

# Towards Faster and More Inclusive Growth

An Approach to the 11<sup>th</sup> Five Year Plan



सत्यमेव जयते

Government of India  
PLANNING COMMISSION  
Yojana Bhavan, New Delhi  
December 2006

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**(2007-2012)**



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(As on 9<sup>th</sup> December 2006)

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# Chapter 1

## Objectives and Challenges

1.1 On the eve of the 11<sup>th</sup> Plan, our economy is in a much stronger position than it was a few years ago. After slowing down to an average growth rate of about 5.5% in the 9<sup>th</sup> Plan period (1997-98 to 2001-02), it has accelerated significantly in recent years. The average growth rate in the last four years of 10<sup>th</sup> Plan period (2003-04 to 2006-07) is likely to be a little over 8%, making the growth rate 7.2% for the entire 10<sup>th</sup> Plan period. Though, this is below the 10<sup>th</sup> Plan target of 8%, it is the highest growth rate achieved in any plan period.

1.2 This performance reflects the strength of our economy and the dynamism of the private sector in many areas. Yet, it is also true that economic growth has failed to be sufficiently inclusive, particularly after the mid-1990s. Agriculture lost its growth momentum from that point on and subsequently entered a near crisis situation. Jobs in the organized sector have not increased despite faster growth. The percentage of our population below the poverty line is declining but only at a modest pace. Malnutrition levels also appear to be declining, but the magnitude of the problem continues to be very high. Far too many people still lack access to basic services such as health, education, clean drinking water and sanitation facilities without which they cannot claim their share in the benefits of growth. Women have increased their participation in the labour force as

individuals, but continue to face discrimination and are subject to increasing violence, one stark example of which is the declining child sex ratio.

1.3 Despite these problems, most of the ordinary people have tried to cope with their livelihood issues. Many have participated in collective action to try to improve their social and economic conditions. Empowerment of Panchayati Raj Institutions (PRIs) is ongoing but much remains to be done. Civil Society Organizations have gained strength and are trying new experiments to reach the unreached, often in partnership with PRIs. Women are participating in PRIs and leading group action for a better life.

### 1.4 A Vision for the 11<sup>th</sup> Plan

1.4.1 The 11<sup>th</sup> Plan provides an opportunity to restructure policies to achieve a new vision based on faster, more broad-based and inclusive growth. It is designed to reduce poverty and focus on bridging the various divides that continue to fragment our society. The 11<sup>th</sup> Plan must aim at putting the economy on a sustainable growth trajectory with a growth rate of approximately 10 per cent by the end of the Plan period. It will create productive employment at a faster pace than before, and target robust agriculture growth at 4% per year. It must seek to reduce disparities across

regions and communities by ensuring access to basic physical infrastructure as well as health and education services to all. It must recognize gender as a cross-cutting theme across all sectors and commit to respect and promote the rights of the common person. The first steps in this direction were initiated in the middle of the 10<sup>th</sup> Plan based on the National Common Minimum Programme adopted by the government. These steps must be further strengthened and consolidated into a strategy for the 11<sup>th</sup> Plan.

1.4.2 Rapid growth is an essential part of our strategy for two reasons. Firstly, it is only in a rapidly growing economy that we can expect to sufficiently raise the incomes of the mass of our population to bring about a general improvement in living conditions. Secondly, rapid growth is necessary to generate the resources needed to provide basic services to all. Work done within the Planning Commission and elsewhere suggests that the economy can accelerate from 8 per cent per year to an average of around 9% over the 11<sup>th</sup> Plan period, provided appropriate policies are put in place. With population growing at 1.5% per year, 9% growth in GDP would double the real per capita income in 10 years. This must be combined with policies that will ensure that this per capita income growth is broad based, benefiting all sections of the population, especially those who have thus far remained deprived.

1.4.3 A key element of the strategy for inclusive growth must be an all out effort to provide the mass of our people the access to basic facilities such as health, education, clean drinking water etc. While in the short run these essential public services impact directly on welfare, in the longer run they determine economic opportunities for the future.

It is important to recognize that access to these basic services is not necessarily assured simply by a rise in per capita income. Governments at different levels have to ensure the provision of these services and this must be an essential part of our strategy for inclusive growth. At the same time it is important to recognize that better health and education are the necessary pre-conditions for sustained long-term growth.

1.4.4 Even if we succeed in achieving broad-based and inclusive growth, there are many groups that may still remain marginalised. These include primitive tribal groups, adolescent girls, the elderly and the disabled who lack family support, children below the age of three and others who do not have strong lobbies to ensure that their rights are guaranteed. The 11<sup>th</sup> Plan must pay special attention to the needs of these groups.

1.4.5 The private sector, including farming, micro, small and medium enterprises (MSMEs), and the corporate sector, has a critical role to play in achieving the objective of faster and more inclusive growth. This sector accounts for 76% of the total investment in the economy and an even larger share in employment and output. MSMEs, in particular, have a vital role in expanding production in a regionally balanced manner and generating widely dispersed off-farm employment. Our policies must aim at creating an environment in which entrepreneurship can flourish at all levels, not just at the top.

1.4.6 To stimulate private investment, policy induced constraints and excessive transaction costs need to be removed. To increase the number of successful entrepreneurs a competitive environment must be created which encourages new entrants and provides enough finance for

efficient enterprises to expand. Competition also requires policies to curb restrictive practices, particularly those that deter entry, for example, preemptive acquisition of property. To achieve such an environment it is imperative that the reforms agenda be pursued with vigour. Though licensing controls and discretionary approvals have been greatly reduced, there are many remnants of the control regime that still need drastic overhaul. Quantitative controls, where they exist, should give way to fiscal measures and increased reliance on competitive markets subject to appropriate, transparent, and effective regulations. The burden of multiple inspections by government agencies must be removed and tax regimes rationalized. A major component of the 11<sup>th</sup> Plan must be to design policies that spur private sector investment while encouraging competition by guarding against monopolistic practices. Continued commitment to the developmental and social roles of banking is important to ensure that the benefits are widespread.

1.4.7 While encouraging private sector growth the 11<sup>th</sup> Plan must also ensure a substantial increase in the allocation of public resources for Plan programmes in critical areas. This will support the growth strategy and ensure inclusiveness. These resources will be easier to mobilise if the economy grows rapidly. A new stimulus to public sector investment is particularly important in agriculture and infrastructure and both the Centre and the States have to take steps to mobilize resources to make this possible. The growth component of this strategy is, therefore, important for two reasons: a) it will contribute directly by raising income levels and employment and b) it will help finance programmes that will ensure more broad based and inclusive growth.

1.4.8 All this is feasible but it is by no means an easy task. Converting potential into reality is a formidable endeavour and will not be achieved if we simply continue on a business-as-usual basis. There is need for both the Centre and the States to be self critical and evaluate programmes and policies to see what is working and what is not. Programmes designed to achieve specific objectives often fail to do so even though substantial expenditure is incurred on them. It is therefore necessary to focus on outcomes rather than outlays, including a disaggregated level to examine their impact on different groups and genders. The practice of gender budgeting already begun by the central government should extend to the states, so that performance is judged on the basis of gender disaggregated data. Particular attention must also be paid to SCP/TSP guidelines for expenditure and monitoring of outcomes.

## 1.5 Strengths of the Economy

1.5.1 The strengths of our economy are reflected in the macroeconomic indicators in Table 1 which compare the position in the 10<sup>th</sup> Plan with that of the 9<sup>th</sup> Plan. Compared to the 9<sup>th</sup> Plan, the pace of growth of the economy has accelerated and our macroeconomic fundamentals are sound.

- Domestic savings rates have been rising and reached 29.1% in 2004- 05.
- The combined fiscal deficit of the Centre and state governments is higher than it should be, but has been falling and the Budget Estimates for 2006-07 suggest it may come down to 7%.
- Inflation has been moderate despite the sharp hike in international oil prices.

- The current account was in surplus during the first two years of the 10<sup>th</sup> Plan but in deficit to the extent of 1.0% of the GDP in the third year i.e., 2004-05. The deficit is estimated to have risen to around 1.3% of the GDP during 2005-06 reflecting the revival of investment and also the impact of high oil prices; but a deficit of this order is eminently financeable.
- As of August 25, 2006 our foreign exchange reserves are at a very comfortable level at \$ 165.3 billion.

**Table 1 : Macroeconomic Indicators**

	9 <sup>th</sup> Plan	10 <sup>th</sup> Plan
	(1997-98 to 2001-02)	(2002-03 to 2006-07)
GDP growth (%) of which	5.5	7.2
• Agriculture	2.0	1.7
• Industry	4.6	8.3
• Services	8.1	9.0
Gross Domestic Savings (% of GDP, at market prices)	23.1	28.2
Gross Domestic Investment (% of GDP, at market prices)	23.8	27.5
Current Account Balance (% of GDP, at market prices)	- 0.7	0.7
Combined Fiscal Deficit of Centre and States (% of GDP at market prices)	8.8	8.4
Foreign Exchange Reserves (US \$ billion)	54.2	165.3
Rate of Inflation (based on WPI)	4.9	4.8
<i>Notes:</i>		
1. The growth rate for 2006-07 is as projected by the Economic Advisory Council to the Prime Minister.		
2. Gross savings rate, gross investment rates, and the Current Account Balance are expressed in current prices and are averages for the Plan. For the 10 <sup>th</sup> Plan, these are the average of the first three years i.e., for the years 2002-03 to 2004-05.		
3. Combined Fiscal deficit is the average of the Plan. For the 10 <sup>th</sup> Plan, it is the average of the first 4 years of the Plan, i.e., for the years 2002-03 to 2005-06.		
4. Foreign Exchange Reserves are as on 29 <sup>th</sup> March, 2002 for the 9 <sup>th</sup> Plan and 31 <sup>st</sup> March, 2006 for the 10 <sup>th</sup> Plan.		
5. The rate of inflation for the 10 <sup>th</sup> Plan is the average up to January 2006.		

1.5.2 As a result of economic reforms implemented by successive governments over the past decade and a half, our economy has matured in several important respects. It is now much more integrated with the world economy and has benefited from this integration in many ways. The outstanding success of IT and IT-enabled services (ITES) has demonstrated what Indian skills and enterprise can do — given the right environment. Similar strength is now evident in sectors such as pharmaceuticals, auto components, and more recently, textiles. These gains in competitiveness need to spread to other sectors too.

1.5.3 One of the benefits derived from global integration is the increased inflow of foreign direct investment (FDI). FDI increased from an average of \$3.7 billion in the 9<sup>th</sup> Plan period to average of \$5.7 billion in the first four years of the 10<sup>th</sup> Plan. This however is still below potential. The National Common Minimum Programme states that the country needs and can absorb three times the amount of FDI that it gets. This is a reasonable target and can be achieved in the 11<sup>th</sup> Plan.

1.5.4 In the longer run, there is another important potential strength arising from our demographic trends. Our dependency rate (ratio of dependent to working age population) is falling whereas in industrialized countries and even in China it is rising. The presence of a skilled young population in an environment where investment is expanding and the industrial world is ageing could be a major advantage. It is important to realize however that we can only reap this demographic dividend if we invest on human resource development and skill formation in a massive way and create productive employment for our relatively young working population.

## 1.6 Some Major Challenges

1.6.1 The strengths enumerated above are real and provide a sound base on which the 11<sup>th</sup> Plan can build. Yet several challenges remain.

### (a) *Agricultural Crisis: Regaining Agricultural Dynamism*

1.6.2 One of the major challenges of the 11<sup>th</sup> Plan will be to reverse the deceleration in agricultural growth from 3.2% observed between 1980 and 1996-97 to a trend average of around 2.0% subsequently. This deceleration is the root cause of the problem of rural distress that has surfaced in many parts of the country and reached crisis levels in some. Low farm incomes due to inadequate productivity growth have often combined with low prices of output and with lack of credit at reasonable rates, to push many farmers into crippling debt. Even otherwise, uncertainties seem to have increased (regarding prices, quality of inputs, and also weather and pests) which, coupled with unavailability of proper extension and risk insurance have led farmers to despair. This has also led to widespread distress migration, a rise in the number of female headed households in rural areas and a general increase in women's work burden and vulnerability. In 2004-05, women accounted for 34% of principal and 89% of subsidiary workers in agriculture, higher than in any previous round of the National Sample Survey.

1.6.3 The crisis of agriculture is not a purely distributional one that arises out of the special problems of small and marginal farmers and landless labour. In fact, agricultural deceleration is affecting farms of all sizes. To reverse this trend, corrective policies must not only focus on the small and marginal farmers who continue to deserve special attention, but on middle and large farmers too who suffer from productivity stagnation arising from a variety of constraints.

1.6.4 It is vital to increase agricultural incomes as this sector still employs nearly 60% of our labour force. A measure of self-sufficiency is also critical for ensuring food security. A second green revolution is urgently needed to raise the growth rate of agricultural GDP to around 4%. This is not an easy task since actual growth of agricultural GDP, including forestry and fishing, is likely to be below 2% during the 10<sup>th</sup> Plan period. The challenge therefore is to at least double the rate of agricultural growth and to do so recognize demographic realities — particularly the increasing role of women.

**(b) *Changing Employment Patterns***

1.6.5 Doubling the growth of agricultural GDP to 4% per annum will improve rural employment conditions by raising real wages and reducing underemployment. However, even if this is attained, an *overall* growth of 9% will further increase income disparity between agricultural and non-agricultural households unless around 10 million workers currently in agriculture find remunerative non-agricultural employment. To make this possible, and absorb all new entrants into the labour force, non-agricultural employment would need to increase at over 6% per annum during 11<sup>th</sup> Plan. This poses a major challenge not only in terms of generating non-agricultural employment but also in matching its required location and type. Care has to be taken to manage the resulting livelihood changes and to ensure that employment is generated at all levels of skill in non-agricultural sector. The inadequacy of widely dispersed and sustainable off-farm productive employment opportunities is a basic cause of most divides and disparities. Growth without jobs can neither be inclusive nor can it bridge divides. All avenues for increasing employment opportunities, including those that can be provided by micro and

small enterprises need to be explored. If we fail to do so, the demographic dividend can turn into a demographic nightmare. Thus employment creation and raising employability is another major challenge for the 11<sup>th</sup> Plan.

**(c) *Providing Essential Public Services to the Poor***

1.6.6 A key element of 11<sup>th</sup> Plan strategy should be to provide essential education and health services to those large parts of our population who are still excluded from these. Education is the critical factor that empowers participation in the growth process, but our performance has been less than satisfactory, both overall and in bridging gender and other divides. Overall literacy is still less than 70% and rural female literacy less than 50% with corresponding rates even lower among the marginalized groups and minorities. While the *Sarva Shiksha Abhiyan* has expanded primary school enrolment, it is far from providing quality education. Looking ahead, we cannot be satisfied with only universal primary education; we must move towards universal secondary education too as quickly as possible. In the area of health, there continue to be large gaps in the most basic services such as mother and child care, clean drinking water, and access to basic sanitation facilities. The poor do not have even minimum access.

1.6.7 While both education and curative health services are available for those who can afford to pay, quality service is beyond the reach of the common people. Other privately provided services are of highly variable quality. In this situation, access to essential services can only be through public financing. In most cases this means public provision or partnership with non-profit and civil society organisations.

1.6.8 A major institutional challenge is that even where service providers exist, the quality of delivery

is poor and those responsible for delivering the services cannot be held accountable. Unless such accountability is established and cutting edge service providers trained, it will be difficult to ensure significant improvement in delivery even if large resources are made available.

**(d) *Increasing Manufacturing Competitiveness***

1.6.9 Although growth in manufacturing sector has accelerated compared to the 9<sup>th</sup> Plan it is unlikely to exceed 8% in the 10<sup>th</sup> Plan. This is unacceptably low. If we want our GDP to grow at 9%, we have to target a 12% growth rate for this sector.

1.6.10 Our remarkable success in IT enabled services (ITES) has prompted some observers to conclude that China has a comparative advantage in manufacturing while India in services. It has thus been suggested that we should concentrate on growth of high value services. This approach is simplistic. India's performance in IT enabled and other high end services is clearly a source of strength that must be built upon. However, India cannot afford to neglect manufacturing. We meet most of the requirements for attaining a double digit growth rate in this sector. We have a dynamic entrepreneurial class that has gained confidence in its ability to compete. We have skilled labour and excellent management capability although this is an area where supply constraints will soon emerge. There are, however, some important constraints which limit our competitiveness, especially in labour intensive manufacturing, and the 11<sup>th</sup> Plan must address these on a priority basis.

1.6.11 A major constraint in achieving faster growth in manufacturing that needs immediate attention, is the inadequacy of our physical infrastructure. Our roads, railways, ports, airports, communication, and above all power supply, are not comparable to the standards prevalent in our

competitor countries. This gap must be filled within the next 5-10 years if our enterprises are to compete effectively. In the increasingly open trading environment that we face today, our producers must compete aggressively not just to win export markets, but also to retain domestic markets against competition from imports. Indian industry recognizes this and no longer expects to survive on protection. But they do expect a level playing field in terms of quality infrastructure. Development of infrastructure is therefore to be accorded high priority in the 11<sup>th</sup> Plan.

**(e) *Developing Human Resources***

1.6.12 Decades ago we had emphasized on quality higher education by setting up IITs and other premier educational institutions. This has paid us rich dividends. However, there are emerging signs that rapid growth can result in shortage of high quality skills needed in knowledge intensive industries. One area of concern is that we are losing our edge on the tracking of pure sciences. To continue our competitive advantage and ensure a continuous supply of quality manpower, we need large investments in public sector institutions of higher learning. This should be accompanied by fundamental reform of the curriculum as well as service conditions to attract a dedicated and qualified faculty. Expanding capacity through private sector initiatives in higher learning needs to be explored while maintaining quality standards.

1.6.13 At the present pace of economic development, the country cannot train everyone to become skilled professionals. Even university level education to all cannot be ensured. But our industries require skills in specific trades, and India has historically lagged behind in the area of technical/vocational training. Even today enrolment rates in Industrial Training Institutes

(ITIs) and other vocational institutes, including nursing and computer training schools, are only about a third of that in higher education. This is quite the opposite of other Asian countries which have performed better than us in labour intensive manufactures. Vocational training institutes need to be substantially expanded not only in terms of the persons they train but also in the number of different skills and trades for meeting industry requirements as well as creating opportunities for self-employment.

**(f) *Protecting the Environment***

1.6.14 Our concern for environmental issues is growing along the lines of global concern. While in the short run there may seem to be a trade-off between environmental sustainability and economic growth, we must in the longer run, take recourse to the complementarities between environmental sustainability and human wellbeing. We have already seen that neglect of environmental considerations. For example, profligate use of water or deforestation has devastating effects. The threat of climate change poses a real challenge to future generations. Our development strategy therefore, has to be sensitive to these concerns and should ensure that threats and trade-offs are appropriately evaluated.

**(g) *Improving Rehabilitation and Resettlement Practices***

1.6.15 Our practices regarding rehabilitation of those displaced from their land because of development projects, conflicts, or calamities are very deficient. These have caused many people to feel vulnerable and there is anger because of forced exclusion and marginalisation. In particular, the costs of displacement borne by our tribal population, have been unduly high. Compensation has been tardy and inadequate, leading to unrest and insurgency in many regions. This discontent is likely to grow exponentially if the benefits from

enforced land acquisition are seen accruing to private interests, or even to the state at the cost of those displaced. To give displaced people especially women, their due rights, it is necessary to frame a transparent set of policy rules that address compensation, proper resettlement, and rehabilitation and also gives project affected persons a permanent stake in project benefits. Moreover, these rules need to be given a legal format in terms of the rights of the displaced

**(h) *Improving Governance***

1.6.16 Good governance and transparency should be ensured in the implementation of public programmes and also in government's interaction with the ordinary citizens. Corruption is now seen to be endemic in all spheres of life. Better design of projects, implementation mechanisms, and procedures can reduce the scope for corruption. Much more needs to be done by both the Centre and the states to lessen the discretionary power of government, ensure greater transparency and accountability, and create awareness among citizens. The Right to Information (RTI) Act empowers people to demand improved governance, and as government we must be ready to respond to this demand.

1.6.17 Justice delayed is justice denied. Quick and inexpensive dispensation of justice is an aspect of good governance which is of fundamental importance in a successful society. India's legal system is respected for its independence and fairness but it suffers from notorious delays in dispensing justice. The poor cannot access justice because delays cost money. Fundamental reforms are needed to give justice two essential attributes: speed and affordability.

## **1.7 Disparities and Divides**

1.7.1 Even as we address the specific challenges listed above, we must deal with the perception that development has failed to bridge the divides that

afflict our country and may even have sharpened some of them. Some of these perceptions may be exaggerated, but they exist nonetheless. The 11<sup>th</sup> Plan must, seek to bridge these divides as an overarching priority.

1.7.2 There are many divides. Foremost among these is the divide between the rich and the poor. As explained in Chapter 5, poverty is declining, but

only at a pace which is no longer acceptable given the minimalist level at which the poverty line is fixed. There is also a divide between those who have access to essential services such as health, education, drinking water, sanitation etc., and those who do not. Groups which have hitherto been excluded from our society such as SCs, STs and some minorities and OBCs, continue to lag behind the rest.

*Table 2: Status of Some Socioeconomic Indicators*

	Average/All India		Best State	Worst State
	Around 1990	Recent Year	Recent Year	Recent Year
Per Capita Net National Product : (Rs. per person at 1993-94 Prices) <sup>1</sup>	7321	<b>11799</b>	16679	3557
Consumption Poverty: Head Count Ratio (%) <sup>2</sup>	36.0	<b>27.8</b>	5.2	46.5
Literacy (age 7+) Male: <sup>3</sup>	64.1	<b>75.3</b>	94.2	59.7
Literacy (age 7+) Female: <sup>3</sup>	39.3	<b>53.7</b>	87.7	33.1
Attending Elementary Schools (6-14 years) <sup>3</sup>	55.3	<b>71.1</b>	103.1	55.8
Child Sex Ratio (0 – 6 year olds): (females/1000 males) <sup>3</sup>	945	<b>927</b>	975	793
Infant Mortality Rate: (2003) (Per 1000 live births) <sup>4</sup>	80	<b>60</b>	11	83
Maternal Mortality Rate: (1997) (Per 1000 live births) <sup>4</sup>		<b>4</b>		
Undernourished Children: (1998-99) <sup>5</sup>				
Weight-for-age		<b>47.0</b>	20.6	55.7
Height-for-age		<b>45.5</b>	18.1	55.5
Weight-for-height		<b>15.5</b>	4.8	24.3
1 For the years 1990-91 and 2003-04 2 The poverty estimates given are for 1993-94 and the latest estimates based on the NSS 2004-05 survey which is comparable with 1993-94. 3 Calculated from information based on Census 1991 and 2001 4 Based on SRS 5 Percentage below 2 standard deviation from the mean of an international reference population.				

1.7.3 Another important divide relates to gender. It begins with the declining sex ratio, goes on to literacy differential between girls and boys and culminates in the high rate of maternal mortality. The extent of bias is self evident. The statistics given in *Table 2* are reflective of the trend but do not tell the whole story. Differentials in educational status and economic empowerment are heavily biased against women. Special, focussed efforts should be made to purge society of this malaise by creating an enabling environment for women to become economically, politically, and socially empowered. Measures to ensure that society recognizes women's economic and social worth, and accounts for the worth of women's unpaid work, will be a concomitant of this.

1.7.4 The divide between urban and rural India has become a truism of our times. The central government has already adopted a multi-pronged strategy to reduce this divide in its various dimensions. For example, the Bharat Nirman programme addresses gaps in rural infrastructure and covers irrigation, road connectivity, housing, water supply, electrification, and telephony; the National Rural Employment Guarantee Act (NREGA) attempts to ensure a social safety net as it provides guaranteed employment in rural areas and at the same time has the capacity to build rural infrastructure especially if resources from other programmes are pooled in; the Sarva Shiksha Abhiyan and National Rural Health Mission are ambitious programmes for providing

elementary education and primary health services respectively. All these programmes indicate the priority being given by the Government to Rural Development and are meant to give a new hope to rural India. While making these provisions for rural India, the 11<sup>th</sup> Plan must also provide basic amenities to the growing number of poor in urban areas.

1.7.5 Regional backwardness is another important issue. Differences across states have always been a cause of concern but there exists imbalances within states as well. Backward districts of otherwise well performing states, present a dismal picture of intra-state imbalance and neglect. The Centre and the states will together have to deal with this problem on a priority basis otherwise discontent, injustice and frustration will only breed extremism. The spread of Naxalite movement to more than hundred districts in the country is a warning sign. There is anger and frustration where communalism has left scars. This is the direct fallout of the failures of the state apparatus to create an environment where the bulk of the people reap the benefits of development.

1.7.6 Special efforts must be made to give the people a sense of fairness, dignity and hope. The Backward Regions Grant Fund is meant to address the problem of regional imbalance so that the growth momentum is maintained.

1.7.7 The broad policy approaches needed to address the challenges described above, are discussed in subsequent *Chapters* of this Approach Paper.

## Chapter 2

# Growth Potential in the 11<sup>th</sup> Plan

2.1 The challenges, disparities, and divides discussed in Chapter 1 cannot be effectively addressed in a slow-growing stagnant economy. Rapid growth increases the size of the pie which, combined with policies aimed at broad basing growth, can facilitate a process of change which would help achieve our multiple objectives. Rapid growth of the economy is, therefore, not so much as an end in itself but an essential ingredient of the strategy to achieve the objectives of the 11<sup>th</sup> Plan.

### 2.2 Macroeconomic Projections

2.2.1 Simulations from several models show that the base-line growth rate of the economy, that is the growth that is likely to be achieved without significant new policy initiatives or the business-as-usual scenario has increased to around 7 to 7.5 per cent per annum. Growth has been more rapid in recent years – likely to

average a little more than 8% in four years since 2003-04 to 2006-07. But this acceleration was helped by sizeable excess capacities that existed in the economy at the beginning of the 10<sup>th</sup> Plan period. These possibilities have now been more or less exhausted, therefore future growth will have to be driven by new capacity creation. Given the leads and lags in the process, the pace of new capacity creation in the recent past is not sufficient to maintain the growth rate at above 8 per cent for any length of time. However, all the models also indicate that with additional policy initiatives it is possible to raise the average growth rate in the 11<sup>th</sup> Plan to close to 9 percent with acceleration through the Plan period to end with a rate of around 10 percent. The scenarios arising from the in-house model of the Planning Commission, which give an indication of the feasibility of different growth targets are given in Table 3.

**Table 3: Alternative Scenarios for 11<sup>th</sup> Plan**

Target GDP Growth Rate in 11 <sup>th</sup> Plan	7.0%	8.0%	9.0%
Average investment rate	29.1	32.0	35.1
Average CAD as % of GDP	2.0	2.4	2.8
Domestic Savings Rate: of which	27.1	29.6	32.3
(a) Household	20.1	20.5	21.0
(b) Corporate	5.0	5.5	6.1
(c) PSEs	3.1	3.1	2.8
(d) Government	-1.1	0.5	2.4

### (a) *Resources for Investment*

2.2.2 It is clear from the various simulation models that acceleration of growth will require significant acceleration in investments, especially during the first three years of the Plan. For instance, an acceleration of say 9% will require an increase in the total investment rate from about 30% of GDP in 2005-06 to 35.1% on average during the 11<sup>th</sup> Plan period. This is significantly lower than the investment rates reported in China for realizing comparable growth rates, reflecting the fact that our use of capital has been, and can continue to be, more efficient. Even so, the scale of the increase envisaged is substantial and the feasibility of this level of investment depends upon the willingness of the private and the public sector to invest, and also the ability of the system to finance these investments.

2.2.3 The higher level of investment has to be financed by some combination of increased domestic savings and increased foreign savings as reflected in a larger current account deficit (CAD). In recent years, the current account has been in surplus or at worst a small deficit, but the rapid growth of investments required to attain high GDP growth can push up the CAD significantly. There are limits to the extent to which the CAD can be widened but it is reasonable to assume that the CAD could be allowed to increase from 1.3% of GDP in 2005-06 to 3.0%, provided it is financed mostly from foreign direct investment (FDI) and long-term external borrowings rather than short-term borrowings or portfolio flows. Even higher levels of the current account deficit can be tolerated for some time, if financed largely by higher FDI, but in general we should aim at keeping the CAD below 3%.

