation effort through technology upgradation in the industry. This initiative includes all sub-sectors of textiles like spinning, weaving, knitting,

processing, garment making, cotton ginning and pressing and the jute sector.

8.42 The **Geological Survey of India** will be restructured and modernised so that it can play a vital role in the search and evaluation of mineral resources on a regional scale by increasingly adopting modern concepts and techniques. Airborne and marine surveys will be intensified and the synthesis and dissemination of data will be given high priority so that the organisation can effectively act as the 'first-stop shop' for all prospective investors, both domestic and foreign.

QUALITY OF LIFE

8.43 The **Re-organisation of family welfare personnel** through SWAP is an attempt at partially restructuring the health system. Both the Government of India and the State Governments are funding delivery of family welfare services. This dichotomy of funding comes in the way of streamlining the functioning and also leads to delays in the States getting reimbursements. Under the SWAP arrangement, it is proposed that the Government of India will fund all the 1.37 lakh Auxillary Nurse Midwives (ANM) in sub-centres and the States will take over the establishment of the rural family welfare centres and post partum centres. This is expected to improve the coverage of services in rural areas, especially in poorly performing States where lack of AMNs has been a major problem.

8.44 Improving **drug safety** will be a major programme to improve the quality of drugs by strengthening the drug control organisation and drug testing laboratories. The Medicinal Plants Board set up by the Department of Indian Systems of Medicine and Homeopathy will ensure that good quality medicinal plants are available for Indian Systems of Medicine drugs for both domestic and export markets.

8.45 The **National Nutrition Mission** will be set up with the objective of reducing under-nutrition and micro-nutrient deficiencies. The Mission will coordinate and strengthen existing programmes, promote R&D and provide relief in natural calamities.

8.46 **Under-nourished adolescent girls** will be provided foodgrains free of cost and nutrition education addressed to the family, aimed at proper intra-family distribution of food under a pilot project in 51 backward districts.

8.47 **A National Plan of Action for Empowerment of Women** will be prepared with a view to translating the National Policy for Empowerment of Women into action. The salient features will be, identification of partners, determination of action points and monitoring of its progress.

8.48 **A National Commission for Children** will be set up to protect and safeguard the rights of children. On the lines of the National Human Rights Commission, this Commission will investigate and redress individual complaints and grievances as well as provide the necessary legal support and services where required.

8.49 Universalisation of the **Integrated Child Development Services Scheme** (ICDS) will be achieved during the Tenth Plan in all the 5652 blocks of the country. Anganwadi workers (AWW) and helpers (AWH) who are the most visible grass-root functionaries primarily for ICDS, also play an important role in other development activities. To suitably compensate them and also to boost their morale, the honorarium of AWW and AWH has been doubled with effect from 1.4.2002.

8.50 The **Sarva Shiksha Abhiyan (SSA) and National Literacy Mission (NLM)** are two key programmes to attain the goal of universalisation of elementary education and education for all. The SSA aims at enrollment of all children in schools or other alternatives by 2003; and completion of five years of primary schooling by 2007. The NLM, through its various programmes has to ensure that the neo-literates do not lapse into illiteracy.

8.51 A greater focus on **secondary education** will be one of the important priority areas of the Plan. The 'Education for All' programme of the Sarva Shiksha Abhiyan is likely to result in total enrolment by 2003 and universal retention and achievement at the primary level by 2010. This will result in increased demand for secondary education. Steps

will be taken in the Tenth Plan to set up more secondary schools in the government sector as well as with the help of private trusts, religious/missionary institutions and public-spirited organisations.

8.52 During the Tenth Plan it is proposed to provide computer connectivity to 140 government senior secondary schools through **Vidya Vahini Programme** and upgrade the IT infrastructure at Delhi University through **Gyan Vahini Programme**. Later, efforts would be made to replicate these programmes in other schools and colleges by involving the private sector.