2.2.4 If the CAD is constrained as indicated, the total domestic savings rate must increase from

around 28% that is likely to be in 2005-06 to something over 32% for a growth rate of 9 per cent in the 11<sup>th</sup> Plan period. The growth of household and corporate savings will be determined by behavioral parameters, given the growth of income and GDP. With an increase in the tax/GDP ratio, household savings as a percentage of GDP have not shown a sustained upward trend in recent years while corporate savings have increased. Private savings are thus projected to grow to 28.1% of GDP during 11<sup>th</sup> Plan<sup>1</sup> from 27.3% in the first three years of the 10<sup>th</sup> Plan. Private savings can be influenced by government policy but only to a limited extent. A significant portion of the required increase in domestic savings will therefore have to come from an improvement in government savings. The required improvement in government savings would have to be from around -1.5 per cent of GDP in 2005-06 to at least +1.0 per cent for a growth rate between 8.5 and 9%, and even higher for a more ambitious growth target. In addition, the savings of public sector enterprises would also need to increase somewhat since PSU investment financed by IEBR would need to increase by about 1.5% of GDP.

2.2.5 The public savings target will require very strong budgetary discipline by both the central government and the state governments. Fortunately, the high buoyancy in tax revenues visible in recent years suggests that tax structure and tax administration reforms are having an impact. Continuation of these efforts at the Centre and also in the states will be essential to achieve rapid growth in tax revenues. This needs to be combined with moderation in growth of current expenditure, especially in subsidies, and with progress in rationalizing user charges to reduce losses in various public sector areas. These issues are examined later in detail in Chapter 6.

**(b) *The Mix of Private and Public Investment***

2.2.6 Availability of resources is one part of the picture. It is also necessary to achieve high levels of investment, both public and private. Private investment is responsive to the aggregate growth of GDP as also to policies that open up investment opportunities, reduce the transactions cost of doing business, and reduce the cost of finance. A growth rate of 9 per cent requires a rise in private investment from the historical average of 6.5% per year to nearly 12% per year, taking it from 21.1% of GDP in the 10<sup>th</sup> Plan to 24.9% in the 11<sup>th</sup> Plan (See *Table 4*). The growth of private investment will be somewhat faster than projected in the *Table 4* on account of better investment climate and a successful strategy of using PPPs to develop infrastructure. Even then public investment would have to increase from an average of 6.7% of GDP in the 10<sup>th</sup> Plan to 10.2% in the 11<sup>th</sup> Plan to meet the total investment requirements shown in *Table 3*.

**Table 4: *Some Implications of the Savings Requirements for 11<sup>th</sup> Plan***

Target GDP Growth Rate in 11 <sup>th</sup> Plan (%)	7.0	8.0	9.0
Public Investment (as % of GDP)	8.4	9.8	11.2
Private Investment (as % of GDP)	20.7	22.2	23.9
Government Revenue Balance (% of GDP)	-2.9	-1.3	0.6
Government Fiscal Balance (% of GDP)	-6.4	-6.2	-6.0

2.2.7 The projection of private investment is optimistic but not impossible. Private investment registered growth rates of above 18% per annum

during the period 1994-95 to 1996-97, and could do so again, if the investment climate appears favourable. It should be noted however that public investment in certain areas is often an important determinant of private investment and for this reason it would be desirable to maintain ambitious targets for public investment especially in infrastructure including energy. This is especially so because infrastructure development is a critical area in the 11<sup>th</sup> Plan and public investment has a large role to play in this area.

2.2.8 The role of the public sector in promoting PPPs in infrastructure deserves special mention. The projections in *Table 4* do not explicitly allow for investments made in the PPP mode. Allowance has been made for PPP investments in working out the public sector savings shown in *Table 3*. This support takes the form of viability gap funding of PPPs in the form of a transfer from the public sector to the private sector leading to the level of private investment being correspondingly higher. PPP offers a distinct possibility for increasing total investments in certain key sectors by using a limited amount of public resources to leverage a much larger amount of private investment. However, to succeed in this requires considerable institutional capacity in the public sector. Given the inefficiencies often encountered in public investment, such PPP could also increase economic efficiency and lower the capital requirement, provided that regulatory mechanisms are adequate. (See *Box* in Chapter 3)

### 2.3 Sectoral Growth Rates

2.3.1 The sectoral growth rates consistent with the 9% growth scenario suggest that; demand constraints on agriculture will restrict its growth to around 4%; services could grow at 10%; and industry a little faster. The implicit growth of manufacturing sector, which is a subset of industry,

would be around 12%. The target growth rates for Industry and services certainly appear feasible in the light of recent performance, although the agricultural growth rate target is much higher than recent trends.

2.3.2 The importance of agricultural growth arises not only from the need to provide for adequate food production and a broader base of income generation but also because of the increasingly important role rural demand will need to play in order to support non-agricultural growth from the demand side. Much of this demand would be for non-agricultural products produced in rural areas which would also generate non-agricultural employment in rural areas. It may be noted that if agriculture grows at the recent trend growth rate of only 2%, the industrial growth required to meet the GDP growth targets becomes much higher, and a much higher export growth is required to absorb the additional industrial growth. Export growth in the 9% growth scenario would have to be nearly 26% per year instead of the 16.4% necessary if agriculture grows at 4%. Such very high export growth requirements may not be easily attainable, despite the recent performance. Therefore, a strategy aiming at acceleration in the growth rate should provide for acceleration in agricultural growth not only because it is more consistent with reducing poverty and generating income in rural areas, but also because it is more consistent with the likely constraints on export performance.

## 2.4 The External Environment

2.4.1 Any assessment of growth potential must take into account the external environment facing the economy which is now more important for

our growth prospects than earlier, given our greater integration with the world economy.

### (a) *Trade Liberalization*

2.4.2 The progressive trade liberalization implemented since 1991 has resulted in the complete dismantling of all quantitative controls on import of merchandise and reduction of peak import tariffs on non-agricultural products from 300 per cent in 1991-92 to 12.5 per cent in 2006-07. Liberalization of trade and investment policies over the last 15 years has brought rich dividends in several areas. With India subscribing to the Information Technology Agreement, computer hardware and telecommunication equipment became accessible to entrepreneurs at international prices. The adoption of one of the most liberal trade and investment regimes in this area gave the country a highly efficient system in basic telecommunications. Liberalization of trade and investment in high technology goods and the development of efficient basic telecommunication have brought India to the forefront of developing nations supplying IT-enabled and knowledge-related services. If India can continue to produce engineers and highly skilled categories of professionals, it can hope not only to maintain its position but also increase its standing in the world knowledge economy.

2.4.3 Liberalization has also improved competitiveness of the manufacturing sector. The automobile components industry and the generic drugs industry are in the process of becoming front-runners internationally. The fact that for more than four years India's exports of merchandise have grown at more than 20 per cent annually in US\$ terms testifies that liberalization has made India's manufacturing sector internationally competitive.

External liberalization has complemented internal liberalization and put Indian manufacturing sector in a strong position. During the 11<sup>th</sup> Plan, while continuing with trade liberalization, we need to consolidate the gains to the economy from reduction of tariffs by intensifying trade facilitation measures to reduce transaction costs and the time taken for customs clearance.

#### (b) *Foreign Direct Investment*

2.4.4 India is now regarded as one of the best performing emerging market countries capable of sustaining rapid growth over the next two decades, provided appropriate policies are put in place to deal with existing constraints on growth. This has created a favourable impression among foreign investors though there are complaints still about the ease of doing business. Most of the major international companies are now operating in India and many have announced ambitious expansion plans.

2.4.5 There has been steady liberalization of the FDI policy as well. Although some key service sub-sectors are still subject to FDI ceiling, and restrictions apply in a few business services and retail services, there is continuing progress. The FDI limit has been eliminated in virtually all areas in the manufacturing sector and in the majority of sub-sectors in the services sector. The country also remains on course on its policy of encouraging capital flows in a cautious manner. The flow of FDI amounted to about \$6 billion in 2005-06 and could increase significantly during the 11<sup>th</sup> Plan. However, for this, delays in state level clearances required by investors to establish enterprises will have to be reduced and some further progress may have to be made in raising FDI limits where these still exist.

#### (c) *Oil Prices and the Global Economy*

2.4.6 The global prices scenario has been a major source of concern since 2005. It is difficult to predict what will happen to oil prices over a five-year period. There has been some softening in oil prices from the peak of over \$70 per barrel, but current assessments are that oil prices will remain high. This could exert contractionary pressures on the economy, both directly and also through its impact on world economic growth. The impact of high oil prices on the world economy has been somewhat muted thus far, partly because industrialised countries have been more able to adjust to higher oil prices. However, there are also macroeconomic imbalances in the world economy which introduce uncertainties about global economic performance in the years ahead.

2.4.7 For India, the persistence of high oil prices does pose difficult choices between (a) passing on the price increase to the consumer; (b) lowering taxes on petroleum products; and (c) squeezing the oil companies. Each of these options has some adverse consequences, and the government has resorted to a combination of all three in the past 12 months. In the medium term, the only viable approach is to rationalize taxation on petroleum products and then pass on the bulk of the burden of higher oil prices to consumers with targeted subsidies to protect the poor.

2.4.8 Simulations with macro-models suggest that if oil prices increase sharply in future, our growth rate could be lowered by 0.5 - 1.0 percentage points below the levels projected with present levels of oil prices. However, all such estimates have a large margin of error. The important point is that even these simulations show that with appropriate oil pricing policies,

increased exports, and appropriate fiscal and monetary policies, the adverse impact of high oil prices on GDP growth can be substantially moderated in the medium term. They will have an impact on affordable levels of consumption, but they need not have as sharp an impact on GDP growth.

2.4.9 The other source of the uncertainty mentioned above is the persistence of major macro-imbalances among some of the largest economies. It is difficult to predict whether these can be managed through international policy coordination to achieve a soft landing or whether a disruptive adjustment is more likely. The latter would depress the growth of world trade and exert downward pressure on our growth possibilities. In formulating the 11<sup>th</sup> Plan we should assume that a more disruptive adjustment will be possible.

## 2.5 Financing Development

2.5.1 The macroeconomic feasibility of the strategy proposed in this paper in terms of aggregate domestic savings has been discussed above and the specific problems of financing the public sector plan are discussed further in detail in Chapter 6. A key feature which affects feasibility is the financial system and its ability to intermediate savings to potential users. Accelerated growth involves expansion in investment, economic restructuring of existing enterprises as they gear themselves for competition, and encouraging new entrepreneurs to respond to opportunities. All this is possible only if the financial systems can finance the structural changes taking place.

2.5.2 One of India's strengths is that it has a financial system comprising commercial and

cooperative banks, various types of non-bank financing organizations, capital market institutions, and insurance and pension funds. Indian skills are evident in financial markets and institutions all over the world and the Indian financial system has evolved to meet many specific needs, improving considerably over the years with an expansion in depth and variety.

2.5.3 There are several problems in areas of cooperative banking and in reaching finance to small-scale industry. Solving these problems expeditiously is critical for ensuring inclusiveness of growth. The Vaidyanathan Committee has laid out a road-map to revitalize rural credit co-operatives but the situation regarding finance for micro and small non-agricultural enterprises (MSE) is even worse than for farm credit. Unlike agriculture, MSEs have to face direct competition from the corporate sector which not only has access to equity markets but also appears able to preempt bank credit when it is tight. This lack of a level playing field can have serious consequences for employment if thereby the corporate sector is able to wrest markets from those MSEs which are otherwise competitive. A continuing commitment to priority lending for both agriculture and MSEs remains therefore an essential feature of the development banking required for growth. Nonetheless, the overall financial system needs to be strengthened and developed through improved regulatory mechanisms in line with international best practices and by liberalising to encourage competition.

2.5.4 The approach that has been followed thus far has included an increased role for private sector banks and foreign financial institutions in the domestic market, and a carefully calibrated

opening of the economy to international capital markets. This has generally succeeded in ensuring systemic stability while also allowing financial development. As we gain confidence in systemic stability and as the oil price scenario and its effect on the international economy, becomes clearer, we can be more ambitious. It should be noted, however, that the degree of fiscal consolidation that is usually considered safe for capital account convertibility would, on current projections of revenues and non-plan expenditures, place constraints on providing budgetary support required for faster and more inclusive growth in the 11<sup>th</sup> Plan (Chapter 6).

2.5.5 Several aspects of the strategy outlined in the Approach Paper call for financial innovation. The insurance and pensions sectors are major sources for long-term finance for infrastructure, and policies need to evolve to encourage the development of a healthy and well-regulated industry. The need to manage risks of various types calls for new insurance products. As Indian corporates acquire positions abroad, they will need to hedge themselves against various risks. The need to encourage innovation and new entrepreneurship will require encouragement of venture capital funds which are as yet in their infancy. A comprehensive review of policy in the area is necessary and should be undertaken in the 11<sup>th</sup> Plan.

2.5.6 Micro-finance is another new development in which Indian institutions have acquired considerable expertise and where up-scaling holds great promise to expand the nature of financial services offered to micro enterprises and also to make these the springboard for entrepreneurial development. The 11<sup>th</sup> Plan must

ensure that our policies are sufficiently flexible to support the development of micro-finance. Interest rates in the micro-finance sector have to be significantly higher than in the banking sector reflecting the much higher cost of doing business. This sometimes attracts criticism but they still remain much lower than rates charged by money lender and therefore provide competition to money lenders. There have been incidents of state governments imposing restrictions on micro-finance institutions in a manner which does not appreciate the ground realities. Such excessive regulation can prevent the development of a healthy and competitive micro-finance sector which could compete with usurious money lenders.

## 2.6 Growth Target for the 11<sup>th</sup> Plan

2.6.1 To summarize, the task of achieving an average growth rate of around 9 percent in the 11<sup>th</sup> Plan is macroeconomically feasible. In fact, the scenarios show that even 10 percent growth rate is achievable with a strong fiscal effort that is difficult but not impossible. However, to achieve a more inclusive growth, substantial resources would have to be directed to setting right the neglect of rural infrastructure and provide education and health services to all. While these outlays will eventually lead to faster growth, in the short term there will be some reduction in growth rate. It is, therefore, proposed that the target growth rate for the 11<sup>th</sup> Plan be placed at 9 per cent per annum.

2.6.2 The key macroeconomic values consistent with a growth target of 9.0% are presented in Table 5. These values have been adjusted to account for the growing role of private investment through public private partnership, and the higher rate of private savings seen in recent years.

Table 5: *Macroeconomic Indicators for the 11<sup>th</sup> Five Year Plan*

		10 <sup>th</sup> Plan (Actual)*	11 <sup>th</sup> Plan (Average)
1.	Growth rate of GDP (%); of which;	7.2	9.0
1a.	Agriculture	1.7	4.1
1b.	Industry	8.3	10.5
1c.	Services	9.0	9.9
2.	Investment rate (% of GDP) of which	27.8	35.1
2a.	Public	6.7	10.2
2b.	Private	21.1	24.9
3.	Domestic Savings rate (% of GDP) of which	28.2	32.3
3a.	Household	22.8	22.0
3b.	Corporate	4.5	6.1
3c.	PSEs	4.2	3.0
3d.	Government	-3.2	1.2
4.	Current account balance (% of GDP)	0.2	-2.8
5.	Government revenue balance (% of GDP)	-4.4	-0.2
6.	Government fiscal balance (% of GDP)	-8.0	-6.0
*	1. GDP growth rate is actual up to 2005-06 and as estimated by the EAC to PM for 2006-07. Savings rate, investment rate and CAB are actual up to 2004-05		
	2. Government fiscal balance and revenue balance are based on actuals (3 years for Centre and two years for States) and for remaining years RE/BE/Projected.		

2.6.3 In adopting a target of 9.0% growth, we need to recognize certain key vulnerabilities and provide for them:

- The projection assumes no sharp disruption in the world economy which could arise from a disorderly adjustment of global macro-imbalances or a further large increase in oil prices. If this happens, our growth prospects would be affected at least for a few years.
- The experience of the past decade indicates that endogenous business cycles may have become an abiding feature of Indian macroeconomic behaviour. This can be addressed through appropriate fiscal and monetary measures provided that recognition is early enough.
- The most vulnerable period will be the first two years of the Plan during which the

possibility of a cyclical downturn is complicated by the effect of oil prices on the domestic and the international economies and by the lack of sufficient flexibility in fiscal management arising from FRBM Acts in the Centre and the states.

- Agriculture continues to be an important driver of macroeconomic behaviour in India and all projections are based on a steady, sustained improvement in agricultural

performance. Any slippage will have to be compensated by measures which not only prevent rural distress but also preserve the growth momentum.

2.6.4 Finally, macro-economic feasibility is only one test. To make the growth target a reality, and also to do so in a manner which makes the growth inclusive, calls for a large number of supportive policies in individual sectors. These are explored in the subsequent Chapters of this Paper.

## Chapter 3

# Sectoral Policies for the 11<sup>th</sup> Plan

3.1 The transition towards faster and more inclusive growth calls for significant new initiatives in many sectors. In some we need to build on policies that are working well but need further strengthening in critical areas to build the additional momentum needed. In others we need a more comprehensive restructuring since it is evident that business as usual will not do. In this Chapter, and Chapter 4, we provide a brief assessment of the broad direction of policy we need to explore in formulating the 11<sup>th</sup> Plan.

### 3.2 Accelerating Agricultural Growth

3.2.1 The crisis of stagnation in agriculture needs urgent attention. This sector still provides livelihood to nearly 60 percent of our people and remains vital for food security. To ensure a better life for women and men engaged in agriculture, it is necessary to double the growth rate achieved in 10<sup>th</sup> Plan and put agriculture on a growth path of around 4 percent. To do this and at the same time maintain prices and profitability, a corresponding increase in demand for agricultural output matched with the supply side response based on productivity improvements is required. As pointed out by the National Commission on Farmers, we need a *new deal* that rebuilds *hope* about farming. Apart from larger public resources that this requires, state level policy makers need to identify critical areas of support and reform that will instill confidence in farmers to undertake more investment.

#### (a) *Increasing Demand for Agricultural Output*

3.2.2 In recent years our farmers have been hesitant in expanding production because a) per capita domestic food consumption has stagnated in recent years and b) world prices turned weak for many crops. Consequently agricultural product prices received have failed to keep pace with overall inflation and production costs, thus reducing farm profitability. Various models suggest that even with 8 to 9 percent GDP growth a 4% growth in agriculture will not be sustainable from the demand side unless agricultural exports pick up or consumption by the poor grows beyond what is likely as a result of GDP growth alone.

3.2.3 This means that, although more rapid agricultural growth is the key to more inclusive growth, this in itself requires that other initiatives be in place to ensure that the poor are able to improve their nutrition and contribute to growth of agricultural demand. The recently introduced National Rural Employment Guarantee Programme, will help increase incomes of the poor directly and reduce expenses incurred on distress migration. The emphasis on expanding access and improving quality of public sector schools and health facilities may also help by reducing the need to pay privately for these services.<sup>1</sup> Improved rural connectivity envisaged through the Bharat Nirman programme can also trigger growth of an integrated

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<sup>1</sup> A very large shift, of at least 5% of total private consumption, has occurred over the last decade from food to health, education and conveyance, some of which should be reversible.

national market where rural people are more able to meet each others' demand. In its sheer size and scope, the broad based expansion of such rural-rural trade is likely to be much more important in the initial years than other efforts to create demand support such as promoting agricultural exports or support to domestic processing for agricultural diversification. Over time, importance of diversification is likely to grow as infrastructure is put in place, with added advantage of being able to attract private corporate investment into rural areas.

3.2.4 The demand side also requires renewed focus on the Minimum Support Prices (MSP) policy and the need for a supportive tariff policy to deal with import price variability. Implementation of MSP policy is very weak except for a few crops in a few regions, and has often failed when farmers were most in need. There have also been too many cases in recent years when world prices have declined very sharply and compensating changes in tariffs have been unduly delayed. All this has lent credence to the view that WTO and globalization are against farmers' interests and that the government is no longer committed to supporting farm prices though, on the contrary, our tariff bindings in WTO are in most cases adequate to prevent prices falling below costs of production through WTO-compatible interventions. We need to consider ways of strengthening the MSP policy especially ensuring coverage of relevant crops and of new areas where production increases are likely to take place. We also need to evolve a clearer understanding of how best to adjust import tariff to insulate farmers from collapses in international prices. This may require an internal mechanism that includes the Commission for Agricultural Costs and Prices for signalling automatic tariff revision. This will buoy farmer confidence without precluding longer term reform.

### (b) *Strategy to Increase Supply*

3.2.5 The supply side challenge of doubling agricultural growth is even more formidable. No dramatic technological breakthrough comparable to the first green revolution is presently in sight. And yet the target requires that we achieve higher agricultural growth than has ever been attained in the past, starting at a point where agricultural price-cost ratios are lower than in earlier periods of relatively rapid growth. Moreover, the world oil price scenario could turn price-cost ratios further adverse since higher oil prices not only increase costs of production but also push farm output prices further below consumer prices by increasing transport margins.

3.2.6 Sustained long-run growth depends critically upon technological progress and steps are therefore needed to strengthen research in agriculture. However, research has long time lags and it must be recognized that most of the gains realizable during the 11<sup>th</sup> Plan will have to come by exploiting the potential of existing technology. There is enough scope for increasing productivity using existing technology, particularly since Bharat Nirman should ease infrastructure constraints significantly.

Most of the growth required in cereals, pulses, and oilseeds is possible merely by narrowing the gap between actual yields and those obtained in trials. But further region-wise, crop-wise analysis is necessary to identify the specific constraints and policy distortions that have resulted in these yield gaps. Development of appropriate strategies for different agro-climatic zones requires a strong data base with regard to soil characteristics, soil health, water availability, weather parameters etc. Improvement in land and water management, much enhanced extension support, quality planting material, and better animal breeds etc., are also required to overcome the yield gaps. Supply or

quality problems with fertilizers and pesticides, or higher costs of inputs requires that cannot be met due to insufficient credit may also have to be addressed. In effect, it is necessary to revive and improve the whole range of systems support that a small farm economy requires, but which appears to have deteriorated because State governments have cut-back in the course of fiscal consolidation. There must be informed advice on farm practices and recommended inputs, particularly seeds, must be easily available and affordable. The quality of all inputs should also be regularly monitored. In some cases, the private sector may be able to provide superior support, for example, through PPPs to revive sick State seeds farms or contract farming, but for most part this is a responsibility that State governments must fulfill.

3.2.7 Further, because the basic strategy is to exploit existing technology more intensively, it will require either much more effort from farmers or more labour saving machinery. Mechanization has accelerated during the last decade despite slow agricultural growth (for example tractor numbers went up to 70% between 1997 and 2003 Livestock Censuses) and this trend will normally intensify if growth increases, particularly because young males in relatively better off farm families now prefer off-farm work. But while higher labour productivity is desirable, and so is voluntary exit from farming to better non-farm alternatives, NSS reports a rapid rise in involuntary unemployment among agricultural wage workers due to large absolute decline in days of agricultural wage employment. There is evidence too of increase in unrecorded tenancy. Despite this more land is being left fallow. Current land distribution and laws governing tenancy need to be re-examined.

3.2.8 Taking all the above into account, the 11<sup>th</sup> Plan strategy to raise agricultural output will be based on the following elements:

- Double the rate of growth of irrigated area;
- Improve water management, rain water harvesting and watershed development;
- Reclaim degraded land and focus on soil quality;
- Bridge the knowledge gap through effective extension;
- Diversify into high value outputs such as fruits, vegetables, flowers, herbs and spices, medicinal plants, bamboo, bio-diesel etc., but with adequate measures to ensure food security;
- Promote animal husbandry and fishery;
- Provide easy access to credit at affordable rates;
- Improve the incentive structure and functioning of markets;
- Refocus on land reforms issues.

These issues are discussed in detail in subsequent paragraphs.

(i) *Water Management and Irrigation*

3.2.9 Water is a critical input for agriculture and this calls for more effective utilization of existing irrigation potential, expansion of irrigation where it is possible at an economic cost and better water management in rainfed areas where assured irrigation is not possible. This is clearly an area where past policies have been inadequate. Performance in expanding irrigation has been disappointing with resources being spread thinly over many projects and a large number of irrigation projects remaining under construction for many years. At the same time, flood forecasting, control and management are also vitally important for many parts of the country.

3.2.10 The Bharat Nirman programme envisages creation of 10 million hectares additional assured

irrigation during the 4 years period (2005-2009). To achieve this, the pace of potential creation will have to increase from 1.42 million hectares per year in recent years to 2.5 million hectares per year. Of the new potential envisaged under Bharat Nirman, about half is planned for 2007-08 and 2008-09 that is first 2 years of the 11<sup>th</sup> Plan. Assuming the same rate continues thereafter, a total of about 11 million hectares of new potential can be expected in the 11<sup>th</sup> Plan consisting of 5.5 million hectares in major & medium irrigation, 3.5 million hectares through minor irrigation and about 2.0 million hectares through ground water development. In addition, another 3-4 million hectares of land is to be restored through modernization of major, medium, and minor projects and restoration of tanks.

3.2.11 Investments in the major and medium irrigation sector will require large resources from the state governments supported by Central Assistance under AIBP. However, prioritization by proper cost-benefit analysis and timely implementation of these projects by state governments is also important. Besides regular monitoring by Central Water Commission, it is proposed to expand usage of remote sensing techniques for this purpose which has been initiated on a pilot basis in the 10<sup>th</sup> Plan.

3.2.12 Along with expansion of irrigation facilities, it should be ensured that water is distributed equitably and used efficiently. The pattern observed in the past where tail-enders are denied water because upper end-users appropriate it for highly water intensive crops must be avoided. Participatory Irrigation Management (PIM) by democratically organized water user associations empowered to set and collect water charges, and retain a substantial part of the collection, would help to maintain field channels, expand irrigated area, distribute water

equitably and provide the tail enders their just share of water. Experience in Andhra Pradesh and Gujarat has shown the effectiveness of such PIM. The 11<sup>th</sup> Plan must expand reliance on PIM on a large scale.

3.2.13 Water is also critical for rainfed as well as unirrigated land which accounts for more than 60% of cultivable area. Water conservation and ground water management is critical for these areas and will therefore need much more focused attention. In some regions, particularly the lower Gangetic plains and Assam, there is vast scope to utilize the abundant ground water which can quickly add to output. Tapping this potential must be an essential part of 11<sup>th</sup> plan strategy. In other regions, the urgent need is for discipline on groundwater use to avoid the deepening agricultural crisis in dry land areas. Some policies being followed by state governments encourage wasteful use of water. As the NCF has pointed out, having access to cheap power use almost doubles the amount of water per unit of crop compared to farmers using diesel pump sets. Continued provision of free power by some states, and highly subsidized power by all states, encourages excessive use of ground water. This is reflected in the fact that semi-critical, critical, and over exploited areas of groundwater use are increasing and already cover 29% of the blocks in the country.

3.2.14 Watershed management, rainwater harvesting, and ground water recharge can help augment water availability in rainfed areas. Micro-irrigation is also important to improve water use efficiency. Building structures for water management and managing them provides immediate opportunities for employment generation in rural areas. The enhanced productivity of land will generate further sustainable demand for labour in rural areas. The National Rainfed Areas Authority, which will be set up shortly would

provide for developing concerted action plans for rainfed areas in close consultation with state governments.

3.2.15 A serious effort at addressing water management issues will require a substantial commitment of public resources. With an estimated 80 million hectares needing treatment, and average expenditure of Rs.10,000 per hectare, the total requirement of funds is about Rs.80,000 crore. For this magnitude of funds to be available during the 11<sup>th</sup> Plan, it is essential that these programmes be converged with or at least supplemented by the Employment Guarantee programme funding local level schemes which conserve moisture and recharge ground water.

(ii) *Reclaim Degraded Land and focus on soil quality*

3.2.16 Due to expansion of urban areas net sown area has reduced significantly in recent years. While conversion of agricultural to non-agricultural land is an unavoidable concomitant of the development process, we need to ensure that this does not put undue pressure on agriculture or lead to inefficient land-use, for example loss of water bodies and speculative land purchase that reduces cultivation without any productive use for several years. Existing regulatory procedures need to be re-examined since delay in converting land from farm-use to more productive non-farm use does have costs. But this must go hand-in-hand with the creation of a new regulatory framework governing such conversion, based transparently on principles of sound land-use planning.

3.2.17 Since land-use patterns *will* change, it is necessary to offset the loss of agricultural land by bringing more land under cultivation. As noted above, there is a large amount of degraded land that can be reclaimed through watershed development.

There is also a considerable amount of saline and sodic land, which can be brought back to cultivation with treatment. Although schemes exist, these have so far suffered from lack of funding. As with watershed development, state governments should upscale using all the scope for convergence with other rural development programmes including, where possible, National Rural Employment Guarantee Programme (NREGP).

3.2.18 The scope for improving the quality of land that is currently being cultivated also needs further exploitation. Vast areas of cultivated land are acidic, where significant yield increases are possible through treatment using waste material from industry. There is sulphur deficiency in large parts of the country, but this can be treated effectively, resulting in better yield, particularly for pulses and oilseeds. More generally, Indian soils are relatively deficient in organic matter and are suffering inadequate manuring and composting, aggravated in many regions by unbalanced use of chemical fertilisers, especially excessive application of nitrogen. This raises serious issues of long-term sustainability, but also offers the possibility that fairly large yield increases can be obtained in the short-run by applying the other nutrients, including micro-nutrients, that have been seriously depleted. Subsidies are, to a considerable extent, responsible for excessive use of some fertilizers, for example, Urea. Fertilizer pricing therefore requires urgent reform to end the present irrational discrimination across nutrients.

(iii) *Bridging the Knowledge Gap*

3.2.19 The National Commission on Farmers (NCF) has drawn attention to the knowledge deficit that exists at present and explains much of the difference between yields realized in experiments and what farmers actually get. One reason for this is the virtual collapse of extension services in most

states, with 30-40% of positions remaining vacant. Farmers are not fully aware of the adverse consequences of unbalanced fertilizer use or of benefits of micronutrient application and soil testing to determine optimal nutrient requirements is hardly practised on a regular basis even by State Agriculture Departments. Similarly, although many new varieties of seeds and pesticides have entered the market during the last decade and farmers are using these, they do not appear to have significantly higher productivity and there are frequent complaints about quality. A problem is that input dealers, who have narrow commercial interests have emerged as the main vehicle for technology diffusion and farmers do not have access to reliable third-party advice which an effective and knowledgeable extension service should be able to provide. Lack of credit also pushes farmers to purchase inputs from local suppliers who often provide sub-standard inputs.

3.2.20 To overcome information gaps and for advice in contingencies such as pest-attacks, it is necessary to revitalize the extension system in a manner that links universities and best practices effectively to farmers. States need to take urgent steps in this area. Central initiatives on this also need to be strengthened. Krishi Vigyan Kendras set up by **Indian Council of Agricultural Research (ICAR)**, have very little interaction with the Agricultural Technology Management Agency (ATMA) model of extension being promoted by the Department of Agriculture & Cooperation (DAC). Due to this lack of coordination not only are farming practices in large parts of the country sub-optimal, our plans and programmes are failing to converge technical and development aspects even across Centrally Sponsored Schemes (CSS) of the Ministry of Agriculture (MoA), let alone converging effectively with those of other central ministries, such as on watershed development. The

lack of synergy between different public efforts must be addressed urgently to multiply returns to plan expenditure.

3.2.21 The NFC has suggested ways to synergize at the village level, for example, through Farmer Knowledge Centres, which is already being implemented in some places with PRI and NGO help. Since synergies between line departments and CSS can be derived best through district plans, the Planning Commission and Ministry of Panchayati Raj have begun strengthening the process of district planning. The recent MoA initiative to set up technical bodies such as the National Fisheries Board and the National Rainfed Areas Authority should help to improve synergy.

3.2.22 The nature of technical constraints and crop/livestock development possibilities vary considerably across different agro-climatic zones and the agricultural strategy for the 11<sup>th</sup> Plan will have to aim at evolving packages specific to zones. In this context, there is a need to bring a much more regionally focused technical content into all CSS of MoA. However, while strategies can emerge through consultation between the Centre and the states, the task of implementing these on the ground falls almost wholly on the state governments. Administrative structures need to be optimized for region-specific implementation. One approach could be that MoA delegates many of the existing powers from Delhi by appointing Regional Production Commissioners based alongside ICAR Regional Co-ordinators.

(iv) *Diversification to High Value Output while ensuring food security*

3.2.23 Faster agricultural growth will require diversification into higher value output, for example horticulture, floriculture etc. This is partly because demand patterns are shifting in that

direction and also because in many cases this is the most efficient way to increase incomes of farmers from their limited land and water resources. Recognizing this, the newly launched National Horticulture Mission (NHM) is already the largest *single plan scheme* of MoA, which is even larger than the Macro-Management in Agriculture (MMA) scheme that provides main support from the Centre to almost all other crop activity. The NHM allocation is large because apart from including significant new interventions for ensuring availability of quality planting material; crop and regions-wise, the programme also provides for structural changes in the relationship between agriculture and non-agricultural sectors. Horticulture products are perishable commodities and therefore very efficient linkages need to be put in place between farms and final buyers. This requires modern methods of grading, post-harvest management, cold chains, etc. For this purpose, besides providing for direct public investment in marketing infrastructure, NHM incentivises amendment of APMC Acts to enable larger private sector participation in marketing and processing. Many States have begun this process, which should be accelerated.

3.2.24 Diversification also means that the produce must meet the specific requirements of the different markets being serviced, and these requirements vary depending on whether the market is domestic consumption, agro-processing or exports. Producers' co-operatives are one way of achieving these linkages. Contract farming is another way of attracting corporate investors to help establish these linkages and also provide farmers with necessary inputs, extension, and other advice. Many states have taken steps to facilitate contract farming as a way of assisting the process of diversification. A much greater focus is also necessary on enabling small farmer participation by encouraging group

formation and providing suitable and effective regulatory frameworks. Entrenched interests dominating traditional trade channels often oppose change. But such opposition, if it seeks simply to restrict market competition or to hinder the growth of co-operation among farmers, is against the interest of both farmers and consumers.

3.2.25 In a mission so demanding of public resources and with a scope that can alter how agriculture is carried out and how it relates to the rest of the economy, there are also bound to be genuine concerns. Some experts believe subsidising shift of land from foodgrains to horticulture can be uneconomical and at the cost of food security. Such fears are somewhat exaggerated, but have become more relevant now that our food stocks have depleted to the point where large and high cost wheat imports have become necessary again. It is important that encouragement to diversification is not driven purely by subsidy but reflects a logical shift towards higher sustainable productivity. There is need to exploit fully the scope for co-operation between different agencies. The guidelines of NHM are silent on NREGP despite very large possibility of convergence. Also, horticulture involves greater female participation than in case of other crops, but there has been no follow-up on lessons from a UNDP-financed pilot that had demonstrated success with women's co-operatives.

3.2.26 The 11<sup>th</sup> Plan provides an occasion to re-examine policies to deal with these issues. The broad principle that will have to be followed is the one that was stated in the Mid-term Appraisal of 10<sup>th</sup> Five Year Plan: that priority must be on technology to improve yields and on post-harvest management, infrastructure and processing. The objective is not to attain any particular level of production for a particular

horticultural crop but to enable farmers to earn the highest possible sustainable income. Therefore, as far as possible, subsidies should be neutral across crops, whether covered by NHM or other programmes such as MMA. With this, food security will not be endangered by diversification if foodgrains yields grow at around 3% per annum. This rate of yield increase had actually been achieved during the 1980s and should be a specific 11<sup>th</sup> Plan target. With a focus on east and central India, this can be achieved by tapping available ground water, better land and water management, and bridging the large yield gaps that exist. This region will get very sizeable additional resources through NREGP, Bharat Nirman, and the Backward Areas Grant Fund which if used properly can not only reduce costs of land and water development and improve village electrification and connectivity, but also create demand and allow PRI level capacity building. The main tasks on the side of agriculture proper will be to; a) converge effectively with these programmes of other departments; b) massively step up technology demonstration; c) ensure regular and timely provision of credit and of quality inputs (primarily suitable seeds and fertilisers); d) and build up the presently almost non-existent price support system. A potential obstacle will be the semi-feudal land relations that exist in some parts of this region.

(v) *Animal Husbandry and Fishery*

3.2.27 The livestock and fisheries sectors together account for about 30% of the value of the output of Agriculture & Allied Sector and provide full time and part time employment to 5.5% of the total working population, the majority of whom are women. The 11<sup>th</sup> Plan must evolve viable strategies for these sectors to expand rapidly.

3.2.28 India continues to be the largest producer of milk in the world with a total production of 91 million tonnes in 2005-06 and the contribution of milk was higher than paddy, wheat, and sugarcane in the year 2003-04. Yet the per capita availability of milk at 231 gm. per day during 2003-04 is still very low compared to nutritional requirement suggesting scope for further expansion. Matters are even worse regarding meat, with abattoir conditions pathetic and utilization of by-products inefficient. Poultry development in the country has shown better progress over the years, primarily because research and development schemes of the government have been complemented with effective management and marketing by an organized private sector. The fisheries sector has also performed well but vast potential exists, particularly in inland fishery. The setting up of the National Fisheries Board should bring better technical focus.

3.2.29 The survival of pastoralism is crucial for sustainable land use. Besides conserving domestic biodiversity, it is a means of producing food in dry lands without depleting groundwater resources. However, there are many constraints on expansion in this area. Grazing permits are denied in traditional grazing sites that have been converted into protected areas/wildlife sanctuaries, national parks/Joint Forest Management (JFM) programme. Original pasture lands or stipulated animal drinking water ponds are encroached upon, or used for other purposes. Bio-diesel (Jatropha) planting is being promoted through state agencies without seeing all the consequences such as blocking the migration routes of animals and encroaching upon herd-passing pathways. It is vital to ensure that the commons are protected and women, who make up a substantial portion of the workforce in this sector, are given control over them. This will prevent their use for other purposes.

3.2.30 Some of the important initiatives that are needed are:

- Promotion of appropriate crossbreeds while conserving indigenous breeds of livestock.
- Establishment of livestock marketing system.
- Promotion of rural backyard poultry in a cooperative marketing setup.
- Development of cooperative dairy firms.
- Enhancing livestock extension services.
- Encouraging private veterinary clinic.
- Institutionalizing a framework for utilizing synergy between restoration and creation of water bodies for water harvesting and fishery.
- Provision of an insurance package to avoid distress.

(vi) *Access to Credit and Risk Management*

3.2.31 Access to financial resources enables the poor to exploit investment opportunities, reduces their vulnerability to shocks, and promotes economic growth. But lack of credit at reasonable rates is a persistent problem, in large part, reflecting the collapse of the cooperative credit system. The failure of the organized credit system in extending credit has led to excessive dependence on informal sources usually at exorbitant interest rates. This is at the root of farmer distress reflected in excessive indebtedness. There are of course some recent positive developments, for example, the acceptance by the government of the Vaidyanathan Committee report on co-operatives and the success of commercial banks to almost double the flow of agricultural credit after 2003. Nonetheless, problems still persist. Implementation of the Vaidyanathan report has been slow because of the reluctance of states to cede control over co-operatives. Problems of the long-term credit structure have hardly been addressed, and the large

increase in commercial bank credit does not appear to have significantly improved access in either regions with poor banking support or for small/marginal farmers and tenants.

3.2.32 There is evidence that farm debt is increasing much faster than farm incomes and the larger issue of the overhanging debt stock, as distinct from credit flow, has not even been on the agenda except of a few state governments. Admittedly, there are limits to the extent that banks can be expected to play a purely social role in today's more competitive environment. However, too conservative an approach on settling debt that has turned bad due to contingencies of poor weather or prices is not even prudential banking if this serves only to show bank balance sheets to be better than they are, and prevents profitable new lending. There are several suggestions, ranging from a Stabilization Fund to be run by the Centre for automatic write-off under some specified conditions, to the setting up, by states, of standing professional Debt Commissions to examine individual debt (including to non-institutional sources) on a case-by-case basis for one time settlement. The 11<sup>th</sup> Plan will examine in detail the impediments which now stand in the way of social and developmental banking and suggest innovations that can improve access and speed up one-time settlements while maintaining credit discipline and financial prudence.

3.2.33 As farmers adopt new and untried technology and increase input intensities, they also face larger risks. These risks are often not well understood owing to lack of knowledge of the specific requirements of new seeds and other new technology for achieving productivity gains. All farmers do not have the ability to bear downside risks and this is evident from the spate of farmer

suicides when new seeds fail to deliver expected output, or expenditure on bore wells proves infructuous, or when market prices collapse unexpectedly. Farmers should be protected against such risks by appropriate measures. Insurance is one way of doing this, but only 4% of farmers are currently covered by any crop insurance. The financial cost of existing and proposed crop insurance schemes is considerable, as well as recurring. Moreover, current crop insurance is only against yield loss and does not cover price risk. Farmers also lack cover against other risks, for example accidents which can also prove crippling. These and related issues of risk management are again largely non-Plan areas but need to be addressed during the 11<sup>th</sup> Plan. This should ideally be done by concentrating on innovations in design which could help expand insurance in a manner that is financially viable without excessive subsidy.

#### (vii) *Land Reforms*

3.2.34 Land relations can have a major impact on agricultural productivity and production. Inequality in land distribution and insecurity of tenure etc., are often at the bottom of many forms of social discrimination and domination based on gender, caste, minority, and tribal affiliations. The National Commission on Farmers has placed the unfinished agenda in land reform first in its list of five factors central to the present agrarian crisis, and states “the first and foremost task of the National Policy for Farmers should be in the area of land reform with particular reference to tenancy laws, distribution of ceiling surplus land, attention to common property and wasteland resources and the consolidation of holdings. Following the conferment of land rights to women under the Hindu Succession Amendment Act (2005), the provision of appropriate support services to

women farmers has become urgent. Joint Pattas are essential for women to get access to credit. Also, there should be stringent restrictions on the diversion of prime farmland for non-farm purposes.”

3.2.35 Since migration and feminization are increasing trends, land reforms that make tenancy legal and give well defined rights to tenants and to women are now more necessary than ever. not only to reduce distress but also to increase agricultural growth. Facilitating. Leasing of land for cultivation is necessary to prevent cultivated land from turning fallow due to migration of owners to urban areas. Lack of recognized tenancy rights makes it difficult for de facto tenants to get credit from formal sources. Tenants without legal rights do not have proper incentive to develop the land and this explains part of the yield gap. Similarly, a woman without property title is unable to get credit when the male member is away. Giving access to land and homesteads not only reduces poverty but is the most powerful way to bring dignity in the lives of today’s excluded. This, along with the more general need to record land titles properly where these are weak, is also one way to deal effectively with encroachment and non-participation that plague watershed and wasteland development programmes. With EGA in place, such programmes can be stepped up very substantially to address natural resource regeneration but the incentive issues related to land will have to be addressed.

#### (c) *Agricultural Research*

3.2.36 Since the green revolution in the sixties there has been no major technological innovation which could give fresh impetus to agricultural productivity. The absence of productive technology which also reduces risks is particularly serious for rain fed, dry land situations. In the longer run,

growth in agricultural productivity can be sustained only through continuous technological progress. This calls for a well considered strategy for prioritized basic research, which is now all the more urgent in view of mounting pressure on scarce natural resources, climate change and also the shrinking availability of spill-overs from international public research. For ushering in a second green revolution, a strategy that frees us from the past binds is called for. The strategy should be operationalized in the form of challenge programmes in which central institutes and the state agricultural universities work with organic integration.

3.2.37 The 11<sup>th</sup> Plan must energise the National Agricultural Research System and improve its capacity to develop and deliver innovative and effective technologies relevant to the current context and needs. We should not only undertake strategic research to tackle well identified problems in a good directed way but also strengthen basic research that may contribute to growth. The recently established fund for National Strategic Agricultural Research must be expanded in the 11<sup>th</sup> Plan and oriented to stimulate research that responds to newer and more formidable challenges and provides region-specific problem solving capacity. A delivery-targeted operational mechanism will have to be designed for its meaningful operation. Clearly business as usual has no place whatsoever in this framework. The agricultural system also needs to be thoroughly revamped and restructured in the light of the recommendations of the high powered committees chaired respectively by Dr. M.S. Swaminathan and Dr. R.A. Mashelkar.

3.2.38 The initiatives discussed above can, with sufficient effort and funding, raise the agricultural growth rate from 2 percent to 4 percent during

the 11<sup>th</sup> Plan. About half of this, that is, 1 percent additional growth, is expected as a direct result of the new Plan programmes, including Bharat Nirman, that have been initiated since 2004 and which have already increased the combined Plan expenditure of Centre and states on agriculture and irrigation by over 60% in real terms as compared to the first two years of the 10<sup>th</sup> Plan. The remaining 1% additional growth would need to come mainly from better resource utilization and larger private investment, although of course some additional Plan expenditure may be required to facilitate this. Overall agricultural investment would need to be about 16% of agricultural GDP, with public investment contributing 4 to 5%, during the 11<sup>th</sup> Plan.

### 3.3 Industrial Growth

3.3.1 There is considerable evidence that the industrial sector has gained in strength in many ways over the past fifteen years as a consequence of liberalizing industrial controls and the gradual integration with the world economy. Automobile components, pharmaceuticals, special chemicals, textiles have shown a marked increase in global competitiveness. The surge in industrial production in 2005-06 and 2006-07 provides further evidence in support of this assessment. However, there are numerous constraints that limit industrial performance, particularly of labour-intensive manufactures, and these need to be addressed urgently. Indian manufacturing is highly dualistic, with the organized sector producing 67% of manufacturing value added but employing only 12% of all workers in manufacturing. Unfortunately, although employment in the unorganized manufacturing sector has expanded, it has not increased at all in organized manufacturing after mid-1990s. At the same time, labour productivity has hardly increased in

unorganized manufacturing while organized manufacturing has increased this at about 10% per annum by increased use of capital but with fewer employees. A clear priority for the 11<sup>th</sup> Plan is to encourage the organized sectors to employ more labour and, simultaneously, to improve labour productivity in the unorganized sectors.

(a) *Promoting Industrial Growth*

3.3.2 The 11<sup>th</sup> Plan should aim at raising the rate of growth of the industrial sector to 10% and manufacturing growth to 12% per annum. The most critical short-term barriers to growth of the manufacturing sector are absence of world-class infrastructure (power in particular), shortage of skilled manpower, inspector raj and lack of labour flexibility. The 11<sup>th</sup> Plan should place special emphasis on infrastructure and skill formation and these are discussed separately later in this paper (See Section 3.5 and 4.1). At the same time it will ensure that the industrial growth allows women to participate as equals by providing amenities like crèches, toilets, maternity benefits, and also hostels for working women.

3.3.3 The National Manufacturing Competitive Council has proposed a strategy for manufacturing which should be operationalized in the 11<sup>th</sup> Plan. The following initiatives deserve special attention:

- (i) Taxes and duties should be made non-distortionary and internationally competitive. Internally, the tax system must promote and be consistent with a unified national market, so that Indian industry can reap the benefit of economies of scale and scope. The adoption of VAT by most state governments is a healthy development but more needs to be done to streamline tax rates and eliminate octroi, entry taxes, etc. The Central Government on its part must phase out the CST. Externally, the gradual reduction of tariffs on non-agricultural products should continue. A possible objective, subject to considerations of revenue requirement for development expenditure, could be to reduce the simple average of non-agricultural tariffs from the 2006 level of 13 per cent to about half that level by the end of the 11<sup>th</sup> Plan. Negative protection which arises because of inverted duty structures must be minimised and, ideally, eliminated.
- (ii) While initiatives to provide infrastructure in general are important, they should be supplemented by efforts to promote infrastructure development in local areas such as Special Economic Zones and Special Economic Regions. The latter differ from SEZs in that they do not come with export tax benefits. SERs are still to take off but the SEZ programme has generated good response. Within a year of launching a large number of applications have been approved in principle, and several more in the pipeline. However, there are concerns that SEZs primarily focus on real estate, that there is lack of a level playing field between manufacturing units within SEZs and those in the Domestic Tariff Area, and that there can be large loss of revenue on account of tax concessions for exports of goods and services that are already being exported without such concessions. These concerns would need to be addressed and where necessary adequate safeguards put in place.
- (iii) Technological modernization is the key to high industrial growth. The growing interest of foreign direct investors in the economy provides a valuable method of injecting

resources into the economy, upgrading our technological standards and building international partnerships, which can have many positive effects. However, although very important, these are not substitutes for domestic industrial research that builds our own strength and develops technologies that suit our people and natural resources base. Government and industry must invest in R&D to innovate technology ahead of markets.

- (iv) State governments should take steps to create an investor friendly climate. There is a need to ensure that delays in land registration, water and utility connections, environmental and other clearances are minimized through a single window clearance of applications for establishment of industrial units.
- (v) Labour intensive mass manufacturing based on relatively lower skill levels provides an opportunity to expand employment in the industrial sector. China has done exceptionally well in this area and has opened up the world market in which we could compete effectively. A key issue in this context is whether some of our labour laws may be discouraging the creation of employment opportunities in the organized manufacturing sector, inducing capital-intensive rather than labour-intensive industrial development. For example, the Contract Labour (Abolition and Regulation) Act allows governments to limit the ability of enterprises to outsource jobs and *Chapter VB* of the Industrial Disputes Act requires an establishment with more than 100 workers to obtain written permission of government for lay-off, retrenchment, and closure. There are different views on the actual impact of these laws on employment, and the fact is that

outsourcing has been growing rapidly and permission to downsize have been fairly easily accorded to existing enterprises in the past few years. Nonetheless, many potential new entrants into large scale manufacturing see these discretionary provisions as a major disincentive. A consequence is that Indian manufacturers often set up a number of small enterprises (in garments, sports goods, and toys, for instance) rather than having one large efficient enterprise. It is not being suggested that the entire gamut of labour laws need to be reviewed or that an automatic hire and fire system should be introduced. The National Common Minimum Programme recognizes that some changes in labour laws may be needed but this requires legislation and therefore sufficient consensus. A few amendments in the laws mentioned above, with concomitant changes to improve worker welfare as a whole, should therefore be proposed for discussion with stakeholders with view to early legislation within this framework. This could stimulate investment and fuel the creation of jobs. Similarly, although small enterprises are particularly burdened by multiple inspections, and the need to submit many reports, and maintain a large number of registers, workers in this sector have virtually no security. There is therefore a case to relax legal requirements on SMEs if state governments adopt a comprehensive social security scheme for workers, say along lines proposed recently by the National Commission for Enterprises in the Unorganized Sector. For example, state governments that put in place such a scheme could be empowered to exempt SMEs from the application of some laws like the Employer's Liability Act, Weekly Holidays

Act, Employment Exchange (Compulsory Notification of Vacancies Act), and the Apprentices Act.

- (vi) Another constraint affecting the growth of labour intensive manufacturing is the reservation of many of these industries for the small-scale sector. With reduced barriers to trade, and the negotiation of free trade agreements with our neighbours and with ASEAN, our domestic producers have to compete with imports even if they do not aim for export markets. They cannot do so if reservation limits their ability to modernize. The policy of progressive de-reservation of industrial items for small scale production after adequate consultation with industry associations has reduced the list of reserved industries from about 800 to 326. This policy will continue in the 11<sup>th</sup> Plan.
- (vii) Although industrial licensing has been virtually eliminated, residual restrictions and controls remain in sugar, petroleum refining, fertilizer, and drug industry. These should be progressively eliminated. Equally important is the need to amend the Companies Act, 1956, in order to facilitate rehabilitation and liquidation procedures of industrial units, where necessary.
- (viii) The existing incentive programmes such as those available for the North East, J&K, Himachal Pradesh, and Uttaranchal need to be reviewed with a view to assessing their impact on industrialization in these regions. The extension of excise duty exemption to Himachal and Uttaranchal has had an adverse impact on industrial investments in both the North Eastern region and the adjacent states. Consideration would need to be given to restricting these incentives to only hilly areas

or to replacing these incentives by a special programme for roadways and railway development in these states.

- (ix) The industrial growth strategy would be incomplete if it does not recognize the critical role and the special needs of the micro, small, and medium enterprises. There is a need to promote this sector through creation of 'growth poles' and 'business hubs', removal of credit barriers, upgradation of technology, and provision of marketing support. Indeed, credit availability is a major problem for MSMEs. The proposed new Companies Act must include specific provisions to encourage and enable enterprises currently constituted as proprietary and partnership firms to become and operate as small companies and new legislation on 'limited liability partnerships' must be introduced in the context of SMEs. This would enable them to access credit and venture capital required for their upgradation and mainstreaming.

3.3.4 While promoting industrial growth, protection of consumer, particularly illiterate and marginalized cross sections of society in rural areas, should be accorded high priority in the 11<sup>th</sup> Five Year Plan. Competition is the best guarantee of consumer protection and should be strongly encouraged.

(b) *Micro and Small Enterprises*

3.3.5 The dispersed and decentralized micro and small enterprises (MSE) sector poses a special challenge and opportunity to our policy makers. This sector has the second largest share of employment after agriculture and spans a wide range, including small-scale, khadi, village and coir industries, handlooms, handicrafts, sericulture, wool, powerlooms, food processing,

and other agro and rural industry segments. It touches the lives of the weaker and unorganized sections of the society with more than half of those employed being women, minorities, and the marginalized. Fifty seven per cent of the MSE units are owner-run enterprises with one person. They account for 32 per cent of the workforce and 29 per cent of the value added in non-agricultural private unincorporated enterprises. Infusion of appropriate technology, design skills, modern marketing capacity building and easier access to credit can make this segment an expanding base for self-sustaining employment and wealth generation and also foster a culture of creative and competitive industry. Agro-food processing, sericulture and other village enterprises can check rural-urban migration by gainfully employing people in villages. This will also take pressure off agriculture. The MSE sector can open up a window of opportunities in regions like the North East where large industries cannot be set up due to infrastructure gap & environmental concerns.

3.3.6 Several ministries/departments/institutions deal with activities falling within the domain of the MSE sector, and have a variety of schemes to support the MSEs. However, the benefits accrue to only a small fraction of MSEs as only 13% are registered. In the 11<sup>th</sup> Plan we need to adopt a dual strategy to ensure that the unregistered micro and small enterprises and units outside the cooperative fold are encouraged to get themselves registered and are also able to benefit from government schemes, pending registration. In fact, the provision of voluntary filing of enterprise memoranda by micro and small enterprises in the new Micro, Small and Medium Enterprises Development Act, 2006 is a step in that direction and should be implemented energetically.

3.3.7 We need to change the approach from emphasis on loosely targeted subsidies to creating an enabling environment. A cluster approach can help increase viability by providing these units with infrastructure, information, credit, and support services of better quality at lower costs, while also promoting their capacity for effective management of their own collectives. The 11<sup>th</sup> Five Year Plan should restrict subsidies to those needed to create a level playing field and to reflect the costs or benefits to others in the society. It should incentivize innovation and creativity. It should remove all entry barriers and mitigate business risks for start-ups, the latter, *inter-alia*, through a large number of well-managed business incubators in the identified thrust areas of manufacturing. It should provide infrastructure and liberate MSEs from the inspector raj. Further, in order to improve the competitiveness of these micro, small and medium enterprises, schemes for establishment of mini tool rooms, setting up design clinics, providing marketing support, sensitization to IPR requirements and tools, adoption of lean manufacturing practices, wider use of IT tools, etc., should be evolved on a PPP basis. Brand building can be used as an effective strategy to promote their products in national and international markets. All these measures would be more effective if targeted at identified clusters. Most importantly, however, we must remember the people behind the products. While improved production infrastructure, credit, skill upgradation and market linkages are vital, they are not enough given the pitiable condition of most of our weavers and artisans. They need a social safety net and assured access to basic amenities to productively engage in their profession. So, under the 11<sup>th</sup> Plan we will have two kinds of schemes for this sector - one focusing on the lives of the small firm workers, artisans,

and crafts people and the other on their livelihoods.

3.3.8 A legal framework for this sector has now been provided with the enactment of the Micro, Small and Medium Enterprises Development Act, 2006. However, it is necessary to recognize the continuing need to facilitate graduation of these enterprises to higher levels, particularly from small to medium. Incentivizing graduation of micro and small enterprises to medium and larger units, through well-calibrated fiscal and non-fiscal measures, is necessary and would be one of the steps in the 11<sup>th</sup> Plan.