8.53 The **Vocationalisation of education** in the Tenth Plan will be a new thrust area. As a result of the universal elementary education initiatives mentioned earlier, there are going to be a number of middle school pass-outs. While some of these will pursue higher studies, there will be others who would need vocational education instead. This will equip them better to find suitable employment opportunities. In view of this, there is an urgent need to formulate a clear-cut integrated policy on vocationalisation of education.

8.54 The Government will constitute a **Committee on Promotion of Indian Education Abroad (COPIEA)**, to promote Indian education abroad and regulate the operations of Foreign Educational Institutions (FEIs) in India to safeguard the larger national interests and the interests of Indian students.

8.55 The quality of **technical education** in the Indian Institutes of Technology and the Regional Engineering Colleges, other Engineering Colleges and Polytechnics will be upgraded by providing equipment and funds for new courses, and development of teaching-learning materials. Networking of institutions for on-line exchange of information will also be encouraged.

8.56 The intake of **IT professionals** is to be doubled by 2002 and tripled by 2003.

8.57 **Sports academies** will be set up in States in collaboration with private organisations/

corporates and State Governments in order to promote sports and nurture talents.

8.58 For the first time, a new programme for the **holistic development of adolescents** will be started. The delivery mechanism for the programme will be largely in collaboration with NGOs. Various cross cutting issues like health, nutrition, alcohol/drug abuse, life skills etc., will be addressed through the programme. Gender sensitisation will be a prime concern and efforts will be made to involve adolescents in nation-building activities, awareness generation amongst peers on health, nutrition, family planning, HIV/AIDs, sanitation, environment, etc.

8.59 **Youth Development Centres** are to be set up in each of the 5000 blocks in the country. These centres will function as information technology centres as well.

8.60 Digitisation of **rare manuscripts** will be taken up with a view to preserving rare manuscripts, including those belonging to private collections.

8.61 **Urban Reforms Incentive Fund** is a new initiative whereby funds will be released to States for undertaking reforms in the urban sector. The reforms include repeal of the Urban Land Ceiling Act; reform of the Rent Control legislation; rationalisation of stamp duty rates; computerisation of registration of property transactions; improvement in the system and collection efficiency of property taxes; levy of realistic user charges for water supply and other services, and adopting double-entry book keeping in municipalities. The States are expected to enter into a memorandum of agreement with the Department of Urban Employment and Poverty Alleviation, and commit to an agreed time schedule for implementing the reform measures.

8.62 The **City Challenge Fund** will provide funds to meet the transitional and transaction costs of restructuring of urban civic services. The objective of the restructuring exercise is to improve service quality and efficiency of services, bring down losses, raise adequate revenues, and make the projects viable, and bankable.

8.63 **Pooled Finance Development Facility** is another new initiative to enable smaller urban local bodies, which cannot individually go to the financial markets to raise funds through bonds, and pool their requirements of market borrowings. A State-level agency (i.e., an Urban Development Corporation) will arrange for the pooling to be done, and raise the total required funds from the market. The Facility will assist the municipal bodies to undertake required reform measures, so that they can have the capacity to service the loans. The Facility will also underwrite a part of the repayment obligation, through contribution to a Debt Service Reserve Fund, which will raise the credit rating of the participating ULBs and help them to get better terms for their borrowing.

8.64 **Rejuvenation of Culturally Significant Cities** will assist selected cities of cultural importance with grants for upgrading infrastructure and civic amenities. These cities also attract large numbers of pilgrims and tourists, and hence require assistance to meet the demand on civic services and infrastructure.

8.65 **Urban Sanitation Mission** will be a new initiative, focussing on setting up sanitary land-fills and composting plants for urban solid waste, and improvement of drainage in urban areas.

SOCIAL JUSTICE

8.66 A National Plan of Action will be formulated for survival, protection and development of **primitive tribal groups** in consultation with the State governments/Tribal Research Institutes and anthropologists/experts on the subject.