3.3.9 One of the important tasks of the 11<sup>th</sup> Plan would be to review the position regarding the availability of timely and adequate credit (both term loan and working capital) to small and medium enterprises from commercial banks and other financial institutions and suggest measures to eliminate the shortcomings that are noticed. The inadequacies in credit delivery to these enterprises arise from several causes:

- o The State Financial Corporations have become defunct in most states and SIDBI has a very limited branch network;
- o Commercial banks are reluctant to meet the credit needs of these enterprises on account of perceptions of high risks and higher transaction cost of dealing with a large number of small borrowers;
- o They do not even comply with RBI guidelines and continue to seek collaterals from SMEs.
- o There is lack of familiarity among managers of commercial banks with the business model of the diverse activities of SMEs;

These inadequacies need to be addressed by means of measures such as a significant branch

expansion of SIDBI to cover all clusters, expansion of credit guarantee scheme in order to obviate the need of banks seeking collaterals, and training and sensitization of the managers of public sector banks.

### (c) *Mining*

3.3.10 India is a resource rich country but India's mining potential has been much less explored than other comparably endowed countries. The Mines and Minerals Act and the Mineral Concession Rules as well as the FDI policy have also been revised on several occasions with a view to attracting private investment for exploration of mineral deposits and operation of mines but actual investment in this area has been very meager because of procedural hassles and numerous discretionary provisions in the laws, which discourage prospective investors. The provisions for rehabilitation are also unsatisfactory.

3.3.11 A comprehensive review of the policy and of the laws and procedures in this area is urgently needed to identify and eliminate the constraints in the way of investments in mining activities. The High Level Committee on the National Mineral Policy has conducted such a review and submitted its Report to the government in July 2006 making a number of important recommendations (See *Box No. 1*). These need to be considered for early implementation in order to stimulate investment, including foreign investment in the mining sector. The procedures should ensure that there is seamless transition from the stage of reconnaissance permit through prospective license to mining lease, and security of tenure is guaranteed to the maximum extent possible. The conditions for resettlement must also be made transparent and the rights of those whose lands are acquired must be suitably protected.

## Box No. 1

### Main Recommendations of the High Level Committee on the National Mineral Policy

- (i) Mining involves broadly three stages, reconnaissance, prospecting, and mining proper. The transition from Reconnaissance Permit (RP) to Prospecting License (PL) to Mining Leases (ML) should be *seamless*, by giving the right to the RP holder to get a PL and to the PL holder to get a ML.
- (ii) Provisions in the Act and the Rules that enable the Centre and the States to abridge and even cancel the concession should be amended so that concessionaires have security of tenure.
- (iii) RPs should be non-exclusive with an *open sky policy* to maximize investment in exploration.
- (iv) Prospecting companies should have a right to transfer the PL with the accompanying right to be granted a ML. Easy transferability of concessions would result in *unbundling* of exploration from exploitation activity and stimulate investment in exploration.
- (v) Where a State Government has not passed an order within the prescribed time frame the Central Government may pass an appropriate order, after giving an opportunity to the State Government of being heard.
- (vi) Mining companies should develop the social infrastructure in the villages in the area where the mine is situated. One option suggested by the Committee is that mining companies should spend three per cent of the turnover on the social infrastructure in the villages.
- (vii) The method of fixing Royalty rates should be ad valorem rates so as to substantially augment State revenues.
- (viii) Where a mineral-rich State receives multiple applications, it should be entitled to give preference to the applicant who offers to set up an industry based on the mineral. However, where no applicants have made a proposal for setting up an industry, these should not be held up in the expectation that in future such an applicant might turn up.
- (ix) In the best interest of the country the mining policy should provide space for both stand-alone and captive mines.
- (x) The regime of quantitative restrictions and canalization of iron ore exports should be replaced by an export duty (only on high grade lumps with Fe content of 65% and above) and elimination of restrictions on fines and lower grade fines.

#### (d) *Public Sector*

3.3.12 Public Sector Enterprises have made a major contribution to the economic growth of the country by creating a diversified industrial base. They have also been major providers of organized sector employment. Some of the Central Public Sector Enterprises (CPSEs) have had strong financial results over many years and recently some more have turned the corner. In 2004-05, the number of profit making CPSEs increased to 143 from 119 in 2002-03, and aggregate profits rose to Rs.74,432 crore from Rs.43,316 crore. In fact, latest data from the Annual Survey of Industries suggests that manufacturing PSEs (including those in the states sector) have outperformed private organized manufacturing in total productivity growth after the mid-1990s. A part of this is due to the oil sector performance but the evidence of superior performance persists even if this sector is excluded, much of it occurring through downsizing. Unfortunately, however, PSEs have not performed as well on investment though they have accumulated huge reserves, and the management culture appears to have become even more risk-averse with a marked preference towards reducing debt. This needs to change not only because many of our *navratna* PSEs are potential technology leaders in Indian manufacturing, but also because the savings and investment projections in *Chapter 2* assume much higher investment by PSEs through their internal and extra-budgetary resources (IEBR). The necessary conditions for further improvements in the performance of the PSEs are ensuring autonomy, delegation of more powers to PSE Boards, freedom from informal levers of control exercised by the administrative Ministries and a clear statement on future ownership. If these conditions are met, CPSEs do not need to be supported by measures such as administered prices, or price or purchase preference

in government purchases or any type of *de jure* or *de facto* favourable treatment *vis-à-vis* the private sector.

3.3.13 Loss-making CPSEs pose a big challenge before government because of the need to protect employment on the one hand and the imperative of containing fiscal deficits on the other. Although the number of loss-making CPSEs has come down from 105 in 2002-03 to 73 in 2004-05 and so have aggregate losses, the task remains formidable. Progress in closure of chronically sick CPSEs and revival of those that are revivable has been sluggish. Only one CPSE had been identified for closure and 19 for revival by September 2006. In considering revival of loss-making CPSEs, it is necessary to bear in mind the past experience of failed attempts to rehabilitate several undertakings despite repeated infusion of government funds and consider inducting the private sector for turning around sick CPSEs, a course that the NCMP clearly allows.

### 3.4 The Services Sector

3.4.1 The services sector accounts for 54 per cent of GDP and is currently the fastest-growing sector of the economy, growing at 9 per cent per annum since the mid-1990s. The sector has the unique opportunity to grow due to its labour cost advantage reflecting one of the lowest salary and wage levels in the world, coupled with a rising share of working age population. The 11<sup>th</sup> Plan must, therefore, put special focus on this sector so that its potential to create employment and growth is fully realized.

#### (a) *Professional Services*

3.4.2 Professional services include a wide array, namely, IT Services, Customer Relations Management, Health Services, Accountancy Services, Legal Services, Educational Services,

Construction and Engineering Services, Architectural and Design Services etc. The Information and Communication Technology revolution has made it easy to provide such services all over the world and Indian professionals have made a mark in many fields leading India to being recognized all over the world as an important player in the knowledge economy.

3.4.3 India has shown competitive strength in offshore IT services with a 65% share of the global offshore market and a 46% share of global business process offshoring (BPO) industry. This was made possible by an unparalleled export performance with an average growth rate of 28% over a decade. Fortunately, the scope for future expansion continues to be large as only 10% of the potentially addressable global IT/ITES market has been realized. The remaining 90% of a global potential market of approximately \$300 billion still remains to be realized.

3.4.4 India's advantages of talent, established track record, and a geographical location that provides a 24 hour working day to American professionals and communication infrastructure of data connectivity and security should be consciously leveraged to achieve its full potential. We need to work through WTO to assure access to overseas outsourcing. We also need to build a much larger IT workforce through an HRD plan, and improve urban infrastructure through public private partnerships.

3.4.5 While the rapid growth of professional services has been an impressive achievement, industry leaders have been highlighting the emerging skill constraint. Many graduates, not only from the humanities but also from the engineering and science streams need further training to acquire usable skills. India needs to ensure that the number of professionals turned out keeps increasing and,

even more importantly, that there is no slackening of standards in education.

#### (b) *Construction, Housing and Real Estate*

3.4.6 Construction industry provides a large scope for direct and indirect employment of persons with a wide range of skills and also of unskilled persons. It employs over 30 million people, many of them women and migrants, and has been growing at over 10% per year over the last five years. It covers rural and urban infrastructure, roads, airports, sea-ports, and commercial and residential buildings. Infrastructure development has been identified as a major thrust area emphasized through such projects as Bharat Nirman, Pradhan Mantri Grameen Sadak Yojana, the National Highways Development Programme, airport modernization etc. In housing we have a large unmet need and a growing demand due to growing working population and nuclear families. Construction has great possibilities for creating employment which need to be fully exploited.

3.4.7 In order to provide impetus to the construction industry the 11<sup>th</sup> Plan would need to devise ways of meeting the vast human resource needs of the sector and suggest improvements in tender documents and contract procedures in government, including the establishment of expeditious dispute settlement procedures and make recommendations on overall regulatory aspects for achieving quality in buildings and other construction works. Induction of advanced and innovative technologies will also need attention, with emphasis on the use of new materials, economy in construction, energy conservation, impact of construction activities on environment and technologies suitable for natural disaster prone areas.

3.4.8 An important component of the 11<sup>th</sup> Plan would be measures for ensuring adherence to safety requirements, environmental regulations, and occupational health and safety requirements of labour. Given the nature of employment in this sector and the fact that a large number of workers are women, especially migrant women, it is vital to put in place measures which prevent the exploitation of women and children. Care should be taken to ensure equal wages for women and to provide amenities like emergency medical aid, feeding centres, toilets and crèches at the construction site.

3.4.9 The scope for expanding construction activity is limited by constraints on land development in many states. The most important of these arise from the Urban Land Ceiling Act which is still in operation in some states. Non-transparent land use policies, which are almost ubiquitous, also add to the problem. Urban Rent Control, high stamp duty, and other transfer costs also restrict construction. State governments and municipal bodies should undertake a comprehensive review of such policies and amend necessary laws/regulations in line with the requirement of modern city development to formulate their Master Plans and Zonal Plans in a given timeframe. Joint ownership of urban housing will be mandatory and ownership in the name of women will be incentivized. State governments should also make their rural/urban land-use conversion processes simpler and quicker. The situation is aggravated by low investment in urban roads and rapid transport systems, which if developed can help disperse population and mitigate the high cost of urban properties.

3.4.10 Lack of affordable housing in urban areas forces people to live in unsatisfactory and unhygienic conditions. Government polices should facilitate access to social housing in urban areas, especially for the urban poor.

3.4.11 There is considerable scope for FDI in this sector and has to be viewed in light of the fact that even in China nearly half the FDI inflows are in the housing sector alone. Investment in the sector can be stimulated if government and SEBI bring about refinements in the financial markets by developing sophisticated financial instruments, customized for real-estate sector.

#### (c) *Tourism*

3.4.12 Tourism is an important component of demand in the services sector which has shown considerable dynamism in recent years and is poised for even more rapid growth. It is difficult to estimate the full contribution of tourism to the economy since much of it shows up indirectly in sectors such as hotels and restaurants, transport, handicrafts etc but there is general agreement that the sector has great potential and needs to be encouraged.

3.4.13 To fully benefit from natural, cultural, business, leisure, spiritual, religious, ecological, adventure, and medical tourism, the 11<sup>th</sup> Plan should focus on creation of adequate tourism infrastructure like modernization and expansion of airports, increase in accommodation facilities under star and budget category and improved road connectivity to tourist destinations. At the same time it is important to ensure the upkeep and preservation of historical sites, lakes and rivers – all of which attract tourists. Measures need to be devised to enhance India's competitiveness as a tourist destination by *inter alia* reducing luxury tax and sales tax on ATF and by providing for hassle-free inter-state movement of passenger vehicles. Hotel management and catering education programmes need to be widened and hitherto undeveloped archaeological sites opened up for development and maintenance through public-private partnerships.

3.4.14 It is also vital to ensure that tourists, particularly women, feel safe in the country.

#### (d) *Retail Trade and Organized Retail*

3.4.15 Retail trade and services provide employment to large number of persons at varying levels of income. For many hawkers, street vendors, etc. these are sources of livelihood open to almost anyone. While the bulk of retailing will continue to be in the small scale and informal sector, it must be recognized that modern organized retailing brings many advantages to producers and also to urban consumers, while also providing employment of a higher quality. Organized retailing in agricultural produce can set up supply chains, give better prices to farmers for their produce, reduce spoilage and wastage, and facilitate the development of agro-processing industries. Modern retailing can bring in new technology and reduce consumer prices, thus stimulating demand and thereby providing more employment in production industries.

3.4.16 Foreign direct Investment in retailing has been allowed to a limited extent and there is strong interest among foreign investors in being allowed to play a larger role, that includes hyper markets and multi-brand retail stores. The presence of foreign retailers is likely to generate export market linkage for Indian suppliers. However, this is an area of policy where there are different views and we need to evolve a consensus keeping in mind the balance of advantages and disadvantages and the experience with FDI in modern retailing in other developing countries, including China.

#### (e) *Entertainment and Media Services*

3.4.17 One of the sectors which has consistently outperformed the GDP growth year after year is the Entertainment and Media Services Sector which is expected to grow at a compound annual growth rate (CAGR) exceeding 19% during the 11<sup>th</sup> Plan period. This sector comprises Television (CAGR-42%), Films (19%), Radio (1%), Music (2%),

Print Media (31%), Live entertainment (2%) and Advertising (3%). It is a sector in which the demand grows faster than income. We can thus expect continued high growth. The various forms of media are all converting to a common digital form. This along with technological breakthroughs, provides scope for all kinds of new application, leading to even higher growth. A facilitating policy environment needs to be created as the sector offers large scope for employment.

### 3.5 Infrastructure Development

3.5.1 Infrastructure inadequacies in both rural and urban areas are a major factor constraining India's growth and this was pointed out in the Mid Term Appraisal of the 10<sup>th</sup> Plan. A Committee on Infrastructure under the chairmanship of the Prime Minister was also established to define an agenda for action in this area. The Committee has identified an ambitious programme for infrastructure development which will cover the entire 11<sup>th</sup> Plan period.

3.5.2 Preliminary exercises suggest that investment in infrastructure defined as road, rail, air and water transport, power generation, transmission and distribution telecommunication, water supply, irrigation and storage will need to increase from 4.6% to around 8% of GDP in the 11<sup>th</sup> Plan period. In other words, of the increase of 6 percentage points in total investment needed to accelerate growth from 7% to 9%, about half should be in infrastructure. This will place a heavy burden on the public sector which will have to invest more in this area.

3.5.3 Since public sector resources are scarce, an aggressive effort at promoting public private partnership in infrastructure development will be needed. PPPs will not be feasible in all types of infrastructure. In certain parts of the country, which are economically disadvantaged most of the investment in infrastructure would have to come

from the public sector. There are also some infrastructure projects, such as capital dredging in ports, that are not amenable to PPP, and these would have to be carried out by the public sector. Public sector investments would have to be prioritized so that the more important projects are taken up first.

3.5.4 However, PPPs are feasible in many areas and these possibilities should be exploited. A

number of initiatives have been taken in the last two years of the 10<sup>th</sup> Plan by both the Centre and the states to promote infrastructure development through public private partnership and the experience gained helps identify the conditions under which PPPs are more likely to succeed (See *Box No. 2*). But since this is an ongoing process, and somewhat controversial, further reviews by independent experts will be made and corrective action taken if necessary.

#### Box No. 2

##### *Public Private Partnerships*

Public Private Partnerships (PPPs) are increasingly becoming the preferred mode for construction and operation of infrastructure services such as highways, airports, ports etc., both in developed and developing countries. PPPs offer significant advantages in terms of attracting private capital in creation of public infrastructure as well as in improving efficiencies in the provision of services to users.

PPPs can be undertaken through a range of alternatives such as BOT, BOOT etc. They enable governments to transfer construction and commercial risks to the private sector which is best suited to manage them. However, considerable work is needed to create an enabling environment which should not only attract private investment but must also be seen to be in the public interest and this is best assured if the process is seen to provide services at reasonable cost and in a transparent manner. If we adopt best practices, it will be possible to create credible PPP projects that evoke a positive public response and do not require re-negotiation or payment of unforeseen liabilities by the government or the users.

PPPs are best implemented through standardized arrangements that constitute a stable policy and regulatory regime where private capital derives greater comfort and seeks the least possible risk premium. Model Concession Agreements (MCAs) would be used for providing a stable regulatory and policy framework. The MCA for PPP in highways has already been approved and published. Similar work is nearing completion in other sectors.

PPPs involve dealing with the private sector. Sometimes this gives rise to suspicion that corporate investors are getting a favoured treatment. Transparent processes and consultations with stakeholders combined with effective competitive bidding for PPP projects help in improving perceptions and enhance the acceptability of PPP projects. The presence of effective regulatory bodies can also enhance public confidence though the development of a credible regulatory institution will inevitably take time. This approach also provides the requisite comfort to public servants who are responsible for awarding projects to private entities.

The key to making PPPs acceptable is to create an environment where PPPs are seen to be a way of attracting private money into public projects, not putting public resources into private projects.

### (a) *Roads*

3.5.5 The 10<sup>th</sup> Plan stressed the need for improving mobility and easy accessibility. Accordingly, the National Highway Development Programme (NHDP) consisting of 4-laning of the Golden Quadrilateral (NHDP I) with a length of 5,846 km. and the North-South and East-West Corridor (NHDP II) with a length of 7472 km. coupled with Pradhan Mantri Gram Sadak Yojana (PMGSY) for rural roads were taken up. The PMGSY programme has been recently expanded to achieve the Bharat Nirman target of connecting 1000+ habitation (500+ for hilly and tribal areas) with all weather roads by 2008-09. This programme will help bring India's villages into the market economy. It will also help us to tackle social sector problems (like illiteracy, high IMR and MMR) because while roads connect villages to markets, they also connect them to schools and hospitals. The 'Special Accelerated Development Road Programme for the North Eastern Region (SARDP-NE)', will help in developing and integrating these regions with the rest of the country.

3.5.6 The problems of development of our roads network are diverse and future requirements are of formidable magnitude. Therefore, the strategy for development of roads would have to vary keeping in view the nature of problem and the development required. It is proposed to undertake an expanded programme for highway development going beyond NHDP I and II to include NHDP III to VII. This programme will involve substantial resources from public private partnership based on build, operate and transfer (BOT) model which has many advantages over the traditional contracts (See *Box* on PPPs). All contracts on provision of road services for high density corridors to be taken up under NHDP III onwards would be awarded only on BOT basis, and the traditional construction contracts will be awarded only in

specified exceptional cases. A model concession agreement has been developed to facilitate speedy award of contracts. This is a significant innovation towards public-private partnership. Apart from the high density corridors, a substantial part of the National Highways network would also require development during the 11<sup>th</sup> Plan period. These sections are characterized by low density of traffic. Some of these stretches fall in backward and inaccessible areas and others are of strategic importance. The development of these categories of National Highways would be carried out primarily through budgetary resources.

3.5.7 The present traffic mix consisting of non-motorized and low-powered vehicles compels low speed. Furthermore, most of the National Highways pass through habitations and ribbon development is a perennial problem. It is, therefore, necessary to establish a network of access controlled 'expressways' across the country for which advance planning would be undertaken during the 11<sup>th</sup> Plan. The actual construction (except for 1000 km already taken up) would be undertaken during the 12<sup>th</sup> Plan period and would be prioritized according to the density of traffic.

3.5.8 Vehicular traffic needs more than just the arterial routes to be of world-class. Adequate attention has not been given in the past to other roadways, which are the responsibility of the state governments. Priority would be accorded for ensuring integrated development of road networks including State Highways, Major District Roads and Other District Roads. The increased emphasis on rural roads would also continue and a major portion of the 1.72 lakh unconnected habitations would be connected with all weather roads under the PMGSY.

3.5.9 The maintenance of roads has not been given adequate importance by the states mainly due to paucity of resources. This has resulted in poor

riding quality of the road network which is highly uneconomic. A rupee spent on maintenance saves 2-3 rupees in vehicle operating costs, besides improving traffic flow. Therefore, there is a need to accord higher priority to the needs of maintenance by providing more allocation or considering it as a part of Plan. In fact, the 12th Finance Commission has recommended additional grants to the States, to the tune of Rs.15,000 crore for maintenance of roads and bridges for the four-year period 2006-07 to 2009-10.

3.5.10 The National Highway Authority of India (NHAI) has an enormous task before it to implement a road programme. The Authority is being restructured to give it greater professional skills combined with a measure of autonomy and accountability.

3.5.11 Indian roads are considered very accident prone and claim a large number of casualties representing an enormous human and economic loss. This problem is compounded by the phenomenal growth in road transport fleet, particularly personalized vehicles and the consequent problems of increase in vehicular pollution and road safety. Steps need to be taken to improve the public transport system and safety of road transport operations.

**(b) Railways**

3.5.12 The 10<sup>th</sup> Plan laid emphasis on capacity expansion through modernization and technological upgradation of the railway system, improvement in quality of service, rationalization of tariff, and improvement in safety and reliability of rail services. Significant progress has been achieved in the last two years of the 10<sup>th</sup> Plan - thanks to a remarkable improvement in productivity. This has enabled a quantum expansion in efforts at capacity augmentation. Yet bottlenecks persist and containers pile up and

congest ports for want of adequate capacity to move them. The railways need to augment capacity on critical routes on the Golden Quadrilateral by constructing dedicated freight corridors. The process for construction of Eastern and Western Corridors on Howrah-Delhi and Mumbai-Delhi routes has already been initiated. While priority may be accorded to these projects, the process for taking up the construction of dedicated freight corridors on other legs of the Quadrilateral also needs to be initiated during the 11<sup>th</sup> Plan.

3.5.13 The opening of container movement by competing public and private entities is a major initiative that would not only be customer friendly but would also enable railways to regain its market share lost to other modes of transportation. Other steps in the same direction would be the establishment of logistic parks and terminals, further rationalization of freight structures and increased use of IT-enabled services. Railways will also undertake a major initiative in shifting to PPPs for building and operating of selected rail infrastructure. This will enable the Railways to undertake a much larger programme of augmenting its capacity than what public finances alone would permit.

3.5.14 The pace of railway modernisation needs to be vigorously accelerated in the 11<sup>th</sup> Plan. A paradigm shift in provision and delivery of rail services is called for. World class transport services require provision of quality passenger amenities at terminals, introduction of modern rolling stock, and improvement in overall sanitation. In the freight segment, the capacity of the rolling stock needs to be improved through appropriate changes in design of wagons and making them lighter to increase payload to tare ratio. The railways should concentrate on the core activities of infrastructure and operation. Manufacturing and maintenance of rolling stock should be corporatized as has been

done in China. There is also scope for outsourcing other activities.

3.5.15 Rationalization of passenger and freight tariff can also help in getting more freight traffic. Cross subsidizing passenger traffic through freight traffic, and within passenger traffic cross subsidizing second class fares by overcharging higher class of travel cannot be carried beyond a point because overcharged freight migrates to road and overcharged passengers to air. To put railway fares on a rational basis it is essential to establish a Rail Tariff Regulatory Authority.

(c) *Ports*

3.5.16 Although there has been some improvement during the 10<sup>th</sup> Plan, the port sector needs major expansion and modernization to support the growth rates envisaged for the future. The 11<sup>th</sup> Plan will develop ports and related infrastructure to bring them to international standards in turn around time and clearing of import and export cargoes. Keeping in view the present trend, it is estimated that Indian Ports will have to handle cargo traffic of about 800 MT by 2012 as compared to 520 MT handled in 2004-05. This would require substantial capacity augmentation at major and minor ports. A deep sea port will be developed and drafts of existing ports will be deepened, where feasible, through capital dredging.

3.5.17 The bulk of capacity augmentation would be undertaken through public private partnership and captive users. This would necessitate that the framework for private sector participation is laid down in a clear and comprehensive manner (See *Box* on PPP).

3.5.18 Since adequate rail-road connectivity of ports with the hinterlands is of crucial importance, it would be improved on priority basis. The government along with other shareholders such as

Port Trusts and major users would also take up development of common user facilities.

(d) *Airports*

3.5.19 The acceleration in economic activity in recent years has led to a very rapid growth in air travel. Air transport traffic was earlier expected to grow at the rate of 16 per cent per annum, but during the last two years the actual growth rate has been in the range of 24-28 per cent. As a result, airlines are facing infrastructure constraints due to limited landing slots, inadequate parking bays, and congestion during peak hours. In addition, there is considerable suppressed demand for domestic air travel because many regional domestic airports have not been upgraded.

3.5.20 The 11<sup>th</sup> Five Year Plan would lay emphasis on provision of infrastructure facilities at a much faster pace. The restructuring of Delhi and Mumbai airports is now underway and their modernization is expected to be completed by 2010. Chennai and Kolkata will be developed next along lines that will incorporate lessons gained during award of contracts for Delhi and Mumbai airports. The greenfield airports in Bangalore and Hyderabad are already well on their way to commissioning. In order to meet the growth of traffic, greenfield airports would also be developed in other selected cities. In addition, 35 non-metro airports would be taken up for development by Airport Authority of India making use of both in-house capacity and public private partnership.

3.5.21 Development of Aeronautical Communication Navigational Surveillance and Traffic Management (CNS-ATM) services would be taken up on priority to improve the productivity and efficiency of airlines and airport operators. The performance of regulatory agencies such as immigration and customs would be improved by streamlining the procedure, training of staff, and use of IT.

(e) *Telecom and Connectivity*

3.5.22 India has witnessed an impressive telecom revolution during the last decade especially during the last two years; this sector has added 75 million telecom subscribers. The total number of subscribers as on August 2006 stands at more than 165 million with an average addition of about 5 million per month during the year 2006. The sector is poised to grow further and by the end of 11<sup>th</sup> Plan it is proposed to reach a target of 575 million subscribers. Presently, this sector contributes about Rs.17,000 crore to the national exchequer which will reach a figure of more than Rs.60,000 crore by the end of 11<sup>th</sup> Plan period.

3.5.23 From one of the highest telecom tariffs in the world, India has moved to one of the lowest telecom tariffs without compromising on the quality of service that has in fact generated substantial customer satisfaction. With the introduction of One-India call at Re.1/- per minute telecommunication has now become well within the reach of every citizen. The substantial growth in the telecom sector can be attributed to the proactive policies of the government, thereby creating a level playing field for all the operators.

3.5.24 In addition to telephone connectivity, which is predominantly used for voice, we also need to establish internet connectivity for data. Broadband – “an always-on network capable of providing interactive voice, data and video services on public network” – is fast becoming a prerequisite for rapid economic growth, maintain competitiveness, and social transformation. Access to the internet in urban areas increased significantly due to its affordability but it is still low and in rural areas it is negligible. We need to make special intervention to connect rural areas and develop a strategic plan to carry text, data, and video to make rural telephony a viable proposition. A Universal

Service Obligation (USO) Fund would encourage sharing of critical infrastructure amongst the service providers.

3.5.25 The new wireless technologies (such as 3G-GSM or CDMA, Wi Fi and Wi Max) now provide various last mile connectivity options for different range of distances. It is therefore imperative that the traditional fixed line voice telephone connectivity is augmented or supplemented using latest wireless technologies for last mile connectivity. Government of India through the State Wide Area Network (SWAN) Programme has provided connectivity to 6000 block headquarters on fibre. Wireless technology options could be used for providing last mile connectivity to every village from the block headquarters. Andhra Pradesh proposes to connect every village on fibre and provide gigabit connectivity. These options need to be examined to arrive at the best option for the country.

3.5.26 The backbone for the wireless communication infrastructure is availability of adequate spectrum and its judicious allocation. A considered effort needs to be undertaken to identify unused spectrum available with various agencies such as Defence & Space, and to reposition it for growth in wireless communication.

3.5.27 This vibrant sector needs to be adequately backed by strong R&D support. The government should facilitate establishing *Centres of Excellence* in premier educational institutions in the country in public private partnership mode. The centres can focus on the emerging areas such as 3G and beyond, Next Generation Networks, IP Telephony and IPv 6 Networks etc. In addition to this, the Government needs to make a consolidated effort to put in place a system for addressing the critical aspects related to telecom network security.

### Box No. 3

#### *Telecom Target for the 11<sup>th</sup> Plan*

A telecom subscriber base of 575 million with one phone for two rural households by 2010 *i.e.*, to reach a rural tele-density of 10% from the present 1.9%.