8.67 It is proposed to introduce a **Component Plan for the Disabled** in the budget of all the related Ministries/Departments, in order to ensure flow of adequate financial resources to the un-reached, so as to make as many disabled as possible active, self-reliant and productive.

8.68 **A Skill Development Fund (SDF)** will be set up in partnership between the industry and government, with major voluntary contributions coming from the industry. The resources collected

would be utilised for creating training infrastructure at the same location where they are collected. The purpose is to attract resources from the beneficiaries from training including the employers and the employees in the organised sector, and the trade unions. Income tax incentives to the contributions made could also be considered.

8.69 **A Competency based certification system** will be introduced. While an entrant to the organised sector is usually skilled and therefore receives remuneration accordingly, entrants to the unorganised sector, who constitute more than 90 per cent of new entrants to the labour market, are usually not trained formally. They learn on-the-job. A system of testing and certification of proficiencies/skills acquired at work, albeit in the informal sector will be put in place which will be certified by professional bodies. This would greatly benefit the labour in the unorganised sector, especially those involved in manufacturing, construction and services.

8.70 **A pension system for the unorganised sector** is another area that will be paid special attention. The present pension system is confined to the organised sector, which covers less than a tenth of the labour force. In the unorganised sector, there are a large number of self-employed persons but they do not have a mechanism for earning a risk-free and reasonable return on their savings for retirement. During the Tenth Plan it is proposed to prepare a self sustaining pension system for the unorganised sector. This would also facilitate pension reforms in the organised sector.

CROSS CUTTING ESSENTIALS

8.71 **Science and Technology** plays a crucial role in catalysing and accelerating economic and social development. It has an overarching impact in almost all sectors of the economy. It plays a lead role in contributing to sustainable development and self-reliance. It is now becoming increasingly clear that while the investments in physical infrastructure are important, it is the intellectual infrastructure derived through innovative S& T initiatives that will give India a comparative advantage. During the Tenth Five Year

Plan, a number of time-bound programmes will be taken up. These include:

- Operationalisation of National Natural Resource Management System (NNRMS) through application of remote-sensing technology in developmental programmes;
 - Technology development for future generation launch vehicle for placing 4 ton class INSAT satellites in geo-synchronous transfer orbit and also critical technologies required for Re-useable Launch Vehicles;
 - Development of all-weather, remote-sensing technology by way of Radar Imaging Satellites (RISAT) with a multi-mode, multi-polarisation agile Synthetic Aperture Radar;
 - Application of space technology in education and health for tele-education and tele-medicine networks;
 - Technology demonstration for water desalination for large scale desalination of sea water and fresh water into fresh potable water;
 - Development of technically feasible, economically viable and eco-friendly irradiation technologies for farm products through linkage with State agricultural universities, seed corporations, ICAR and other State and Central agencies;
 - Genomics research, especially, for drug targeting against specific human pathogens like those responsible for peptic ulcer, tuberculosis, damage to kidney and heart, and the genes responsible for diabetes;
 - Development of new generation vaccines against diseases like rabies, cholera, HIV/AIDS, tuberculosis, Japanese encephalitis and malaria;
 - Food and nutritional security through enhancement of crop productivity, value-addition and genetic engineering for enhanced nutritional status;
 - Exploration and exploitation of microbial wealth of India for novel compounds and bio-transformation processes;
 - Development of pollution control and monitoring systems/devices for air, water and solid waste;
 - Carcass utilisation and development of eco-friendly leather processing technologies;
 - Technologies for bamboo products for giving significant thrust to the usage of bamboo, promote specialized products for commercialisation and to generate good employment opportunities; and
 - Research in the area of Nano science and technology for development of nano sized ceramics, water purification, drug delivery systems, energy devices, etc.
 - The Pharmaceutical Research & Development scheme is envisaged to encourage R&D in the pharmaceutical sector in a manner compatible with the country's needs and with particular focus on diseases endemic or relevant to India. A Drug and Pharmaceutical Research and Development Support Fund (PRDSF) is also proposed to be set up.
 - Drug and Pharmaceutical Research and Development Support Fund (PRDSF) is also proposed to be set up.
 - Validation and testing of 10 new drugs and molecules from important medicinal plants.
- **The environment** has an over-arching effect on all aspects of economic and social life. Some initiatives that will be taken up in the Tenth Plan are:
- Detailed Action Plan will be drawn up for controlling pollution in rivers and lakes.
 - Optional use of natural resources, and adoption of pollution prevention and cleaner technology projects.
 - Bio-diversity in ecologically sensitive areas to be conserved.
 - Setting up of an International Institute on Science and Technology for Tropical Areas to handle climate change related issues.