- On demand telephone connection across the country at an affordable price.
- 20 million broadband connection and 40 million internet connections by 2010 and broadband connection on demand across the country by 2012.
- 3G services in all cities/towns with more than 1 lakh population.
- Broadband connectivity to every school, health centre and Gram Panchayat.
- To make India a hub of telecom manufacturing by facilitating establishment of telecom specific SEZs.

#### (f) *Urban Infrastructure*

3.5.28 Rapid economic growth will inevitably lead to an increase in urbanization as cities provide large economies of agglomeration for individual activity. Unfortunately, the state of urban infrastructure in the country has deteriorated to an extent that we are not able to fully benefit from these economies. Poor urban infrastructure inflicts a severe hardship on people. Congested roads, poor public transport, inadequate availability of water, improper treatment of sewage, uncollected solid waste, and above all grossly inadequate housing that forces more than 50% of the population in some metropolis to live in slums severely decrease the quality of life and lower the well being of urban population. Unless we deal with these problems now, the situation will deteriorate further as urban

population may rise from present 28% to 40-50% by 2025.

3.5.29 In order to cope with massive problems that have emerged as a result of rapid urban growth the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched by the government on 3rd December, 2005 for a seven-year period beginning 2005-06. It envisages urban renewal projects in a mission mode approach. The objectives of the JNNURM are to: (a) give focused attention to integrated development of infrastructure services in 63 selected cities; (b) establish linkage between asset creation and asset management through reforms needed for long term sustainability; (c) ensure adequate funds to meet the deficiencies in urban infrastructural services; (d) achieve planned development of cities; (e) scale up civic amenities and provision of utilities; (f) put special focus on urban renewal of old city areas; and (g) provide basic services to the urban poor including security of tenure at affordable prices, improved housing, water supply, and sanitation, and (h) ensuring delivery of other existing universal services of the government for education, health and social security. The selected cities are one million plus cities, state capitals and places of historical, religious, or tourist importance. The Sub-missions on Urban Infrastructure and Governance, administered by the Ministry of Urban Development is charged with infrastructure projects relating to water supply and sanitation, sewerage, solid waste management, road network, urban transport and redevelopment of old city areas. The Sub-mission on Basic Services to the Urban Poor, administered by the Ministry of Urban Employment and Poverty Alleviation has been entrusted with integrated development of slums through projects for providing shelter, basic services, and other related civic amenities.

3.5.30 The 11<sup>th</sup> Plan will have to make substantial provision of funds under the JNNURM (See Box No. 4) if the momentum of urban reform linked to infrastructure creation really takes off as we hope.

## Box No. 4

*Jawaharlal Nehru Urban Renewal Mission*

The scheme involves a total allocation of Rs. 50,000 crore by the central government in the form of ACA Grant to states/UTs. The state would be provided Additional Central Assistance (ACA) in the form of 100% grant as a percentage of project cost ranging from 35% (for Mega Cities) to 90% (for NE states). In order to ensure outcomes, the state has to prepare city development plans, detailed project reports and sign MOA indicating milestones for implementation of reforms, with the Ministries of Urban Development and Urban Employment and Poverty Alleviation to access the funds from the Central government.

Success of the JNNURM will depend on the implementation of the reform programme, which has been designed to make governance of the Urban Local Bodies democratic and transparent and to strengthen their finances and to facilitate private investment in housing. The main elements of the mandatory reform programme are:

*At the Level of ULBs, and Parastatal Agencies*

- (a) Adoption of modern accrual-based double entry system of accounting;
- (b) Introduction of a system of e-governance using IT applications, such as GIS and MIS;
- (c) Reform of property tax with MIS;
- (d) Levy of reasonable user charges by ULBs and Parastatals;
- (e) Internal earmarking, within local bodies, of budgets for basic services to the poor;
- (f) Provision of basic services to the urban poor including security of tenure at affordable prices, improved housing, water supply and sanitation.

*At the Level of States*

- (a) Implementation of decentralization measures as envisaged in 74<sup>th</sup> Constitutional Amendment Act;
- (b) \*Repeal of Urban Land Ceiling and Regulation Act;
- (c) \*Reform of Rent Control Laws balancing the interests of landlords and tenants;
- (d) Rationalisation of Stamp Duty to bring it down to no more than 5 per cent;
- (e) Enactment of Public Disclosure Law to ensure release of information periodically to stakeholders;
- (f) Enactment of Community participation Law in institutionalising citizen's participation;
- (g) Assigning 'city planning functions' to elected ULBs or associating them with such functions.

\*These reforms are not mandatory for schemes relating to water supply and sanitation

3.5.31 The JNNURM is an ambitious programme to bring about urban renewal in the country. Critical to its success would be the drawing up of comprehensive City Development Plans, leveraging of funds obtained by way of grants from the central government to mobilize resources from the market

and implementation of the reform programme so that close monitoring of progress in implementation is already in position and mid course corrections can be made where necessary. The mandatory reform requirements have been designed to ensure that the ULBs function democratically and become

financially strong on a sustainable basis. It would be therefore be particularly necessary to ensure that there is no dilution in these reform requirements. In drawing up City Development Plans it would need to be ensured that provision is made for sustaining the traditional livelihood of craftsmen, hawkers, vendors, and rickshaw pullers. It would also be necessary to provide for public conveniences and lighting of streets, which are particularly important for women.

3.5.32 The JNNURM has the potential to transform the infrastructure and improve greatly the civic amenities in selected cities but this may not be enough to cope with the scale of urbanization that is expected in the coming decades as populations move out of the villages in search of jobs. It would be imperative to also undertake planned urbanization through

development of new townships and growth centers. New growth centres could be created around existing small and medium towns or created around mega-industrial or infrastructure projects or set up in the periphery of mega cities. Location of these centres could be along the existing or proposed high capacity transport infrastructure. The 11<sup>th</sup> Plan will devise appropriate policies and schemes to bring about planned urbanization of the country.

**(g) Rural Infrastructure: Bharat Nirman**

3.5.33 The Bharat Nirman Programme launched in 2005 identifies seven major areas where infrastructure gaps need to be addressed (See Box No. 5). The programme currently extends into the first two years of the 11<sup>th</sup> Plan. It must be fully and effectively implemented.

<b>Box No. 5</b> <b><i>Bharat Nirman</i></b>	
Bharat Nirman is a time-bound business plan for action in rural infrastructure over the four year period (2005-2009). Under Bharat Nirman, action is proposed in the areas of irrigation, rural roads, rural housing, rural water supply, rural electrification and rural telecommunication connectivity. Specific targets have been set under each of these goals as under:	
Irrigation	- to create 10 million hectares of additional irrigation capacity
Rural roads	- to connect all habitations (66802) with population above 1000 (500 in hilly/tribal areas) with all weather roads
Rural housing	- to construct 60 lakh houses for rural poor
Rural water supply	- to provide potable water to all uncovered habitations (55067) and also address slipped back and water quality affected habitations
Rural electrification	- to provide electricity to all un-electrified villages (1,25,000) and to connect 23 million households below the poverty line
Rural telephony	- to connect all remaining villages (66822) with a public telephone
While the agenda is not new, the effort is to impart a sense of urgency to these goals, make the programme time bound, transparent and accountable. The funding for the programme will be met through an appropriate mix of budgetary support by the Centre and states, external aid, market borrowing and a separate window under RIDF for rural roads.	
To ensure accountability, the names of villages electrified, villages connected by all weather roads, villages provided drinking water and villages provided telephone will be put on the internet.	

### 3.6 Energy

3.6.1 GDP growth of 9% is not possible without a commensurate increase in supply of energy, electricity, coal, oil and gas and other fuels. Further, with nearly half the country's population without electricity and without a consistent supply of any other form of commercial energy either, distribution of energy is as crucial to bridging the divide between the haves and the have-nots. Ensuring lifeline supply of commercial energy to all is essential for empowering individuals, especially women and girls, who have the back-breaking, time consuming and unhealthy task of collecting and using non-commercial fuels that remain the primary energy source for cooking in over two thirds of the households. Provision of clean fuels or at least wood plantation within one kilometer of habitation and dissemination of technology for use of clean fuels is vital for good health.

#### (a) *Electric Power*

3.6.2 Rapid growth of the economy will place a heavy demand on electric power and this is an area of weakness at present. Reforms in this sector have been under way for several years and they have brought about several important institutional changes which were needed to make the power sector efficient and more competitive: The Electricity Act 2003 is in place; The National Electricity and Tariff policies envisaged in the Act have been notified; Regulators are in place in the states and have issued a series of regulatory orders which are beginning to reduce the wide dispersion in electricity tariffs that have existed traditionally and to contain tariffs charged for industries; Many states have unbundled their SEBs into generation, transmission, and distribution companies for better transparency and accountability. Nevertheless, as mentioned in Chapter 1, shortage of power and lack of access continues to be a major constraint on economic growth.

3.6.3 The greatest weakness in the power sector is on the distribution side which is entirely the domain of the states. Aggregate Technical and Commercial (AT&C) losses of most State Power Utilities (SPUs) remain high and have made SPUs financially sick and unable to invest adequately in generating capacity. For the same reason they have also had only limited success in attracting private investors to set up power plants.

3.6.4 The Accelerated Power Development and Reform Programme (APDRP) initiated in 2001 was expected to bring down AT&C losses to 15% by the end of the 10<sup>th</sup> Plan. In fact, the average for all states is closer to 40% (including uncollected bills). However, there are encouraging success stories in loss reduction in a number of cities and small areas as a result of intensified management efforts. Some states, for example, Tamil Nadu and more recently Andhra Pradesh, have shown a much better performance than the national average. This gives hope and provides guidance on how to restructure APDRP, using technological tools such as smart metering and GIS mapping for real time, monitoring and accountability at each distribution transformer. State governments should adopt the goal of bringing down AT&C losses from the current level of around 40% to at least 15% by the end of the 11<sup>th</sup> Plan. This can be done if managements of SEBs are professionalised and given autonomy of operation without political interference.

3.6.5 The Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) is a key initiative providing electricity access to all households and actually connecting all BPL households. However, the success of this commendable effort depends critically upon adequate availability of electricity and actual electrification of all households. Mere access without supply of power will only add to frustration.

3.6.6 Utility-based generation capacity is expected to rise by less than 30,000 MW in the 10<sup>th</sup> Plan but we should plan for an increase by 60,000 MW in the 11<sup>th</sup> Plan to move to a comfortable situation consistent with a growth rate between 8 - 9% per annum. The 11<sup>th</sup> Plan must evolve policies that can ensure completion of on-going projects quickly and that generation capacity of this order is created in an efficient, least cost manner while emphasising exploitation of India's hydro potential and nuclear capabilities especially in the field of fast breeder reactors. Renewables such as wind power can play a useful role in the 11<sup>th</sup> Plan. These can be set up in a short time and though they have a low load factor with a good transmission system, can be balanced by hydro power and can contribute to meeting peak demands.

3.6.7 Establishment of new generation capacity and reducing cost of power will require action on many fronts:

- Availability of fuel such as coal or natural gas for new power plants must be assured;
- A national consensus on royalty rates for fuels and compensation for host states also needs to be worked;
- Long term finance should be made available to lower capital charge;
- The presently provided guaranteed rate of post tax returns for CPSUs should be lowered to reduce cost of power and augment resources of state power utilities;
- An efficient inter-state and intra-state transmission system of adequate capacity that is capable of transferring power from one region to another;
- An efficient distribution system which alone can ensure financially viable expansion;

- Rehabilitation of thermal stations through R&M to augment generating capacity and improve PLF;
- Rehabilitation of hydro stations to yield additional peaking capacity;
- Improving supply side and demand side efficiencies to effectively lower primary energy demand by 5-7% during the 11<sup>th</sup> Plan period;
- Ensuring use of washed coal for power generation; and
- Harnessing captive capacity to support the grid.

(b) *Coal*

3.6.8 Coal will remain the dominant primary source of commercial energy and total demand for coal is projected to increase from 432 million tonnes in 2005-06 to 670 million in 2011-12. The need for the power sector itself would increase by 180 million tonne taking the total to about 500 million tonnes in 2011-12. Meeting these demands poses a formidable challenge in increasing coal production. Coal India is aiming to increase production by an unprecedented 60% during the 11<sup>th</sup> Plan period inclusive of the recently approved emergency production plan. However, realistically speaking, this level of increase in output together with the necessary rail infrastructure to move the additional coal production may be difficult to achieve by Coal India alone.

3.6.9 Coal production is nationalized at present and private investment in coal mining is only allowed for captive mines supplying coal to designated sectors power, steel, and cement. Taking a longer term view of energy production there is a strong case for de-nationalizing coal so that private sector investment can come into this crucial area. If petroleum, which is much scarcer than coal, is open to the private sector there is no reason why

coal should not also be opened up, especially if we take a longer term view of energy constraints and also the need to absorb new clean coal technologies. Pending a consensus on this issue, every effort should be made to expand coal production through the route of captive mines. Large coal users, especially in the power sector, can be given available proven coal blocks for developing captive mines.

3.6.10 Preliminary estimates suggest that in addition to coking coal we may also need to import 40-50 million tons of superior grade thermal coal by the end of the 11<sup>th</sup> Plan. Thermal power stations on the southern and western coasts can be competitive using imported coal and the country's electricity requirement does justify such import. This would require necessary port handling capacity and coast based power generation capacity of around 12000 to 15000 MW to absorb the imports.

3.6.11 Coal pricing and marketing also needs to be modernized. The e-auction route which has been opened recently has worked well, and has helped to nudge consumers towards more rational coal pricing. This window can be expanded over the 11<sup>th</sup> Plan. The method of pricing coal also needs to be rationalized by shifting to gross caloric value instead of useful heat value and by having more finely graded price bands.

### (c) *Oil and Gas*

3.6.12 India will remain dependent on crude oil imports. Fortunately, the demand for petroleum products has grown at only 2.7% per annum in the first 4 years of the 10<sup>th</sup> Plan. Consumption of petroleum products is likely to rise from 112 MT in 2005-06 to about 135 MT by the end of the 11<sup>th</sup> Plan with net crude oil imports reaching 110 MT. Gas consumption is forecast to rise to about 55 MTOE with imports reaching 20 MTOE

unless the recent finds announced in the KG basin actually start flowing in significant quantities by the terminal year of the 11<sup>th</sup> Plan. This assumes that Naphtha based fertilizer production switches completely to gas by the end of the 11<sup>th</sup> Plan. The scope for transnational gas pipelines needs to be explored from a longer term perspective, but no pipelines are likely to become available for this level of gas import during the 11<sup>th</sup> Plan. Thus LNG imports would need to rise to four times from the current level of 5 million tons.

3.6.13 The most important policy issue in this sector relates to pricing petroleum products. The recent increase in oil prices is now expected to persist for some years and although prices of some petroleum products have been raised the increase still leaves a large uncovered gap. This gap is being borne partly by the oil companies and partly by the issue of bonds by the government to the companies, which is equivalent to a government subsidy. Other critical issues facing the oil and gas sector relate to: (i) pricing of domestically produced natural gas and its allocation to the power and fertilizer industry; (ii) strengthening upstream regulation in the oil and gas sector; and (iii) ensuring competition and open access in the proposed pipeline transportation and distribution grid.

3.6.14 In the longer run, the only viable policy to deal with high international oil prices is to rationalize the tax burden on oil products over time, rationalise existing pricing mechanisms which give the oil companies an excessive margin, realize efficiency gains through competition at the refinery gate and retail prices of petroleum products, and pass on the rest of the international oil price increase to consumers, while compensating targeted groups below the poverty line as much as possible.

3.6.15 The current method of determining prices for petroleum products needs reconsideration. Full

price competition at the refinery gate and the retail level needs to be adopted. India is deficient in crude oil but has developed surplus capacity in products. Many products are exported in sizable quantities. Product price entitlement should therefore be based on trade parity pricing, which would be much lower than import parity. The 10% duty on products has been reduced to 7.5% which is a step in the right direction. There is a strong case for further reducing the duty on products to 5% to equate it with the duty on crude.

#### (d) *Other Energy Initiatives*

3.6.16 More broadly, as we move into the 11<sup>th</sup> Plan, we need to take an integrated view of energy policy towards different energy sub-sectors. While the Central and state sectors will continue to dominate the energy sector in the 11<sup>th</sup> Plan, energy policy should not be determined sector by sector where the dominant public sector players often have significant vested interests. We need to move towards a more transparent policy framework that treats different sources of energy in a similar fashion. Such a framework must meet the following objective:

- Ensure energy competition in each sub segment of the energy sector and remove all entry barriers so as to realize optimal fuel and technology choices for extraction, conversion, transportation, and end use of energy.
- Ensure energy pricing that leads to efficient choice of fuel, inter-fuel substitution, and technology so that resource allocation takes place based on market forces operating under a credible regulatory regime.
- Incentivize rational use of energy across all sectors including, agriculture, industry, commerce, domestic, personal transport, public transport, and haulage.

- Ensure an institutional framework that provides a level playing field to public sector and private sector players and provides comparable incentives to producers across all energy sectors.
- Ensure a consistent tax and regulatory structure across all energy sub-sectors. There is no reason why energy resource should be taxed much more than others unless there are some externalities involved.
- Meet social objectives as far as possible through direct and tradable entitlements offered to those in genuine need.
- Treat environmental externalities uniformly under the polluter pays principle. Thus renewables should be given appropriate incentives.
- Promote energy efficiency and energy conservation.

3.6.17 A consistent policy framework embodying these principles would minimize distortions across sectors and maximize efficiency gains.

3.6.18 Institutions for promoting and forcing the pace of energy conservation and improvement in energy efficiency also need to be strengthened. Development and use of renewable and non-conventional energy sources have not progressed to the extent they could have. The 11<sup>th</sup> Plan will restructure incentives and support from supply driven programmes to demand driven programmes and technologies. It will also link subsidies and support to outcomes in terms of renewable energy generated, rather than to capital investments.

3.6.19 Available fossil energy resources must be optimally exploited using enhanced recovery techniques. Coal bed methane must be fully exploited and fossil fuel reserves enhanced through more intensive exploration. Renewable energy

sources such as wind energy, bio-mass and bio-fuels account for a very small percentage of total energy but they could increase to 2 - 3 percent in the course of the 11<sup>th</sup> Plan period.

3.6.20 The 11<sup>th</sup> Plan must also set up a robust energy R&D system to develop relevant technology and energy sources to enhance energy security and lead to energy independence in a cost effective way in the long run. A number of technology missions covering areas such as in-situ gasification, IGCC, solar energy, energy storage etc. are proposed to be launched. The scope for bio-fuels including extraction of ethanol from agricultural waste, using reported advances in technology, needs to be vigorously explored.

### 3.7 Environmental Sustainability

3.7.1 Population growth increases the environmental load irrespective of the rate of economic growth. Rapid economic growth can intensify environmental degradation. The solution does not lie in slowing growth since slow growth also leads to its own form of environmental deterioration. With rapid growth we can have the resources to prevent and deal with environmental problems, but we must also ensure that rapid growth is environmentally benign. This can be achieved through greater awareness, starting with school children, and appropriate policies. The 11<sup>th</sup> Plan must integrate development planning and environmental concerns, providing the use of economic instruments based on the polluter pays principle, supplemented by command and control policies where these are more appropriate.

#### (a) *Improving Air and Water Quality*

3.7.2 Real time monitoring of air and water quality is crucial for devising programmes and

policies related to pollution management. The existing 300 monitoring stations for air and 850 for water quality need augmentation in number and technology. Establishing a reasonably adequate monitoring network with contemporary technology will be a priority.

3.7.3 The objective of river cleaning is to restore the water quality of all the major rivers to the designated best use which is the 'bathing class' (Category B). We are very far from achieving this objective. The National River Conservation Plan needs a critical review of the present strategy of central assistance to states for creation of facilities. Sustainability and operational issues remain unresolved in most cases. Ways of linking treatment of sewage and industrial effluents to the urban and industrial development planning need to be worked out. The goal should be to ensure that by the end of the 11<sup>th</sup> Plan no untreated sewage or effluent flows into rivers from cities and towns, and that rivers become clean encouraging riverfront development in cities on the banks. Studies on minimum essential flow in the rivers and plans to maintain it must be drawn up. This should include workable mechanisms to expedite solution of water sharing problems between states.

3.7.4 The demands of river cleaning increase with population and expansion of townships and success depends on the efforts of all stakeholders. Civic bodies should have a pivotal role to play in this context. This must be ensured through policy/legislative means. The impact on water quality of the "Water Quality Assessment Authority (WQAA)" constituted in June 2001, in different states is yet to be ascertained. A workable mechanism will be developed for monitoring and early warning systems for improving water quality.

### (b) *Solid Waste Management*

3.7.5 The increasing generation of solid waste is a growing problem in all cities. Uncollected garbage not only causes diseases but it is also visually ugly. Dumping garbage into landfills is not an attractive option in our land scarce cities and should be minimized. Most industrial countries now require their citizens to segregate wastes at home into recyclable products. While recycling is done by rag pickers in India, their lives can be made less unpleasant if citizens sort out organic and inorganic waste and dispose of organic waste in local compost or vermiculture pits. Cities and towns must be encouraged to evolve systems with citizen participation, for segregation of waste at point of origin, maximizing recycling, and safe disposal of the rest. Our villages also have problems of garbage disposal which must be addressed through SHGs and PRIs and with the help of CSOs.

### (c) *Preservation of Wildlife and Bio-diversity*

3.7.6 Management planning for the Protected Areas will be a priority and each sanctuary/national park will be enabled to maintain a database of vital information on its biodiversity and habitat status.

3.7.7 Important wildlife habitats of the country will be conserved and protected with participation of people. While an interface with communities will be developed, communication and surveillance of forests and wildlife will be augmented through Integrated Forest Protection scheme of MoEF.

3.7.8 People living in deep forests will be encouraged to shift to fringes voluntarily for providing inviolate space for wildlife. To facilitate this process, an appropriate programme including provision for livelihood opportunities will be formulated as suggested by the Tiger Task Force.

### (d) *Mitigating Land Degradation Through Green Cover*

3.7.9 Overuse of resources has been identified as a major cause of land degradation. Creation of forest/biomass resources in all the culturable vacant lands will be taken up for strengthening life support system of communities and maintaining soil/water regimes. A programme for social forestry will support development and sustainable management of the common property resources through Panchayati Raj Institutions.

3.7.10 Encouraging agro/farm forestry and building interface between industry and farmers is an important strategy suggested in the National Forest Policy 1988. An enabling environment will be created for encouraging tree growing by farmers. Subsidized supply of raw material to industries from government forests will be discouraged. Domestic and international trade on farm forestry produce by support price mechanisms and exim/tariff regulation will be considered. Forest management will be encouraged to withdraw from raising farm forestry plantations in government forests to provide better market opportunities to the farmers.

### (e) *Increasing the Green Cover*

3.7.11 Satellite data for 2002 indicate green cover of 23.68%, representing a net improvement of 0.65% since 2000. This is a welcome development and if the trend continues, the 10<sup>th</sup> Plan target of 25% will be fulfilled by 2007. However, it is a matter of concern that the quality of green cover has deteriorated. There has been a 6.3% reduction in dense forests indicating degradation. State forest management would need to work for attaining productivity potential of the forests. Timber and non-timber benefits must be

optimized with adequate investment for regeneration. The 12th Finance Commission has also supported this cause through grants-in-aid for forest maintenance.

3.7.12 Joint Forest Management (JFM) evolved in 1990s aimed at involving communities in improving degraded forests. This was largely based on benefit sharing. It failed where the forests managed by the communities were so degraded that no significant benefits accrued to the communities. However, there was success in places where leadership was in the hands of highly motivated individuals and significant benefits could be generated. Certain aspects of empowerment, reciprocal commitment for protection and sense of ownership remain to be strengthened in JFM.

3.7.13 The 10<sup>th</sup> Plan proposed universalization of JFM. In the 1.70 lakh villages in the vicinity of forests, 99708 JFM Committees were formed till 2005 against about 62890 in the beginning of the 10<sup>th</sup> Plan. The emphasis in the 11<sup>th</sup> Plan will be on consolidation of JFM through augmenting productivity and linking forests with livelihood and gainful employment generation. Management of NTFP for value addition and link to markets will need to be organized for better returns to the communities.

3.7.14 Among the initiatives to be pursued in the 11<sup>th</sup> Plan are the following:

- Encourage PRIs to revive common property resources through social afforestation.
- Rationalize forest regulations to allow industry to partner farmers in undertaking agro-forestry for augmenting the raw material base for forest based industries like paper and pulp.
- Encourage the corporate sector to participate in development of degraded land for forestry, without compromising communities priorities.
- Rationalize rules and procedures under environmental laws to expedite investment, production and employment growth.

(f) *Environmental Clearances*

3.7.15 As we put in place a policy of environmental protection, we must also pay attention to the danger of creating a new license permit raj system which will replicate all the ills associated with the old licensing regime. A comprehensive review of environmental clearance procedures is necessary to ensure that the system is transparent and avoids unnecessary delay. Unless this is done, the large increases in investment required for accelerated growth will not fructify.

## Chapter 4

# Strategic Initiatives for Inclusive Development

4.1 Along with sectoral policies aimed at improving livelihood support and increasing employment, a strategy of inclusiveness also calls for new emphasis on education, health, and other basic public facilities. Inadequate access to these essential services directly limits the welfare of large sections of our population, and also denies them the opportunity to share fully in the benefits of growth. Indeed, inadequate attention to human resource development limits the growth process itself.

### 4.2 Child Nurture: Starting Right

4.2.1 Any strategy for removing disparities, bridging divides, and ensuring the well-being of our people, must begin by respecting the rights of our child population. Rights based development of children must be at the centre of the 11<sup>th</sup> Plan. We must ensure that our children

do not lose their childhood because of work, disease or despair.

4.2.2 The Integrated Child Development Programme (ICDS) is aimed at giving children below the age of 6 the right start in life (see Box). The programme covers supplementary nutrition, immunization, monitoring of weight and height, and in some cases, crèche facilities for a limited period. The effectiveness of the programme varies across States but where it works well, it provides much needed facilities especially to the weaker sections. Its coverage, however, is limited and often the youngest children in the 0-3 years age group get left out of its ambit. The 11<sup>th</sup> Plan must universalise ICDS and also find practical ways of reaching out to the children in the 0-3 age group. Strong efforts also need to be made to improve accountability through greater involvement of PRIs.

#### Box No. 6

#### *Child Nurture – Starting Right*

Development of children is at the centre of the 11<sup>th</sup> Plan. We are committed to ensure that our children do not lose their childhood because of work, disease or despair. We aim to give the right start to children from 0-6 years with effective implementation of the ICDS programme. It is to be a community based programme involving parent groups. The nutrition component has to have imaginative menus based on seasonal and regional variations. The scheme will nurture and strengthen pregnant and lactating mothers.

Currently, the pre-school component of ICDS centres is very weak. Early Childhood Education (ECE) could be placed under the SSA. The ICDS centres then will concentrate on inculcating good health and hygienic practices among the children. For this it will be essential that these centres have toilets and drinking water. The elders of the community could be asked to visit the children on a weekly basis to narrate folk tales, poetry etc., which are often missing from school curriculum. This will serve the dual purpose of enriching the child and making the elderly feel part of the education process.

4.2.3 Meeting the nutritional needs of children however is not enough. Child mental health is a much neglected area in our country. According to the ICMR, at any given time, 7-15% of Indian children suffer from mental disorders. It is thus vital to provide counselling services for children in all schools - private or public - to ensure their well-being. Mental health must be made an integral part of the school health programme in the 11<sup>th</sup> Plan.

4.2.4 School is an important element of a child's development. The Sarva Shiksha Abhiyaan (See Section 4.3) aims at providing elementary education to all children in the 6-14 years age group. Children from socially disadvantaged families often have learning difficulties since, among other things, their vocabulary at entry to primary school is limited. Special help in pre-primary schools can help them overcome this handicap. Efforts must be made to mainstream differently-abled and other disadvantaged children and to provide them access to education, just like other children their age.

4.2.5 The most vulnerable such as street children, trafficked children, children affected by conflict or calamities, children of sex workers, child labourers, children with HIV/AIDS, victims of child sex abuse, differently-abled children, and juvenile delinquents need special attention. Adoption, rescue and rehabilitation, juvenile police units, shelter homes, counselling and medical aid etc., also need attention as they contribute to ensuring a secure childhood to children.

### 4.3 Empowerment Through Education

4.3.1 Education, in its broadest sense of development of youth, including sports, is the most critical input for empowering people with skills and knowledge and for giving them access to productive

employment in the future. The 11<sup>th</sup> Plan should ensure that we move towards raising public spending in education to 6% of GDP, which is an NCMP commitment. It must fulfill the Constitutional obligation of providing free and compulsory elementary education of good quality to all children up to the age of 14. This means we must ensure both access and good quality and standards in respect of curriculum, pedagogy, and infrastructure irrespective of the parents' ability to pay.

#### (a) *Elementary Education: Sarva Shiksha Abhiyan (SSA)*

4.3.2 The Sarva Shiksha Abhiyan seeks to provide elementary education to all children in the 6-14 years age group by 2010. It also aims to bridge all social, gender, and regional gaps with the active participation of the community in the management of schools. This is a flagship programme and a 2% education cess has been levied on all taxes and earmarked to fund this programme.

4.3.3 Expanding enrolment has been one of the major objectives of the SSA and an almost 100% enrolment of 6-14 year olds is likely to be achieved by the end of the 10<sup>th</sup> Plan. Enrolment, however, is only the first step. Children must also complete eight years of schooling and this continues to present a major challenge. The drop-out rate in primary schools for the country as a whole was around 31% in 2003-04 and it was much higher in many states. Dropout rates for both boys and girls of all social groups must be reduced sharply, if not eliminated altogether.

4.3.4 High drop-out rates are the result of a combination of factors. A school that is far away or that does not function regularly fails to retain students. Similarly, a teacher who is absent or engaged in non-teaching work, is intimidating or uses uninteresting methods of teaching also

encourages children to drop out. Often the need for children of poorer families to work also drives them away from school. With the Employment Guarantee Scheme adding to family income, these pressures are expected to somewhat reduce. Opening of crèches for children at the work site will reduce the incidence of girls dropping out to take care of younger siblings. The experience of many NGOs, in both rural and the urban areas, has shown that child workers can be mainstreamed into education through camps that hook them on to good education after withdrawing them from work. Well run residential schools in regions of extreme poverty keep the children from living on streets or railway platforms or joining the work force prematurely.

4.3.5 Experience has shown that the Mid-day Meal Scheme can help increase attendance and improve the children's nutritional status. It also helps in removing caste barriers as all children sit together for their meals.. SHGs formed by mothers should be given the task of preparing mid-day meals. This will guarantee better quality food. Wherever possible, particular attention should be paid to the scope for using the MDMS to tackle micro-nutrient deficiencies through nutrient supplementation and provision of fortified foods. Management and supervision mechanisms must be improved and changes in the nutritional status of children monitored regularly. School health programmes must be revived and converged with MDMS and MDMS itself merged with the SSA at an appropriate time.

4.3.6 The pre-school education component of ICDS-Anganwadi at present is very weak and the repetition rate in primary classes is, therefore, quite

high. This, in turn, discourages many students from continuing their education. The SSA should also have a separate component for at least one year Early Childhood Education (ECE) which can be universalized in a phased manner.

4.3.7 The most difficult task is to ensure good quality of instruction. A recent study<sup>2</sup> has found that 38% of the children who have completed four years of schooling cannot read a small paragraph with short sentences meant to be read by a student of Class II. About 55% of such children cannot divide a three digit number by a one digit number. These are indicators of serious learning problems which must be addressed. Several states have started efforts to raise basic skills in a campaign mode. Their experiences need to be evaluated. A set of national testing standards will be created and a chain of institutions that test and evaluate children according to set norms will be established. These will help us to monitor and improve the quality of learning. However, we should also note that just 28% of our schools had electricity in 2005 and only about half had more than two teachers or two classrooms. Only 40% of primary school teachers were graduates and 30% had not even completed Higher Secondary<sup>3</sup>. For a large proportion of our children, school is therefore an ill-lit classroom with more than one class being taught together by someone who may not have completed her own schooling. The monitoring above will need to correlate such facts with learning skills to identify where the real problems lie: pre-school, teachers, state governments, the design of Sarva Siksha Abhiyan or the assumed requirements for universal education. Correctives may have to be taken at all these levels.

<sup>2</sup> Annual Status of Education (ASER) –Rural 2005 facilitated by Pratham

<sup>3</sup> Elementary Education in India, Analytical Report, NIEPA 2006

4.3.8 Our longer term goal should be that all schools in India have physical infrastructure and quality of teaching equivalent to Kendriya Vidyalayas. Provision of sports facilities, to the extent possible within school premises must also be ensured. We are very far from this goal at present. One cause for poor quality of teaching is the shortage of teachers reflected in a large number of vacancies. The quality, accountability, and motivation of existing teachers are also low. In many areas, teacher absenteeism is a major problem. Teacher training is both inadequate and of poor quality and needs to be expanded and improved.

4.3.9 Empowering panchayats and citizens' education committees to oversee teacher performance will help increase accountability. The management of schools should move away from the highly centralized system of today to a more decentralized one based on local school management committees. These committees comprising of parents and other well-educated people from the neighbourhood will be accountable to the institutions of local self government. Making available ICT solutions, shared management personnel, and management skills with the school committees will be crucial.

4.3.10 Schools are expected to not just impart education in its narrow sense but, more broadly, to mould children's attitudes. Egalitarian values, compassion, tolerance, concern towards others, respect for cultural diversity, gender sensitivity, and health education must therefore be integrated in the curriculum at the elementary stage itself to help develop healthy attitudes. Gender sensitization and gender equality must be emphasized early on to help correct the skewed sex ratios and cull all beliefs about inferiority and superiority of sexes.

#### (b) *Secondary Education*

4.3.11 Universalization of elementary education alone will not suffice in the knowledge economy. A person with a mere 8 years of schooling will be as disadvantaged in a knowledge economy dominated by ICT as an illiterate person in modern industry and services. Secondary education is vital because it is in this age group that the child, particularly the girl child is extremely vulnerable and is pushed into child labour, early marriage or trafficking. The 11<sup>th</sup> Plan must therefore aim to progressively raise the minimum level of education to high school or Class X level. The demand for secondary education will also expand significantly as SSA reaches its goal of universal and complete elementary education. A major initiative for expanding secondary education up to class X, must be initiated in the 11<sup>th</sup> Plan and should include access to organized sports and games. However, the pace at which this expansion takes place will also depend on how quickly we can reduce the drop-out rates at the elementary stage.

4.3.12 The required expansion of secondary education calls for both public and private effort. At present, private aided and unaided schools account for 58% of the total number of secondary schools and 25% of the student population. Clearly with state governments finding it difficult to fund public secondary education, the proportion of private schools has gone up and the relatively better off sections of the population have virtually stopped sending their children to public schools. Yet the latter still absorb 75% of all present secondary school students, a pressure likely to increase as more children from poorer families complete the primary stage. The 11<sup>th</sup> Plan will have to find sufficient resources to end this vicious circle and evolve strategies to significantly expand the number of places in secondary schools, including

expansion of intake by private schools wherever this can complement the public effort. The participation of the private sector in a non-commercial manner by involving them in providing facilities like classrooms, laboratories, toilet blocks etc. to government schools will continue to be encouraged. To reward merit, improve mobility, and introduce some competition between schools, it is worth considering a scholarship scheme for bright but poor children who complete primary schooling in public schools that would also be valid in unaided private secondary schools which agree to a common fee structure for the scholarship holders. However, while expansion of private schools should be welcomed, government must bear the responsibility of ensuring that public schools are not only available in areas presently not served or underserved by private schools, but also competitive with private schools where these exist. Special efforts will be made to cater to the educational needs of poor Muslims, SCs, STs and girls whose enrolment is much lower than the general population.

4.3.13 As discussed in the case of elementary schools, it is necessary to also monitor the extent of learning through regular testing by independent bodies. There are strong differences of opinion among educationists on whether parental choice on schools through devices such as vouchers can improve accountability and quality or whether this would only increase existing divides and divert public money to private schools. But parents do need information about quality of their children's schools if they are to have any effective voice in influencing how these are run.

4.3.14 Extension of secondary education in rural areas poses a special challenge since secondary schools cannot be set up in every village. In view

of this, the present trend of combining upper primary with secondary school education may need to be strengthened.

(c) *Technical/Vocational Education and Skill Development*

4.3.15 Data collected in the 60th round of NSS shows that only 3% of the rural youth (15-29 years) and 6 per cent of the urban youth have gone through any kind of vocational training. Most of them have acquired the skills they have from taking up or changing employment. This is much lower than in other developing countries. The current set up for skill formation and upgradation is woefully inadequate. For inclusive growth, it is vital to enhance the productivity of labour in the unorganized sector. We need to expand vocational training from the present capacity of a mere 2 to 3 million to at least 15 million new entrants to the labour force. While we have 5000 Industrial Training Institutes (ITIs) (under the Ministry of Labour) and 7000 Vocational Schools (under the Ministry of HRD), China has about 5,00,000 Secondary Vocational Schools. The 11<sup>th</sup> Plan must pay special attention to devising innovative ways of modernizing the ITIs and increasing their number substantially. More importantly, industries and industrial associations will be involved in running them so that the scope and content of the training provided in these institutions is relevant to the needs of the industry and the job market. The number of skills for which training is provided also needs to be expanded to include new skills. ITIs in India typically cater to around 40 skills compared with 4000 in China.

4.3.16 Since 2004 an effort has been made to identify and implement reforms in administration of ITIs so as to facilitate better interaction with the industry. To begin with 100 ITIs have been taken up and it is proposed to expand the

programme to cover 500. However, much more needs to be done to meeting the demands of the knowledge economy. It is necessary to give true financial and administrative autonomy to ITIs that are formally registered societies. These ITIs should be run by independent, qualified professional heads who are accountable to boards consisting of stakeholders, such as user industries and public spirited citizens in the locality. Their performance should be measured by the placements/income improvements of the trainees who pass out.

4.3.17 Public Private Partnership models which involve industry representatives in management of ITIs and in design of courses are being tried in some states and need to be encouraged further. There are a number of other vocational training and entrepreneurship development institutes in the country in addition to the ITIs. These institutions also need to be strengthened and a process of accreditation evolved for them.

4.3.18 Vocational training for both men and women should be accorded top priority in the 11<sup>th</sup> Plan. It should be treated as an industry and efforts made to attract private investment into this sector. So far, the private investments have come in only for the higher wage skills— IT, airlines personnel, fashion technology, etc. or for skills linked with government jobs—teachers, instructors, etc. Even these private training institutes are mainly centred around large towns. Small towns that provide avenues for advancement of rural youth have concentrated mainly on academic or college education. It is necessary to encourage a broader based system offering skill enhancement possibilities in smaller towns also.

4.3.19 The possibilities in agro-processing are increasing. There is however little or no training available in processing of agricultural or forest produce. There exist many government schemes

with known technologies that need to be taken to the youth through short courses. Starting agricultural schools with strong agro-processing, irrigation, soil conservation, and forestry/gardening components will thus be one of the goals of the 11<sup>th</sup> plan.

4.3.20 Often vocational training for women is confined to sectors like nursing, sewing etc. in keeping with their traditional roles. If we are to move towards a gender just society, then this has to change. Girls should be encouraged to take up training in secondary and tertiary activities to enable them to compete as equals.

4.3.21 To reach out to rural youth, skill development must be treated at par with school education in allocation of government resources. An initiative at block level for vocational training (VET) should be taken. VET will be given priority at par with secondary education in allocating public sector financial and physical resources – land and other supportive services.

4.3.22 Both public and private institutions should be encouraged to provide training and freedom to train those seeking certification. An appropriate **certification system** should be instituted by the Central and state governments for certifying the skills of trainees graduating from a variety of institutions and suitable academic credits given to them. The Central Government should provide the necessary guidelines and support for establishing appropriate mechanisms and state governments should institute certification bodies to issue certificates for a variety of skills.

(d) *Higher and Technical Education*

4.3.23 India has a well-developed and comprehensive higher education system which has served us well thus far, but is now inadequate. The extent of access it provides is limited. Only about

10% of the relevant age group go to universities whereas in many developing countries, the figure is between 20 and 25%. There is an overwhelming need to undertake major expansion to increase access to higher education. The system also suffers from a serious problem of quality. While some of our institutions of higher education have the potential to become comparable with the best in the world, the average standard is much lower. High quality institutions are finding it difficult to get quality faculty given the enormous increase in private sector opportunities for the skills most in demand.

4.3.24 There are serious shortages of qualified research personnel in educational institutions, in national laboratories and in industrial R&D units. Currently the number of scientists and engineers engaged in R&D in the country is 157 per million. Korea has fifty times more, whereas US & Japan have about thirty times more. At present we produce around 5000 PhDs annually in science and

about 800 PhDs in engineering. The Prime Minister's Science Advisory Council has estimated that if India has to lay claim to being a knowledge-based economic power, the number of PhDs of quality acceptable by world standards should be five times more than the number that we are currently producing.

4.3.25 These considerations suggests that the 11<sup>th</sup> Plan must undertake a major effort to expand and improve the quality of our higher education system. In particular, we need to expand higher education in science and create an environment that attracts bright students to careers in science and in R&D. Unless these efforts are made, we will run into skill constraints which will limit our ability to gain competitive advantage in this area (See *Box No. 7: The Emerging Skill Shortage*). In fact, India should aim to be a global innovation (R&D) hub and a global education hub that attracts students from around the world. Our policies can be fine tuned to achieve this goal.

#### Box No. 7

##### *The Emerging Skill Shortage*

While India's young demographic profile has the country favorably placed in terms of manpower availability, talent supply shortages are emerging. This is extremely disconcerting especially for the knowledge services sector, which, over the last few years has emerged as a significant growth engine with demonstrated gains in terms of exports, employment and very visibly in urban development across several cities in the country. Research has shown that so far, only a tenth of the global addressable market for these services has been tapped. With its early lead and strong fundamentals (demographics, economics, and expertise), India is best positioned to take advantage of this opportunity. Yet the unsuitability of a large proportion of the talent pool in the country could lead to significant lost opportunities. The NASSCOM-McKinsey Report 2005 projections indicate that these will fall short by about 500,000 suitable professionals (representing an opportunity cost of US\$ 10bn) by the end of the decade and in the absence of corrective action, this gap will continue to grow. However, if current trends are maintained, the IT-ITES sector (IT-ITES alone of the knowledge sector) will need an additional 1 million plus qualified people in the next 5 years and will generate exports of US \$ 86 billion in FY 2012. If the country is to capitalize on the huge opportunity in this and other areas of knowledge services, what is needed is a major thrust at all levels of education. Clearly, substantial expansion and radical reform of the education sector are called for to ensure that we are able to meet the quality and quantity of professionals needed by the country.

4.3.26 The regional divide in the matter of educational and R&D institutions is also a matter of concern. Over 60% of these are located in just about 6 to 8 States depending on the segment (for example engineering colleges or biotech R&D labs) one considers. The 11<sup>th</sup> Plan must address these disparities as they greatly influence distribution of employment opportunities. New colleges and universities must be set up, to provide easier access to students in educationally backward districts. Existing institutions must be strengthened and expanded where possible and open and distance education encouraged. In addition, a specific plan for upgrading a few existing select universities with a “potential for excellence” must be formulated, laying down specific parameters which are in tune with global standards. One University in each state should be made a model university through all-round upgradation during the 11<sup>th</sup> Plan. Select state universities should be upgraded to the level of Central Universities, where a share of maintenance expenditure could be met centrally and the state and the Centre could share the development needs. The three oldest Universities of Mumbai, Calcutta, and Madras may be taken up in the first instance, in consultation with the respective states so that they could evolve the necessary statutory bases.

4.3.27 Since education is the pathway to economic advancement, the strategy for expanding education must also pay attention to ensuring equitable access. Reservation of seats in educational institutions for SCs and STs, and in many states also for OBCs has been in place for many years. The Centre is taking steps to introduce reservation for OBCs in central universities and other central institutions of higher learning such as IITs, IIMs etc. It has also been decided that the proposed reservation will be introduced in a manner which ensures that there is no reduction in the general category of seats. This involves substantial

expansion of seats which was overdue. The details of the scheme will be finalized shortly and the government will ensure that resources are provided to these institutions to enable the necessary expansion in a manner which does not compromise on quality.

4.3.28 Expanding the scale of higher education is only one part of the solution. The 11<sup>th</sup> Plan must simultaneously address the problems of varying standards, outdated syllabi and also inadequate facilities. Most of all, it must address the need to create an environment that will attract top class faculty to our universities, with the freedom and resources to interact effectively with their global peers. This will require, in many respects, a complete revamping of existing systems.

4.3.29 The triple objectives of *expansion*, *inclusion*, and *excellence* will require a substantial increase in resources devoted to this sector by both the Centre and the states. Successive annual plans will have to provide rising levels of budgetary support. This must be accompanied by internal resource generation by the universities by realistically raising fees. Simultaneously, efforts will be made to develop wider merit-cum-means based loan and scholarship programmes through the banking system and other agencies. The National Merit Scholarship Scheme needs to be expanded to cover at least the top 2 per cent of the student population in fields of education and skill training. We should also strive to increase the scope of scholarships to SC/ST children

4.3.30 While it is important to expand access to high quality institutions for the poor and socially disadvantaged, it is also important to recognize that the ability to benefit from higher education is effectively determined by the quality of schooling available to these groups at the school level. The access of those groups to high quality schooling

must therefore be improved to ensure that they are not at a disadvantage when they enter institutions of higher education.

4.3.31 The open university system is an important instrument for expanding higher education since it overcomes the infrastructure constraint. Until a larger network of accessible and well supported colleges is developed, the open schooling programme should be strengthened and expanded. In case of subjects that do not require laboratory work, it will be helpful for students to access pre-recorded selection of lectures, tutorials, and standardized tests available at internet kiosks. Testing and examination centres where students can take standardized examinations in parts can reduce the pressure. For this autonomous institutions charged with the responsibility of testing and examination will have to be developed. The 11<sup>th</sup> plan should pay attention to creation of electronically available content and testing mechanisms so that the pressure on infrastructure can be eased.

4.3.32 The role of the private sector in providing high quality education also needs to be recognized and a suitably facilitative environment created to allow such institutions to support our objectives of expanding higher education. Since, these institutions are neither aided by the Centre nor by the state governments, their fee structure cannot be expected to be at par with those aided by the Centre/state governments. The present arrangements regarding control over private education institutions have emerged out of a series of court decisions and may not reflect an adequate appreciation of financial compulsions. Private institutions can only develop if they are allowed to charge reasonable fees while also providing need based freeships and scholarships for a certain percentage of students. There is a need to review the system comprehensively to introduce greater

clarity and transparency if we want to see a healthy development of quality private sector education.

(e) *Adult Literacy Programmes*

4.3.33 The 10<sup>th</sup> Plan target of attaining 75% literacy rate is likely to be achieved by 2007. The Dakar goal of halving the illiteracy rate by 2015 will thus be achieved ahead of time. However, bridging of regional, social, and gender gaps will continue to be major areas of concern.

4.3.34 Our aim is to increase adult literacy to 85% by the end of the 11<sup>th</sup> Plan period. Of the 30 crore adult illiterates in our country, a significant proportion is not covered under any adult education programme. A programme using the new computer based self-learning system will be framed for the 35+ age group.

4.3.35 Currently, literacy programmes cover 598 out of 600 districts in the country. The Mid-term Appraisal of the 10<sup>th</sup> Plan pointed out the need for merger of various adult literacy programmes including the Total Literacy Campaign. The quality of the various programmes initiated by the NGOs will be assessed through regular monitoring, and central and state governments will evolve an accreditation process. The NYKS network, synergized with the PRI network, will be fully utilized through the Panchayat Yuva Shakti Abhiyan to fulfill the goals of adult literacy under the overall umbrella of the Total Literacy Campaign.

4.3.36 Adult literacy as we measure it today is not an adequate indicator of the level of functional literacy that is required in the new millennium. A computer based functional literacy tool developed by Tata Consultancy Services (TCS) has the capacity to make an adult illiterate read a newspaper in 8-10 weeks. If deployed nationally as a mission, *India can become 100% literate within 5 years.*

SAC-PM has recommended that this be taken up as a national mission. We must commit ourselves to a much higher level of literacy through continuing education programs. The 11<sup>th</sup> plan will, as a separate stream, create workable models of continuing education.

(f) *The Cutting Edge: Science and Technology*

4.3.37 In the current knowledge era, our development depends crucially on the ability to harness science and technology to stimulate innovative solutions. Capabilities in S&T therefore are reckoned as a reliable benchmark for establishing the status of the development of a nation. India must occupy a frontline position in this listing. The 11<sup>th</sup> Five Year Plan approach to S&T should be guided by this ambition. The emphasis should be on:

- (i) Evolving an integrated S&T Plan and providing the needed resources; substantially stepping up support to basic research, setting up a National Level mechanism for evolving policies and providing direction to basic research.
- (ii) Enlarging the pool of scientific manpower and strengthening the S&T infrastructure. Focused efforts will be made to identify and nurture bright young students who can take up scientific research as a career. Restructuring and revamping the universities and improving the service conditions of the scientists is a concomitant requirement for this.
- (iii) Implementing selected National Flagship Programmes which have direct bearing on the technological competitiveness of the country in a mission mode so that India emerges as a leader in some high technology areas.
- (iv) Establishing globally competitive research facilities and centres of excellence. Kindling

innovative spirit so that scientists translate R&D leads into scalable technologies which yield wealth generating products and processes. Attention will have to be paid to the development of new models of public-private partnerships in higher education, and in particular, in research in universities and high technology areas.

- (v) Identifying ways and means for catalysing Industry-academia collaborations for development, application and flow of technologies from lab to the market place and for the industry to invest more in strengthening national S&T infrastructure.
- (vi) Promoting strong linkages with other countries in the area of science and technology, including participation in mega international science initiatives.
- (vii) Evolving an empowered National Science and Technology Commission responsible for all matters relating to S&T (Administrative, Financial, Scientific) including scientific audit and performance measurement of scientists and scientific institutions.

4.3.38 Culture is an integrating force that binds the nation and it is reflected in people's daily life and should be treated as an integral part of all development programmes. Given the continental size of the country, the monumental diversity of its people and their languages, the plurality of faiths and belief systems, conservation and promotional activities of cultural heritage call for ensuring dissemination of our composite culture, Special efforts are required to promote all regional languages, to sustain the folk and traditional art, and to maintain, document, research and propagate dissemination of the intangible cultural heritage. Also a system needs to be evolved (with involvement of PRIs) to protect monuments not protected by ASI.

## 4.4 A Comprehensive Strategy for Better Health

4.4.1 The 10<sup>th</sup> Plan aimed at providing essential primary health care, particularly to the underprivileged and underserved segments of our population. It also sought to devolve responsibilities and funds for health care to PRIs. However, progress towards these objectives has been slow and the targets on MMR & IMR have been missed. Accessibility remains a major issue especially in areas where habitations are scattered

and women & children continue to die en route to hospitals. Rural health care in most states is marked by absenteeism of doctors/health providers, low levels of skills, shortage of medicines, inadequate supervision/monitoring and callous attitudes. There are neither rewards for service providers nor punishments for defaulters. As a result, health outcomes in India are adverse compared to bordering countries like Sri Lanka as well as countries of South East Asia like China and Vietnam (See *Table 6*).

**Table 6: India and Comparable Countries**

	India	Sri Lanka	China	Vietnam
Infant mortality (per 1000 live births)	60 (2003)	13 (2003)	30 (2003)	19 (2003)
One year olds fully immunized for measles (%)	58 (2002-04)	99 (2003)	84 (2003)	93 (2003)
Population with sustainable access to improved sanitation (%)	30 (2002)	91 (2002)	44 (2002)	41 (2002)
Under-five mortality (per 1000 live births)	87 (2003)	15 (2003)	37 (2003)	23 (2003)
Births attended by skilled birth attendants (%)	47.6 (2002-04)	97 (1995-2003)	97 (1995-2003)	85 (1995-2003)
Maternal mortality (per 100,000 deliveries)	407 (adjusted 2000)	92 (adjusted 2000)	56 (adjusted 2000)	130 (adjusted 2000)

4.4.2 Achievement of health objectives involves much more than curative or even preventive medical care. We need a comprehensive approach which encompasses individual health care, public health, sanitation, clean drinking water, access to food and knowledge about hygiene and feeding practice. This is a difficult area because of our sociocultural complexities and also regional diversity. Policy interventions therefore have to be evidence based and responsive to area specific differences. With concerted action including enabling pregnant women to have institutional deliveries and receive nutritional supplements;

connecting PHCs and CHCs by all weather roads so that they can be reached quickly in emergencies; (accessibility to hospital should be measured in terms of travel time, not just distance from nearest PHC); providing home-based neo natal care including emergency life saving measures etc, we can be on track to reach the Millennium Development Goals for IMR, MMR and for combating diseases by the end of the 11<sup>th</sup> Plan.

4.4.3 To improve the primary health care system, the 11<sup>th</sup> Plan will first lay emphasis on integrated district health plans and second, on block specific health plans. These plans will ensure involvement

of all health related sectors and emphasize partnership with NGOs. The NRHM has already been launched to ensure quality health care in rural areas. The next step should be to extend this to make it a Sarva Swasthya Abhiyan that also covers the health needs of the urban poor, particularly the slum dwellers by investing in high calibre health professionals and appropriate technology.

4.4.4 Besides reducing the burden and the level of risk of existing, growing and emerging diseases, the 11<sup>th</sup> Plan will also take care of the special needs of people who are HIV positive, in particular women. The 11<sup>th</sup> Plan will recognise the feminine face of HIV and accord it the highest priority.

4.4.5 The 11<sup>th</sup> Plan will continue to advocate fertility regulation through voluntary and informed consent. It will also address the special healthcare needs of the elderly, especially those who are economically and socially vulnerable.

(a) *National Rural Health Mission*

4.4.6 A seven year National Rural Health Mission (NRHM), which spans the duration of the 11<sup>th</sup> Plan, has been launched to address infirmities and problems across rural primary health care (See *Box No. 8*). Converging the public health approach with primary health care has been one of the primary objectives of this mission. Another objective is to genuinely empower and support Panchayati Raj Institutions to manage, administer, and be accountable for health services at community levels. Supervision of health sub-centres by gram panchayats will improve attendance of staff, motivate appropriate quality of care and provide constant feedback on patient satisfaction. The NRHM will also converge the management of health delivery across all systems of medicine (including ISM) at primary health care levels.

Box No. 8

*The National Rural Health Mission*

- The National Rural Health Mission is expected to address the gaps in the provision of effective health care to rural population with special focus on 18 States, which have weak public health indicators and/or weak infrastructure.
- The Mission is a shift away from the vertical health & family welfare programmes to a new architecture of all inclusive health development in which societies under different programmes will be merged and resources pooled at the district level.
- It aims at effective integration of health concerns with determinants of health like safe drinking water, sanitation and nutrition through integrated District Plans for Health. There is a provision for flexible funds so that the States can utilise them in the areas they feel are important.
- The Mission provides for appointment of Accredited Social Health Activist (ASHA) in each village and strengthening public health infrastructure, including outreach through mobile clinics. It emphasizes involvement of the non-profit sector, especially in the under served areas. It also aims at flexibility at the local level by providing for untied funds.
- The Mission, in its supplementary strategies, will aim at fostering public-private partnerships; regulating the private sector to improve equity and reduce out of pocket expenses; introducing effective risk pooling mechanisms and social health insurance; and taking advantage of local health traditions.

4.4.7 India has its own well developed indigenous systems of health care like *ayurveda*, *yoga*, *siddha*, *unani* etc, along with diverse ecosystem specific, local health traditions. These systems could be used to complement the allopathic system, as they could be more useful in certain areas of curative/preventive health care. This would enhance the quality and outreach of public health services, which are currently unable to meet the health needs of our people. However, care would have to be taken to ensure that we do not substitute the allopathic system of health care in areas like immunization, etc where it has no alternative.