INFRASTRUCTURE

8.72 **The Nuclear Power Programme** acknowledges that the fast breeder reactor is a precursor to thorium based technologies for nuclear power, in the context of moderate uranium and vast thorium resources in India. Under this programme a 40 MWe Fast Breeder Test Reactor (FBTR) has been set up at Kalpakkam. With experience and expertise gained in the successful operation of FBTR, the Government has embarked upon the design, development and construction of the first Prototype Fast Breeder Reactor (PFBR) of 500 MWe capacity. Simultaneously, an Advanced Heavy Water Reactor (AHWR) of 235 MWe is being developed by the Bhabha Atomic Research Centre (BARC, Mumbai) for demonstration of technology to utilise thorium for electricity generation. These steps are essential to the progress in Research and Development on the utilisation of Thorium in India's Nuclear Power Programme.

8.73 **Creating a strategic crude oil storage facility** has become essential to safeguard against sudden oil supply disruptions under a deregulated post-APM scenario. A mechanism for creating strategic storage and its operation would have to be evolved in the Tenth Plan.

8.74 **The Coal Bed Methane (CBM) Programme** for exploration and production of CBM will be widened and deepened during the Tenth Plan. As per the initial assessment, significant production potential can be expected for methane production, some of which may materialise during the Tenth Plan period.

8.75 **Improving railway freight services** will be of paramount concern in the Tenth Plan. The railways freight traffic continues to lose its share to road transport. In order to maintain its share in the total traffic, the railways freight demand should grow by at least 1 per cent for each 1 per cent growth in GDP. Improvement in the quality of roads and deficiencies of the Indian Railways are the reasons for growth of capital-intensive and energy-inefficient technologies of moving goods and people in the country. To reverse this trend, it is necessary to

increase the capacity of high density corridors. In the Tenth Plan, it is proposed to reduce the speed differential between passenger and freight services by raising the speed of freight trains to 100 km/hour.

8.76 **Construction of expressways** will be taken up in the Tenth Plan. The National Highways Development Project would improve the capacity and riding quality of our major high-density corridors. However, to cater to the increase in the traffic and to improve the mobility of both passenger and freight road transport traffic, it is proposed to augment the capacity of select high-density corridors by planning and constructing a network of expressways, in the private sector. The role of Government would be restricted to that of a facilitator.

8.77 **Gateway Ports** are proposed to be established to cater to the container traffic. A large number of containers that flow into India are transshipped at neighboring ports like Colombo, Singapore and Dubai for want of adequate facilities in India. This causes delays and raises transaction costs in India's international trade. India is uniquely placed geographically between the high-density transport shipment corridors of East and West. It is proposed to set up two major gateway ports, one each on the east and west coasts. These will be connected by a rail/road bridge and equipped with efficient modern handling facilities, which would be very advantageous to international shipping companies in terms of saving of time and fuel. Simultaneously, it would provide big business opportunities for the Indian economy.

8.78 **Conclusion:** It must be recognised that all planning is based on a *a-priori* appraisal of emerging trends and the initial plans, programmes and schemes are a reflection of the strategy to address these. However, during the course of the Plan there are bound to be new developments which may not have been anticipated, given the fast changing world scenario. The Plan will therefore take cognisance of these, and may need to, and should make appropriate changes in the content and design of policies and plan programmes and schemes.