4.4.8 At present, our healthcare system suffers from a severe shortage of trained personnel. Across states, 6.30% posts of doctors remain vacant and random checks show that 29-67% doctors are absent. One way of overcoming the difficulty in recruiting qualified doctors to serve in rural areas is to make greater use of trained paramedical personnel. There is a strong case for reintroducing the 2 year licentiate course in medicine which existed earlier but was abolished. We also need to devise ways of training and accrediting the rural health providers (popularly called RMPs) and permitting them to provide select services under the supervision of a licensed medical practitioner.

#### (b) *Disability and Mental Health*

4.4.9 Coping with challenges of living in a rapidly developing society and increasing exposure to a violent world has led to a perceptible increase in mental stress. Provision of mental health care is thus vital. From the children of farmers who commit suicide to victims of violence, calamities and sexual abuse, all need counselling support. Yet this has been a much neglected area in our country. Even today there is a stigma attached to mental

illness which prevents many from reaching out. The 11<sup>th</sup> Plan should recognize the importance of mental health care and should concentrate on providing counselling, medical services and establishing helplines for all—especially people affected by calamities, riots and violence. Adequate budgetary provisions will be made available for this purpose.

4.4.10 The 2001 Census reveals that 2.13% of our population or approximately 2.19 crore people in India suffer from severe disability. The 11<sup>th</sup> Plan will take special measures to not just prevent discrimination against the disabled, especially children with disability, but also introduce policies to empower them and enable them to lead a life of dignity. The Persons with Disability (Equality Opportunities, Protection of Rights & Full Participation) Act, 1995 which provides various entitlements to persons with disability will be effectively operationalized.

#### (c) *Financing Health Services*

4.4.11 Energizing health systems involves additional government expenditure. The existing level of government expenditure on health in India is just under 1 percent which is unacceptably low and effort should be made to increase the total expenditure at the Centre and the states to 2-3% of GDP. This must be accompanied by innovative financing mechanisms which incentivize performance. The quality of publicly supplied healthcare depends on how healthcare providers are paid. Providers should be paid only if they actually perform a service or satisfy the customer (the patient or the village health committee). Such systems linking payment to performance will increase accountability and should be encouraged.

4.4.12 The 11<sup>th</sup> Plan should experiment with different systems of private-public partnership, of

which many examples already exist in some states. We could explore the possibility of an entitlement system for pregnant women to have professionally supervised deliveries. This will empower them to exercise choice, as well as create competition in the health service sector. Contracting out well-specified and delimited projects such as immunization can help enhance accountability. This does not mean that the state will withdraw from the health sector. Studies across the country have shown that expenditure on healthcare is a primary cause of indebtedness. Due to inadequate and non-performing public health infrastructure, the poor are forced to approach private practitioners who charge exorbitant fees. It is thus vital to ensure access to functioning public sector healthcare facilities.

4.4.13 Experience has shown that severe ill health can lead to disastrous outcomes for individuals and their families especially for the poor. These problems are best handled by health insurance. Community Based Health Insurance (CBHI) is emerging as a promising concept and existing experience in different states has shown that well managed pre-payment systems with risk pooling are effective in protecting the poor from impoverishment due to high medical costs during catastrophic health events. CBHI initiatives based on some individual contributions to the premium, plus a government subsidy, deserve to be supported as they would improve the quality of healthcare and expand the healthcare interventions as per requirements. We also need to look at alternative approaches such as comprehensive risk pooling packages through the public system and through accredited private providers. This is possibly an area where multiple experiments need to be encouraged so that we can come to firmer conclusions about what model will work best.

(d) *Clean Water for All*

4.4.14 Water-borne infections hamper absorption of food even when intake is sufficient. Clean

drinking water is therefore vital to reduce the incidence of disease and to check malnutrition. The 10<sup>th</sup> Plan target of providing potable drinking water to all villages has not been achieved. Under Bharat Nirman, we now plan to cover the 55067 uncovered habitations in 4 years (2005-09). Rural Water Supply is, however, beset with the problem of sustainability, maintenance, and water quality. Thus though more than 95% coverage was achieved prior to Bharat Nirman, 2.8 lakh out of the 14.22 lakh habitations in the country, have slipped back from fully covered to partially covered status. Another 2.17 lakh habitations have problems with the quality of water; about 60,000 habitations face serious problems of salinity or arsenic and fluoride contamination. These habitations will also be taken up under Bharat Nirman. The 11<sup>th</sup> Plan will emphasize full and timely realization of the Bharat Nirman targets.

4.4.15 The 11<sup>th</sup> Plan will also address issues of sustainability by moving away wherever possible from ground water to surface water resources. Where alternate sources do not exist, or are not cost effective, ground water recharge measures will be insisted upon in the vicinity of the project.

4.4.16 The Plan will move away from state implemented and managed projects to encourage community owned and managed projects, like the Swajaldhara Programme. In the 10<sup>th</sup> Plan, Swajaldhara had a limited provision of 20% of the allocation of the Accelerated Rural Water Supply Programme.(ARWSP). It will need to be upscaled so that more and more schemes are community managed, reducing the maintenance burden and responsibility of the state. For this purpose, the states will have to fully utilize the funds provided by the 12<sup>th</sup> Finance Commission.

(e) *Sanitation*

4.4.17 Rural sanitation coverage was only 1% in the 1980s. With the launch of the Central Rural

Sanitation Programme in 1986, the coverage improved to 4% in 1988 and then to 22% in 2001. The programme was modified as Total Sanitation Campaign in 1999 changing the earlier supply driven, high subsidy and departmentally executed programme to a low subsidy, demand driven one, with emphasis on hygiene education. Five hundred and forty districts are covered under this programme and the population coverage is expected to increase to about 35% by the end of the 10<sup>th</sup> Plan.

4.4.18 Lack of sanitation is directly linked to a number of waterborne diseases. It is now generally acknowledged that unless 100% coverage of the community is achieved and proper solid waste management carried out, health indicators will not show significant improvement. Besides, toilets are essential for the dignity and safety of girls and women. The subsidy regime in the current programme is only for BPL families. For full coverage to be achieved however, APL families will

have to be motivated to switch over from open defecation to use of toilets. The Information, Education, and Communication (IEC) campaign will therefore receive increased attention in the 11<sup>th</sup> Plan. Meanwhile, the cost norms for individual household toilets are already being revised and a solid waste management component is being included in the programme. These measures coupled with a focused IEC campaign will significantly increase sanitation coverage in the 11<sup>th</sup> Plan.

4.4.19 Steps are also being taken to link rural sanitation with the rural health mission. The Nirmal Gram Puraskar, a reward scheme for 100% open defecation free communities has been a motivating factor and is picking up momentum as can be seen from the number of communities competing for the Puraskar. With sufficient allocation of funds in the 11<sup>th</sup> Plan, the MDG goal for sanitation can be met by 2010, and full coverage achieved between 2012 and 2015.

## Chapter 5

# Bridging Divides: Including the Excluded

5.1 The strategy of inclusive growth proposed in this paper can command broad based support only if growth is seen to demonstrably bridge divides and avoid exclusion or marginalization of large segments of our population. These divides manifest themselves in various forms: between the haves and the have-nots; between rural and urban areas; between the employed and the under/unemployed; between different states, districts and communities; and finally between genders. Such marked inequalities are a matter of concern and, in some cases even shame. The 11<sup>th</sup> Plan must ensure that the growth process helps to bridge these divides.

### 5.2 Growth and Poverty

5.2.1 A basic and long standing concern has been: will growth bypass the poor, excluding them from its benefits? There is an extensive literature on the effects of growth on poverty and the general conclusion has been that the proportion of the poor has declined over time but not fast enough. Until recently, the available official data indicated that the percentage of the population in poverty had declined from 36% in 1993-94 to 26% in 1999-2000, though the Planning Commission even then had noted that the 1999-2000 data were collected with a different methodology and give estimates of poverty which are not strictly comparable to 1993-94 estimates. This comparability issue subsequently became a matter of academic research. While there were differences on the extent of

poverty reduction there was broad consensus that the official estimates had overstated poverty reduction. Whereas the official estimates implied poverty reduction by 1.66 percentage points per year during 1993-2000, much better than the 1 percentage point per year reduction between 1977-78 and 1993-94, the alternative estimates ranged from 0.5 to 1.1 percentage points per year.

5.2.2 Preliminary estimates are now available from the latest NSS large sample survey conducted in 2004-05. This provides data that are fully comparable to 1993-94. On the basis of these and using the methodology of the Expert Group on Estimation of Proportion and Number of Poor 1993, the percentage of population below the poverty line in 2004-05 is provisionally estimated at 27.8% in 2004-05. Thus the average decline in the percentage of population below the poverty line over the period 1993 to 2004 is 0.74 percentage points per year, much less than implied by the official 1999-2000 data. Because of the slower pace of reduction in the percentage of poor, the absolute number of poor, using the Expert Group methodology is now estimated to be approximately 300 million in 2004-05, larger than the official 1999-2000 estimate.

5.2.3 However, although this poverty estimate for 2004-05 is higher than the earlier official estimate for 1999-2000, this should not be interpreted to mean that poverty increased between

1999-2000 and 2004-05. It means only that the 1999-2000 official estimates had underestimated *comparable* poverty. To deal with this, the 2004-05 survey was carried out in a manner that would also give alternative estimates of poverty, roughly comparable to the 1999-2000 figures. These alternative estimates are much lower. The percentage of poor in 2004-05 that is roughly (but not strictly) comparable to the 26.1% official estimate for 1999-2000 is about 22%. This implies that poverty decreased at the rate of 0.79 percentage points per year during 1999-2005.

5.2.4 Using comparable data we find that the reduction in poverty is only about 0.8 percentage points per year which is at best a modest rate of decline. One reason for this could be that the growth rate in agriculture, the sector employing the largest number of poor people, has just about kept pace with the population growth rate during the last decade. Although growth of non-agricultural GDP has been much higher, its benefits do not compensate for a deceleration in agricultural growth. In fact, much of the poverty reduction during 1999-2005 is because food prices hardly increased. The outcomes would therefore have been much better, had agricultural growth been more rapid.

### 5.3 Employment

5.3.1 Employment is an area which shows up where our growth process is failing on inclusiveness. The number of workers is growing, particularly in non-agricultural employment, but weaknesses appear in unemployment, the quality of employment, and in large and increasing differentials in productivity and wages. Data from the latest NSS round for 2004-05, the Economic Census 2005 and the Annual Survey of Industry reveal the following:

- (i) Employment growth accelerated to 2.6% during 1999-2005 outpacing population growth. But the average daily status unemployment rate, which had increased from 6.1% in 1993-94 to 7.3% in 1999-00, increased further to 8.3% in 2004-05. This was because the working age population grew faster than total population and labour force participation rates increased, particularly among women. We are obviously not tapping the demographic dividend fully. The extent of under-employment also appears to be on the increase.
- (ii) Agricultural employment has increased at less than 1% per annum, slower than population growth and much slower than growth in non-agricultural employment. This is the expected trend in long-term development but a matter of concern is that this has also been associated with a sharp increase in unemployment (from 9.5% in 1993-94 to 15.3% in 2004-05) among agricultural labour households which represent the poorest groups. Also, although real wages of these workers continue to rise, growth has decelerated strongly, almost certainly reflecting the poor performance in agriculture. There are also transition problems in changing employment patterns, and these are probably being exacerbated by our landholding structures and by barriers of caste and gender. These problems need to be addressed in the 11<sup>th</sup> Five Year Plan.
- (iii) Non-agricultural employment expanded robustly at an annual rate of 4.7% during 1999-2005 but this growth was entirely in the unorganized sector and mainly in low productivity self-employment. Employment in the organized sectors actually declined despite fairly healthy GDP growth. This is

clearly a matter of concern since only organized sector jobs are regarded as desirable and lack of expansion in this category is a source of frustration for our increasingly educated youth who have rising expectations.

- (iv) Some young workers in the knowledge economy benefit from high wage rates but NSS earnings data show negligible growth of average real wage rates in non-agricultural employment during 1999-2005. Women and less educated workers did worse than others and sizeable increases in earnings were confined mainly to those who were graduates at least. According to the Annual Survey of Industries, real wages stagnated or declined even for workers in organized industry although managerial and technical staff did secure large increase.
- (v) The wage share in our organized industrial sector has halved after the 1980s and is now among the lowest in the world. One reason for this is increasing capital intensity of the organized sector, another is outsourcing. An issue for policy research is why, despite our factor endowment, organized sector has been choosing to replace labour with capital at this scale and whether there are policy distortions that encourage this which should be corrected.

5.3.2 The 11<sup>th</sup> Plan provides an opportunity to focus on and diagnose the reasons for these failings and to reverse at least some of the adverse outcomes of the recent growth pattern. It should aim at making employment generation an integral part of the growth process and devise strategies to accelerate not only growth of employment but also of wages of the poorly paid. Central to this must be the recognition that a very large number of people in our society lack access to income generating productive assets and that this hinders

their ability to sustain themselves through pure self-employment. In order to make growth more inclusive, it is vital that more people gain access to more productive assets with which they can themselves generate decent incomes and also that GDP growth generates sufficient demand for wage labour so that those who cannot be self-employed are at least employed at decent wages.

5.3.3 Targeting faster growth in GDP and doubling of agricultural growth will help in this process though it must be noted that this alone may not be sufficient. On the supply side, the labour force will increase by about 52 million during 11<sup>th</sup> Plan if it grows at the same rate as current projections of working age population. The increase could be much higher, around 65 million, if female participation rates rise at the pace observed during 1999-2005. Since this increase will be over and above the present backlog of about 35 million unemployed on a typical day, and since inclusiveness requires a shift of employment from agriculture to non-agriculture we must plan for at least 65 million additional non-agricultural opportunities in the 11<sup>th</sup> Plan. This will not create full employment, but it will at least ensure that the unemployment rate falls somewhat. However, even this modest goal implies that the rate of growth of non-agricultural employment would need to accelerate to 5.8% per annum from 4.7% in 1999-2005. Furthermore, if the high unemployment among the educated youth is to be reduced and if quality of overall employment is to improve, there must be a robust growth in organized sector employment. In other words, a massive reversal is required from the negative employment growth during the last decade.

(a) *Promoting Employment Generation*

5.3.4 Additional employment opportunities in the future will be generated mainly in the services

and manufacturing sectors and policy initiatives are needed to support this. Measures would need to be taken in the 11<sup>th</sup> Plan to boost, in particular, labour intensive manufacturing sectors such as food processing, leather products, footwear, and textiles, and service sectors such as tourism and construction. The end of the textile import quota regime in industrialized countries offers India a huge opportunity to expand textile and garment exports and generate substantial additional employment, provided we can compete with other developing countries. Tourism-both domestic as well as international-provides large possibilities for employment generation in the hotel, catering, entertainment, and travel sectors and also a market for handlooms and handicrafts to create additional employment. Substantial employment will also be generated in the construction sector, from building houses to expanding infrastructure. The measures suggested in Chapter 3 to give impetus to growth in manufacturing, tourism, and construction and the possibility that some changes in existing labour laws may be required to spur investment and growth in labour intensive sectors, are clearly relevant. However, it is also necessary to address those features that underlie why higher investment and accelerated GDP growth have not led to satisfactory employment outcomes in the recent past.

5.3.5 The dualistic nature of our economy, with large differences in productivity between agriculture and non-agriculture on the one hand and within the non-agriculture sector between the organized and unorganized sectors poses problems, especially since the dualism appears to have intensified over the last decade or so<sup>4</sup>. Labour productivity in the organized sectors was already

4 times that in unorganized non-agriculture in 1993 and this ratio increased to 7 times by 2004. During the same period, the share of the organized sector in total non-agricultural employment declined from 20% to 13%. Part of this was due to downsizing of the public sector which reduced employment by 1.3 million. However, employment growth was negligible (in fact negative after 1998) even in the private organized sectors, despite an average growth of GDP of nearly 10% per annum after 1993 in this sector. The reason is that capital intensity in the organized sector increased rapidly, so that the real capital stock per worker is now three times what it was in 1993. On the other hand, with its 60% higher workforce now than in 1993, unorganized non-agriculture has absorbed over 60 million new workers, mostly after the late-1990s. But this sector has been unable to increase significantly either its capital - labour ratio or labour productivity. These two disparate private sectors in non-agriculture, unorganized and the organized now produce about 50% and 25% of all non-agricultural value-added respectively, with 87% and 4% of the non-agricultural workforce. These trends show is that while employment in the unorganized non-agricultural sector has expanded it is generally low quality employment constrained by low productivity. Millions of self-employed in the unorganized sector, (particularly home-based women doing putting out work and artisans, but also many in other manufacturing sub-sectors and in retail trade) have levels of labour productivity no higher than in agriculture and their number is increasing rapidly. They are as vulnerable to shocks as farmers.

<sup>4</sup>The definition of organized and unorganized sectors used here is the same as that adopted in the National Accounts. This accepts the DGET definition of organized sector, i.e., enterprises employing 10 or more workers, but not including temporary casual workers. The unorganized sector includes all remaining enterprises and workers.

5.3.6 The 9% GDP growth projection and the associated savings and investment outcomes presented in Chapter 2 suggest that the real capital stock in the private corporate sector will increase at about 13-14% per annum during the 11<sup>th</sup> Plan<sup>5</sup>. This is slightly less than actual growth of corporate sector capital stock during 1993-99 and only slightly higher than the average growth of 11% during 1991-2005. Employment growth in the private organized sectors will therefore continue to be small (at most an addition of 2 million during the 11<sup>th</sup> Plan) if past trends on the capital-labour ratio continue. It is still possible that the target of 65 million non-agricultural opportunities is met in this baseline scenario by the unorganized sector taking advantage of the higher rural demand from a more rapidly growing agriculture. With proper intermediation of the savings available, this could be accompanied by about 4% annual growth in the capital-labour ratio of unorganized non-agricultural employment so that income per worker could increase at roughly the same rate as that in agriculture. But vulnerabilities in the unorganized sectors would remain for two reasons. First, the workforce in unorganized non-agricultural employment at the end of 11<sup>th</sup> plan would roughly equal the combined workforce in agriculture and organized sectors (it increased from 44% in 1993 to 66% in 2004). This implies fewer customers per unorganized sector worker. Second, there would be stiffer competition for markets from the organized sector. To some extent competition from the organized sector and its relative expansion is a normal part of the development process. But a healthy outcome involves greater absorption of labour in the organized sector and a stronger rise in productivity, and capital labour ratios (modernization) in the unorganized sector.

5.3.7 This objective can be achieved if policies are put in place that restrain increase in capital intensity by encouraging corporate entities to enter more labour intensive areas. An addition of about 9 million jobs over the plan would occur with the same growth of capital stock as assumed earlier if the capital - labour ratio of the corporate sector does not increase any further. Organized sector employment would double over the 11<sup>th</sup> Plan if this optimistic assumption is made, but this would still leave about 55 million new workers for the unorganized sectors to absorb.

5.3.8 Those left behind in unorganized sectors could also do better in this scenario since pressure of new entrants would be less than in the baseline, but this is not certain. Much will depend on what policies are used to induce the corporate sector to move into more labour intensive sectors. The outcome would be distinctly positive if corporate expansion takes place in an environment in which new markets are created through rapid and widespread economic growth and through expansion of exports. But the overall employment outcome would be very different if policies only reduce existing barriers and labour costs for corporate players but do not expand markets. If the corporate sector expands mainly by capturing existing markets from the unorganized sector, the total employment outcome would almost certainly be adverse since current productivity differentials mean that each new corporate sector job would displace several people in the unorganized sector.

5.3.9 This has many implications for the design of policy. The need for greater flexibility in labour laws is widely advocated especially by representatives of industry. The fact is that there is more flexibility in practice than is commonly

<sup>5</sup> The definition of corporate sector used here is also the same as used in the National Accounts. This largely overlaps with organized as defined earlier but is not identical since data are compiled from diverse sources.

believed as is evident from the fact that many companies in the organized sector have been able to shed excess labour through voluntary retirement schemes. However, these reductions are typically costly and relatively easy for capital intensive industry. The government does not support extreme versions of labour flexibility such as 'hire and fire' but there are areas of flexibility short of hire and fire which need consideration. The case for more flexible labour laws is obviously stronger and more urgent in export-oriented enclaves such as SEZs and Apparel Parks. However, since women workers are the majority in many enclaves, this should be tempered by including some gender concerns not well addressed at present. Similar considerations could also inform proposals to amend laws such as the Contract Labour (Regulation and Abolition) Act as applied in the domestic tariff area. In other words, we need to evolve a differentiated approach to labour law reform which may be more acceptable to existing organized sector workers. Ways of effectively grandfathering rights of most existing workers should also be considered. This could also resolve some other problems, for example what incentives would SEZs offer for exports if tax breaks are curbed and use of the eminent domain for land acquisition ended?

5.3.10 The role of fiscal incentives in promoting employment objectives also needs to be reviewed. It is sometimes argued that employment goals are best achieved through incentives for existing corporate entities to expand. In fact there are several fiscal incentives for corporate investment, all of which encourage more capital use and none relates to labour use. These are a major part of the problem that has fostered capital-intensive over labour-intensive industry. Fresh thinking is required, and we must consider eliminating all these

distorting incentives, or restructure them and include at least one simple employment-related incentive (e.g. a corporate tax deduction at a flat rate per worker based on number of workers on permanent payroll) without increasing the total fiscal burden. This should not tilt the playing field against the unorganized sectors.

5.3.11 Above all, we need to recognize that the best way scale economies can be secured and employment quality improved in labour intensive activity is by making it easier for enterprises in the unorganized sectors to expand. Organized sector employment would more than double, at much less cost both in terms of investment and disruption of existing employment, if just the top 2% of present unorganized sector enterprises crossed the threshold into organized sector. The current policy of de-reservation of small-scale industry does have this as an objective while allowing existing large units to enter spaces previously occupied by the small-scale. But a grim statistic in this context is that the number of enterprises employing more than 10 workers actually declined by 25% between Economic Censuses 1998 and 2005. We clearly need positive action to encourage efficient small entrepreneurs to graduate upwards and to put far greater emphasis on removing distortions that hinder competition, prevent entry, and discourage graduation from unorganized to organized status. This requires not only a more responsive and innovative financial system but also provisions to smooth the impact of taxes and labour regulations that kick in when units cross particular thresholds. Two types of thresholds are relevant. First, the 10 worker cut-off when inspections and documentation related to labour laws begins. There are proposals by the Second National Commission on Labour to make firms with up to 19 workers exempt from some but not all these requirements and these proposals

need to be considered seriously. Second, some taxes, for example excise, are fully exempt up to a certain level of sales but fully payable including on the exempted amount once the sales cross the exemption limit. This causes very high rates of marginal taxation at the exemption cut-off. We should exempt all firms from payment of taxes on the currently exempt level of sales.

5.3.12 We also need to recognize explicitly that it is the village and small-scale enterprises (VSE) which will have to provide most of the new employment during the 11<sup>th</sup> Plan, at least half of which will have to be created in rural areas. Many of the small-scale manufacturing enterprises fall under the definition of the corporate sector but a feature that the small-scale manufacturing enterprises share with the unorganized village enterprises is greater employment intensity than the large corporate sector. These enterprises already account for the overwhelming bulk of employment in non-agriculture and the 11<sup>th</sup> Plan should address the many problems faced by VSE units and home based workers, particularly women. The most important of these are the non-availability of timely and adequate credit and unreliable power. But there are others, e.g. requirement of permissions from a number of government agencies, the burden of multiple inspections and, often, the need to maintain numerous registers and submit many returns. Some measures have been suggested to stimulate VSE growth in section 3.2. State governments have an important role to play in enabling these enterprises to flourish, or at least function in a friendly environment, so that they can actually provide the huge volume of employment required. In addition, concrete steps are required, for example Rural Business Hubs, to foster the many complementarities that do exist between village enterprises and the corporate sector.

5.3.13 The area of skill formation, discussed in section 4.3, concerns all types of enterprises, small, medium, and large. Industry has been highlighting the fact that a major skill shortage has emerged in almost all areas of manufacturing and a large skill deficit is also weighing down major service sub-sectors, such as hospitality and construction. Besides being a possible dampener to growth, this could hold back employment since employers might adopt capital-intensive technologies rather than provide the in-service training necessary to impart specific skills. Indeed, the situation is so critical that vocational training and skill development will have to be taken up in mission mode. As part of its policy to promote greater employment in the organized sector, government undertakes programmes to facilitate training and employment for workers to upgrade their skills. But it can help even more by training of trainers, based on skill sets and curricula identified in consultation with industry. An overhaul of existing ITIs is already on the anvil but a more sustained and wider effort is called for, including training to those living far from industrial clusters and for new skills which might enhance unorganized sector productivity. For example, a certification system to widen the range of privately supplied vocational training to make imparted skills more marketable and also short duration courses for rural youth in new downstream skills required for efficient and value-added agricultural diversification are urgent priorities.

5.3.14 Many 11<sup>th</sup> Plan thrust areas, education, health, PRI sectors and agricultural extension, face serious staff shortages. About 3 million new positions, half of these school teachers, may be required for these sectors to be adequately staffed. This is 30% of the total present staff of states and local bodies. Resource projections for 11<sup>th</sup> Plan in Chapter 6 therefore provide for 40% real increase

in pay and allowances of state governments over the plan. Yet there may be a shortfall unless pay hikes following the Pay Commission are small and staffing in other areas restrained. Corresponding provision for the Centre is much less since responsibility for these thrust areas lies with the States.

5.3.15 In addition to the above, some Plan funds will be available for direct employment in new schemes, including education and health. It is not possible to put a figure on this at this stage, but if 10% of incremental budgetary support in 11<sup>th</sup> plan over the 10<sup>th</sup> is on initiating new posts this could finance about 2 million new positions. With the ongoing fiscal correction to continue into the 11<sup>th</sup> plan, much more increase in permanent government jobs appears difficult and it will be important to ensure that the new jobs are in priority areas. Profitable public sector enterprises (PSE) are expected to grow faster by leveraging their reserves and this should reverse the contraction of PSE employment seen in the last decade. But the net effect may again be small since downsizing of loss making units would continue. Of course, infrastructure investment will also boost employment in construction directly but, since these are neither permanent nor involve much direct public hiring, should not be included as public sector employment. The bottom line is that the public sector will not add more than 5 million jobs even if Pay Commission implications are not onerous. Thus the employment impact of 11<sup>th</sup> plan will depend essentially on how it stimulates private sector employment growth. Much of this will depend on our being able to meet the GDP growth targets of Chapter 2, but in addition there is the issue of balancing employment growth with that of productivity and manage the resulting structural change.

5.3.16 As far as the organized private sector is concerned, there is little that plan expenditure *per se* can do besides facilitating growth mainly through infrastructure and human resource development. But employment outcomes can be improved by removing policy distortions. For this we must eliminate biases in incentives that favour capital intensity, make graduation easier from unorganized to organized sectors, and adopt a segmented approach to labour laws to make exports more labour intensive without undue threat to existing jobs in either organized or unorganized sectors. We should make these explicit objectives of the 11<sup>th</sup> plan and aim thereby to increase private organized sector employment ambitiously, by at least 10 million. Along with the public sector, organized sector jobs would then expand by over 15 million, a growth rate of about 9% per annum.

5.3.17 This would still leave nearly 50 million new workers to be absorbed in unorganized non-agricultural employment. This exceeds the 40 million actually absorbed in this sector during 1999-2005, but is nearly a percentage point less in terms of rates of growth. Since planned growth rates of both agriculture and overall GDP are more than 2 percentage points higher than earlier, we can expect growth of per worker incomes in the unorganized sectors to accelerate. Further, higher plan spending can help here, not only through better infrastructure and improving workers' capacity for productive work, but also through direct employment, e.g. in construction, and support to self-employment and self-help groups. But, as discussed earlier, growth can increase vulnerabilities from mismatches in supply and demand for skills and for produce, and these are more likely to affect women and weaker sections. The 11<sup>th</sup> Plan will

need to prioritize different proposals to increase employment and also address the issue of vulnerabilities directly.

(b) *Managing Vulnerabilities and Structural Change*

5.3.18 An aspect of the 11<sup>th</sup> Plan strategy is that accelerated agricultural growth should be viewed not so much as source of direct employment but as necessary condition for reducing under-employment and promoting faster rise in agricultural earnings per head. We must recognize that existing farm sizes set a limit to how much can be earned from farming and that with rapid growth in non-agriculture many farmers may find it better to lease or sell their farms and move to non-farm occupations. Many other farmers will resort to mechanisation in order to increase productivity, and in the process reduce employment of hired labour. This is why the discussion above has assumed that the entire issue of additional employment creation should be viewed from the non-agriculture side. However, we should also note that the number of female-headed households in rural areas is likely to increase further as male workers seek non-farm work, and that agricultural labourers will be affected adversely by lower demand for hired labour. In particular, we should recognise that while increased land transactions and displacement of hired labour are necessary for better land use and to achieve productivity gains, these can be socially disruptive.

5.3.19 Planning efficient and equitable shift of labour from agriculture to non-agriculture involves many millions of people and the issues involved cannot be ignored any longer. What is required in this context are proper records of land rights and, in particular, implementation of women's rights to land; a clear definition of the rights of tenants

and landlords; and protection from insecurity for families which lose nearby work and need to migrate. But these can involve controversial decisions, for example legalising tenancy or removing restrictions on land sales where they exist. However, since any restriction on selling land or leasing out is a disincentive for people wishing to shift out of agriculture, the necessary reforms must be made acceptable.

5.3.20 This suggests that relevant aspects of land reform must be placed firmly on the agenda. Proposals for dilution of existing ceiling laws usually based on arguments of "efficiency" of large farms are far from appropriate at this stage. There is in fact no evidence of economies of scale beyond what current ceilings already allow and land hunger remains unabated. On the other side there is clear evidence that even a tiny plot that provides livelihood fallback for families to stay behind and children to go to school as men migrate, can be a powerful enabler for the poor to diversify occupations without jeopardising the capability of future generations. There are also a number of examples where women have been able to cultivate their tiny plots co-operatively and thereby secure required economies of scale. Such efforts must be supported as also attempts to provide a homestead plus a little more to all the poor. Above all, we must acknowledge that processes of structural change, for example declining hired labour demand in agriculture, will have victims on the agricultural side who are also most likely to be victims of vulnerabilities on the non-agricultural side.

5.3.21 A number of measures are already in place to deal with vulnerabilities and these are discussed below. However, we must do much more to manage the consequences of structural change.

(i) *National Rural Employment Guarantee Programme (NREGP):*

The National Rural Employment Guarantee Act 2005 (NREGA) assures every rural household at least 100 days of manual work at minimum wages. Initially in effect in 200 districts, the Act will be extended to the entire country over a five-year period. Unlike employment programmes in the past that were supply driven, bureaucracy controlled, and suffered from large leakage including misuse of funds arising from false muster rolls and poor project design, this is demand driven, based on a legal right and requires PRIs to select projects relevant to the needs of the community. Initial assessments are mixed, for example muster rolls continue to be problematic in many places, but it is clear that the demand-driven nature of NREGP has not led to as high leakages or cost as some had originally feared. If anything, the main teething problems appear to be insufficient information and unduly high task norms, which have caused demand to be much less than earlier estimated. Where these have been addressed, it is a very popular scheme effective in providing fall-back income, reducing distress migration and creating assets. To fulfil the rights created, the 11<sup>th</sup> Plan must ensure that NREGP is adequately funded and effectively implemented. State governments should address existing problems, meet employment demand promptly and, by using NREGP in convergence with other schemes, develop land and water resources effectively, especially to benefit the scheduled castes and tribes.

(ii) *Self-Employment Programmes*

Self-employment is promoted through many schemes by many different departments. Besides an array of programmes for village and small scale enterprises, there are special schemes for scheduled castes and tribes. As far as Rural Development is

concerned, the present strategy for promotion of self-employment in rural areas relies mainly on formation of self-help groups to empower rural communities and enable them to take up economic activities. Many other departments in government also have schemes that provide assistance to self-help groups but guidelines vary in scope, content and implementation mechanisms thus creating overlap and inefficiency. The 11<sup>th</sup> Plan should integrate the self-employment programmes implemented by different Ministries into an integrated programme that cuts across ministries. The programme should also provide for training and capacity building of educated unemployed youth, particularly in rural areas, as such unemployment has assumed serious proportions especially in the southern parts of the country. Marketing support will have to be provided to SHGs to ensure their sustainability. At the same time, the 11<sup>th</sup> Plan must also examine the need to expand the SHG movement in urban slums.

(iii) *National Social Assistance Programme*

This programme has two components: the National Family Benefits Scheme that provides a lump sum benefit of Rs 10,000 in the case of death of the primary breadwinner in a BPL family; and the National Old Age Pensions Scheme which provides pension at the rate Rs 200 per month to aged destitute persons with little or no regular means of subsistence. This is virtually the only social security available to unorganized sector workers, although some states do provide additional packages for specified workers.

5.3.22 There are some other programmes and policies that also constitute elements of a social safety net against vulnerabilities, such as the targeted public distribution system, the Indira Awaas Yojana, National Rural Health Mission and various types of crop and livestock insurance. We do not,

however, yet have a comprehensive social safety net covering the bulk of our population, particularly people in the informal sector. Without this, we do not have a comprehensive strategy for tackling poverty. Thus while formulating the 11<sup>th</sup> Plan, the scope for expanding and reshaping existing schemes and adding new schemes to improve the social safety net needs to be carefully examined. The financial viability of such schemes is obviously critical, and claims of new programmes will be viewed along with other claims on resources aimed at improving the welfare of the poor.

5.3.23 In this context, it should be noted that a criticism of our labour legislation is that it has singularly failed to give any protection or security in terms of working conditions or wages to about 93% of the total workers who work in the unorganized sectors, including agriculture. Extending labour protection to the unorganized sector is obviously difficult to implement but the time has come during the 11<sup>th</sup> Plan to evolve policy initiatives which makes a beginning by offering a modicum of protection and security to the unorganized sector workers, with respect to working conditions, wages, medical insurance facilities and some sort of pension benefits through the joint efforts of the central and state governments, as well as the employers and workers themselves. The Second National Commission of Labour had made some recommendations pursuant to its remit to propose umbrella legislation to ensure at least minimum protection and welfare for unorganized sector workers. Subsequently, the National Commission for Enterprises in the Unorganized Sector has drawn up the draft legislation, along with a scheme for social protection, which is under consideration. One way to proceed expeditiously would be to enact a legislation that provides core benefits to the poorest and commits to progressive enlargement of benefits and extension of coverage.

## 5.4 Gender Equity

5.4.1 Gender bias is deeply ingrained in our social psyche and this is reflected in indicators such as sex ratios, literacy and health gaps of boys and girls, Maternal Mortality Rates etc. These data, however, do not fully reflect the discrimination against women. The 11<sup>th</sup> Plan strategy for gender equity must pay attention to all aspects of women's lives. It must ensure that women live and live with dignity. It must examine everything from generic problems like freedom from patriarchy to specific issues such as clean cooking fuels, care for pregnant and nursing women, dignified spaces for violated women, toilets for women and girls, crèches at work places etc.

5.4.2 Gender equity requires adequate provisions to be made in policies and schemes across Ministries and Departments. It also entails strict adherence to gender budgeting across the board. All this must be complemented by campaigns for public awareness that educate men and women - both are gripped with patriarchal values- about emerging social and economic realities. Special measures for gender empowerment and equity will be an essential component of the 11<sup>th</sup> Plan. The Plan must have a special focus on four aspects – violence against women (VAW), economic empowerment, political participation and women's health. The synergised network of NYKS clubs and PRIs must be used, through the Panchayat Yuva Shakti Abhiyan, to spread this message among the youth at the grassroots level.

5.4.3 Some of the initiatives needed are the following

- Check VAW through effective policies and legislation and also seek to provide physical and social security to women.

- Alcoholism is a leading cause of both physical and economic VAW and
- The 11<sup>th</sup> Plan must explore ways of checking it.
- It must evolve legislative measures to address trafficking. Support systems must be put in place for victims of trafficking and de-criminalisation will be assured for commercial sex workers.
- The Plan must ensure that towns and cities under the NURM are made women-safe and women-friendly.
- It must address problems emerging from feminisation of agriculture and other forms of menial employment, like domestic work.
- Adequate and need based training will be provided to women to enable them to enter all sectors of the economy on an equal footing with men.
- Special attention will be paid to the economic empowerment of women from the marginalised and minority groups. This will have a dual effect of increasing their decision-making powers while also making them less susceptible to violence.
- Women's political participation and their role in all levels of decision-making will be strengthened through legislation and rigorous training.
- The health of a nation depends upon the health and well being of its women. The 11<sup>th</sup> Plan will recognize the pivotal importance of women's holistic health. It will focus on reducing the incidence of anemia and malnutrition among adolescent girls to break the cycle of ill-health and maternal and infant mortality.

## 5.5 Rural Urban Divide

5.5.1 Another divide that needs to be bridged is between the rural and the urban population. Data from NSS surveys show that the ratio of urban to rural per capita consumption increased from 1.62 in 1993-94 to 1.76 in 1999-00 and further to 1.91 in 2004-05, which suggests that the urban rural divide is widening especially since the NSS probably does not fully capture consumption by the rich, particularly in urban areas. If the comparison is extended to gaps in availability of other essential services, the chasm is much deeper. The 11<sup>th</sup> Plan must take action on both fronts. The strategy of accelerated agricultural development proposed in an earlier *Chapter*, combined with infrastructural support for non-agricultural activity in rural areas, will help reduce the urban-rural divide. Programmes such as Bharat Nirman are particularly relevant in this context.

5.5.2 Apart from the rural-urban divide, there is a divide within urban areas which is also widening.<sup>6</sup> Massive problems have emerged as a result of rapid growth of urban population without a corresponding increase in urban infrastructure and in providing civic amenities. A select few have relatively better access to urban services. Yet even they don't escape the consequences of the massive neglect of basic urban services that becomes glaringly apparent in emergencies such as heavy rains, earthquakes etc. The quality of life for the bulk of our urban people, particularly for the poor, means living with many avoidable hardships. They do not even have access to clean drinking water. Urban renewal is imperative for both efficiency and equity, since cities provide substantial economies of

<sup>6</sup> According to NSS, the Gini ratio of urban consumption distribution (that ranges from 0 with perfect equality to 1 with perfect inequality) increased from 0.34 in 1993-94 to 0.38 in 2004-05. These too are likely to be underestimates on account of NSS underestimation of the urban rich.

agglomeration and are the growth engines of the economy. The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) launched in 2005-06 is meant to provide improved urban services.

5.5.3 The above programmes will require substantial allocation of funds, mainly by the government. The question arises whether these outlays will compromise public investment in other needed areas and reduce growth? In fact, if targeted effectively and implemented efficiently, these very programmes and the outlays envisaged for them will stimulate the economy and raise its growth rate. The Rural Employment Guarantee Scheme, for example, can create productive assets, provide additional income to the poor and increase demand for food and other consumer goods. This will, in turn, stimulate growth. Increasing demand for agricultural goods is important to raise agricultural growth, which may otherwise face a demand constraint. Growth of agriculture is vital to bridging the rural-urban divide. Similarly, the Backward Districts Development Programme will also be mobilised to increase growth and reduce disparity.

## 5.6 Balanced Regional Development

5.6.1 Regional divides are another challenge for the 11<sup>th</sup> Plan. Balanced regional development has been an important objective in our planning and various instruments including fiscal incentives, industrial policies and directly targeted programmes have been deployed in the past to achieve it. Some policies, such as industrial licensing, are no longer relevant in today's economic environment since investment cannot be directed to particular locations. In a competitive world, investment must be allowed to flow to locations perceived to have an attractive investment climate and better infrastructural facilities. While this has definitely

generated efficiency, there is, at the same time, evidence of increasing regional divides. Growth performances across states have been varied; the performance of poorer states with poorer infrastructure has been lagging.

5.6.2 While income growth performance has diverged, there is welcome evidence of some convergence in education and health indicators across the states. The gap between the well and poor performing states has somewhat narrowed and the health and education outcomes in the poorer states have registered improvement. Regardless, a much larger effort is needed in this area. Sarva Shiksha Abhiyan and National Rural Health Mission have already put the institutional architecture in place. The states will be supported to improve their governance for delivering these services effectively.

5.6.3 These improvements in social infrastructure must be complemented by improvements in physical and economic infrastructure, which make for a pro-investment environment. This is the surest way of ensuring an improvement in growth performance of poorer states. The emphasis on infrastructure in the 11<sup>th</sup> Plan will help to achieve a more balanced regional development. However, the Centre's efforts to improve infrastructure need to be complemented by parallel efforts by the states. The role of the state governments is especially important in the power sector where operational responsibility lies entirely in their hands.

### (a) *Special Problems of North-East*

5.6.4 The per capita income in the North-Eastern (NE) states, which was slightly above national average in 1947, has fallen to almost 40% below national average today. These states have some unique economic problems arising out of

remoteness, poor connectivity, hilly and often inhospitable terrain, a weak resource base, poor infrastructure, sparse population density, shallow markets, inadequate administrative capacity, low skill development and finally a law and order situation often threatened by insurgency. These factors have resulted in low economic activity and consequent fiscal vulnerability.

5.6.5 Connectivity is the key issue for NE States. It not only imparts a sense of isolation

but also adds to the transportation costs making trade and investment uncompetitive and cost of providing services very high. The 11<sup>th</sup> Plan will facilitate the exploration of NE's reserves of oil, gas, coal and limestone and also encourage tourism. Connectivity will be established to enable NE states to trade freely with neighbouring regions and countries. The 11<sup>th</sup> Plan will accord highest priority to improving the connectivity to NE States by upgrading transport infrastructure (see Box 9)

#### Box No.9

##### *Transport Initiatives in the North-East*

Infrastructure, particularly transport infrastructure, is crucial for the socio-economic development of the North-Eastern States. Improvement of transport infrastructure would necessitate a concerted and multi pronged action covering all modes of transport in the region viz. roads, railways, civil aviation and inland water transportation.

Recognizing the criticality of developing the vast road network in the North-Eastern Region (NER), various road development programmes, including SARDP-NE would be taken up at an accelerated pace. These schemes/programmes, apart from augmenting the capacity of high density corridors, will result in provision of improved four lane or two lane (with paved shoulders) National Highway link to all State capitals. In addition, all district headquarters will be connected through National Highways system either directly through two-lane National Highway or two-lane State road facility.

High priority is being accorded for converting the arterial network of Railways to Broad Gauge (BG) and almost the entire Meter Gauge (MG) network in the North-East region will be converted to BG in the region during the 11<sup>th</sup> Five Year Plan period. Action will be taken to provide rail link to Meghalaya and Sikkim. With this, all the North-Eastern States will be linked with BG line. Efforts will also be made to provide rail link to all State capitals of the NER.

Construction of three Greenfield airports at Pakyong in Sikkim, Itanagar in Arunachal Pradesh and Cheithu in Kohima or should be completed expeditiously. All State capitals in the NER would have air connectivity. As a part of modernization of airports in the country, 4 airports in the North-East (Guwhati, Dimapur, Agartala and Imphal) are proposed to be modernized. With a view to improving intra-regional connectivity, the infrastructure facilities at various airports will be strengthened and air services will be augmented.

In order to harness the maximum potential of Inland Water as an ideal mode of transport for low value, high volume commodities, River Brahmaputra National Waterway 2, which provides trunk route connectivity to the Region, will be made fully functional.

5.6.6 The special problems of agriculture and forestry arising from the unique agro-ecological situation, frequent floods of Brahmaputra and bamboo flowering will be addressed. Opportunities to develop horticulture will also be explored.

(b) *Unbalanced Growth within States*

5.6.7 Inter-state differences are only one aspect of balanced regional development. Equally important is the emergence of large differences within states. Many districts in states that are otherwise performing well are suffering from severe backwardness. The causes of this backwardness are familiarly well known. These are typically districts with rainfed agriculture or extensive land degradation, generally poor infrastructure and connectivity and low human development indicators. Many of these districts also have large tribal populations, where problems of tribal rights in forest areas have remained unresolved and contribute to persistent dissatisfaction. Lack of economic development in these districts has led to severe social problems and a perception of alienation and neglect. Such a perception soon deteriorates into an adverse security environment. This, in turn, discourages development and creates a vicious circle. Many such districts have seen a rise of Naxalism, which now poses a severe internal threat. It is important to remember that while most of these districts are in states that are lagging behind, some are also found in better performing states such as Maharashtra, Andhra Pradesh and Karnataka.

5.6.8 The primary responsibility for achieving a balanced regional development within states must necessarily lie with the state government. By definition, states that are doing well on an average should be able to look after the backward districts within their boundaries by making appropriate allocation of plan resources. Unfortunately this has

not happened. A more equitable allocation of state resources must be an important part of the solution. Recognising the severity of the problem however the government has launched a new programme, the Backward Regions Grant Fund which is applicable to identified backward districts. The 11<sup>th</sup> Plan will ensure concerted effort is made to break the vicious circle that keeps these districts backward.

### 5.7 Bringing on Par: SCs, STs, Minorities and others left behind

5.7.1 Development and empowerment of socially disadvantaged groups and bringing them at par with the rest of the society is our constitutional commitment. Education is the one of the most effective instruments of social empowerment and is vital for securing horizontal and vertical mobility. Schemes for the educational upliftment of the SCs and STs have borne fruit although the gap between the general population and the SCs and STs is still at unacceptable levels. Educational schemes in favour of these sections therefore need to be continued with redoubled vigour. At the same time it is imperative to promote education among all other backward sections including minorities, particularly among poor Muslims, who have fallen far behind the national average in all aspects, particularly in the field of education. It is necessary to go to the root of the problem and examine the reasons for such a distressing situation so that remedial measures can be taken during the 11<sup>th</sup> Plan. At a minimum, areas dominated by backward communities like poor Muslims will require special focus in the SSA, and schemes for creating infrastructural facilities will have to be properly implemented in these areas. In addition, the Plan will explore ways of creating incentives for students belonging to these communities. It will work towards the economic

and political empowerment of Muslim women by increasing their access to credit and ensuring their presence in decision-making bodies.

5.7.2 A 15 point programme for the welfare of minorities has been circulated to all state governments. It reflects a new beginning and has the potential of improving the quality of life of our Muslim population. Our effort in the 11<sup>th</sup> Plan should be to ensure that state governments and central departments implement this programme. The Planning Commission will therefore develop appropriate guidelines to ensure that Plan schemes in the relevant areas are consistent with this intention.

5.7.3 While bringing the SC, ST, minorities and other backward classes to national level may take time, certain aspects of the backwardness need to be immediately set right. Therefore, complete elimination of the abhorrent practice of manual scavenging will be accomplished by the middle of the 11<sup>th</sup> Five Year Plan. This will be done through effective measures of liberation and rehabilitation of scavengers such as sustainable employment and income generating activities. Similarly, total eradication of the practice of bonded labour which especially targets the SCs and STs will be achieved in the 11<sup>th</sup> Plan. For this intense efforts will be made to identify and rehabilitate bonded labour and their children.

5.7.4 The Special Component Plan (SCP) for Scheduled Castes and the Tribal Sub-Plan (TSP) are two strategic policy initiatives to secure overall development of the SCs/STs and to remove all socio-economic and educational disparities between them and the rest of the population. It is disturbing to see that both these schemes have not been implemented with a full sense of commitment and

involvement, either by the Central or the State Governments. The 11<sup>th</sup> Plan will ensure that they are implemented with further innovations and deeper commitment.

5.7.5 Over a period of time a large number of people, particularly tribal groups, have severely suffered from the brunt of mega development projects. They have often become dispossessed of their traditional means of livelihood and got alienated from their cultural heritage. What is worse, they have been rarely properly rehabilitated and resettled. There is no reason for them to bear such an enormous cost of mega- project led development, if they have no stake in that development. Efforts therefore will be made during the 11<sup>th</sup> Plan to prepare a comprehensive and integrated national policy for land acquisition, compensation, and resettlement.

## 5.8 Special Attention to Vulnerable Groups

5.8.1 Rural distress, mining, large projects, riots, natural disasters and internal conflicts often lead to widespread displacement in the country. The internally displaced people (IDPs) especially women and children are subject to huge quantum of trauma and often find themselves living in urban ghettos without access to water, sanitation, work, education or healthcare. Their children are seldom able to return to schools. The 11<sup>th</sup> Plan will develop a special programme to provide civic amenities, counseling and a safety net for IDPs. Schemes will be devised for other categories of vulnerable people such as the elderly, which will take care of their needs in a fast changing family paradigm. In particular, needs of elderly women including widows will receive attention, since they are victims of a double jeopardy.

## Chapter 6

# Public Sector Plan: An Enabling Environment

6.1 The strategy for inclusive growth proposed in this paper can succeed only if both the private and the public sectors play the role expected of them. Private sector activity in farming, small and medium enterprises, and the large corporate sector accounts for 76% of the total investment, and will be crucial for achieving the growth and employment objectives. The Centre and the states must create the environment that will encourage efficient expansion and investment in the private sector, especially in key labour intensive areas which would help to generate new high quality employment and also improve the quality of existing employment. The public sector has major responsibilities in developing infrastructure either directly or through PPPs, and in supporting agriculture, irrigation, rural development, health and education, etc. that are crucial for ensuring inclusiveness.

6.2 Implementing the public sector component of the 11<sup>th</sup> Plan presents three distinct challenges.

- First, the resources needed to finance the public sector effort will be substantial, and ways must be found to finance this effort through the agencies of the Central Government, state governments and the PSUs.
- Second, the focus of public sector activity will shift heavily to sectors that are largely in the

domain of the states and this has implications for the relative role of the Centre and state governments in plan formulation and implementation.

- Third, many of the sectors of special focus are those in which implementation depends crucially on involvement of the local community and this implies that the role of panchayati raj institutions and urban local governments, and also the voluntary sector, must be greatly expanded. These issues are discussed below.

### 6.3 Financing the Public Sector Plan

6.3.1 The final picture on the size of the 11<sup>th</sup> Plan will only emerge after further consultation with the states and Central Ministries, and taking account of the reports of the various working groups on Plan resources. However, it is evident from earlier Chapters that the strategy outlined in this paper will require large increases in Plan expenditure in several sectors in both the Central and State Plans. For example, irrigation and water conservation in rainfed areas are both critical elements of the strategy and will require extra expenditure above the normal levels of about 0.5% of GDP annually. In the health sector we need to increase total expenditure by at least 1 percentage point of GDP by the end of the 11<sup>th</sup> Plan. In education we may need an increase of at least 0.5%

of GDP by the end of the 11<sup>th</sup> Plan period to cover the requirements of expanding secondary education, plus an additional 0.25% of GDP for higher education. The proposed expansion of the NREGA to cover the entire country in a phased manner may require an additional 0.75% of 2005-06 GDP by the end of the 11<sup>th</sup> plan. These items alone will call for additional expenditure, above current levels, of about 1.0 percentage point of GDP in 2007-08 rising to about 2.5 percentage points of GDP in 2011-12.

6.3.2 Large investments are also needed in other infrastructure areas, highlighted in Chapter 3, which should receive high priority if we want to accelerate growth. The requirements for urban infrastructure for example are particularly large if we want to upgrade our cities, many of which have been long neglected. The strategy proposed in this paper recognizes that the need for public resources for infrastructure can be moderated by relying on PPP. Nevertheless, the total requirement is so large, and there are many areas where PPP will not be feasible, that the public sector support may have to increase significantly. This is partly because some of the infrastructure needed is unlikely to attract private investment and partly also because even in areas where private investment is feasible, there are some where it will need public support through viability gap funding. It is also necessary to recognize that deployment of private resources in infrastructure could 'crowd out' investment in the production sectors, which should be the primary focus of private investors and to that extent there is a case for continuing a strong rate for public investment in infrastructure

6.3.3 Some of the demand for increased Plan expenditure in priority sectors could be accommodated by reprioritizing and reducing the allocation of public sector funds from existing plan schemes that do not serve priority objectives, or which have proved to be ineffective. Over the years,

there has been a tendency to continue funding old Plan schemes even when they have lost their relevance or have failed to yield results. The time has come to weed out such schemes in the 11<sup>th</sup> Plan. The targeted 9% GDP growth, if achieved will help reduce allocations as a share of GDP even while maintaining some growth in real terms. However, the scope for containment of Plan expenditure through all these means is limited, since the composition of the Plan has already shifted substantially towards the social sectors. There are also some areas where new demands are being made, *e.g.*, expanded crop and livestock insurance and a comprehensive social security system for the unorganized sectors. The essential nature of these areas is non-Plan, but they could involve some demand for Plan resources.

6.3.4 Pending finalization of detailed estimates of Plan requirements on the basis of reports of various working groups it is best at this stage to work on the assumption that the public sector responsibilities of the strategy outlined above would require an increase in the Budgetary Resources for the Plan from an average of 7.15% of GDP (centre and states combined) in the 10<sup>th</sup> Plan by 2.5 percentage points of GDP.

6.3.5 The feasibility of achieving this order of increase in budgetary support for the Plan by the Centre and the states taken together (excluding investments by PSUs) needs to be carefully examined. In principle, the resources needed can be mobilized while maintaining prudent levels of the fiscal deficit by some combination of the following:

- an increase in tax revenues as a percentage of GDP; and
- a fall in non-Plan expenditure (including explicit and hidden subsidies) as a percentage of GDP.

6.3.6 Fortunately experience with tax collections during the 10<sup>th</sup> Plan has been encouraging, with both the Centre and the states experiencing an increase in revenue collection as a percentage of GDP. With further improvements in tax administration in the Centre, aimed at increasing compliance within a framework of prudent tax rates and the implementation of VAT by most of the states, it is reasonable to assume that tax revenue as percentage of GDP can be 2.9 percentage points higher in the 11<sup>th</sup> Plan. However, there is a strong likelihood that the non-tax revenues of both Centre and states could decline sharply primarily due to reduced interest receipts on account of debt swap, debt write-off and disintermediation in borrowings. The projections of central and state government finances based on a GDP growth of 9% and inflation between 4 to 5% in the 11<sup>th</sup> Plan period and tax revenue buoyancy with respect to GDP of 1.25 for the Centre and 1.15 for the states are summarized in the Annexure. The figure of 1.25 for tax buoyancy and the assumption on the growth of non-tax revenue for the Centre are tentative and more exact figures will be worked out when the 11<sup>th</sup> Plan is formulated. These calculations also do not take into account the possible impact of a new round of wage revision in government.

6.3.7 Containment of non-Plan expenditure is the other major leg of the resources strategy. Our aim should be to limit the growth of non-Plan expenditure to 5% per year in real terms. With a targeted 9% growth in GDP, this would help to reduce non-Plan expenditure from 23.0% of GDP in the 10<sup>th</sup> Plan to around 19.0% in the 11<sup>th</sup> Plan. Our ability to curtail the growth of non-Plan expenditure depends critically on our ability to control subsidies. Subsidies must be curtailed by effectively targeting them to those who deserve them and reducing the non-merit subsidies. With

the use of modern ICT we can and must improve targeting. It is also not possible for the Central and state governments to resist raising user charges and bear the burden of rising costs in a number of public services when most of those who use them can afford to bear a reasonable increase. With reforms in this area, we can achieve a significant containment of non-Plan expenditure which will help to finance public sector plan.

6.3.8 The Centre has passed the Fiscal Responsibility and Budget Management (FRBM) Act and similar Acts have been passed by most of the states. This forces the combined fiscal deficit of the Centre and the states to be limited to 6 percent of GDP from 2008-09 onwards. Implementation of these targets means that the fiscal deficit will have to be reduced by around 1 percentage point of GDP in the first two years of the Plan. Preliminary exercises suggest that the fiscal deficit reduction in the 11<sup>th</sup> Plan period to attain the FRBM target will be achieved consistent with an increase in GBS for the Plan by 2.3 percentage points of GDP for the Plan period as a whole. This would require an adjustment through lower non Plan expenditure or additional taxation by around 0.2 percentage points of GDP. However meeting the fiscal deficit targets will limit the scope for increasing Plan expenditure in the first two years unless the reduction in non-Plan expenditure can be significantly front loaded.

6.3.9 A special problem posed by the FRBM relates to the achievement of the revenue deficit targets specified in the central and also in various state legislations. These targets could prove difficult to achieve because the shift in Plan expenditure towards the social sectors has meant that a large proportion of the expenditure undertaken will be revenue expenditure as per the current budgetary definition. According to this, all grants by one tier

of government to another, or to the private sector, are treated as revenue expenditures, irrespective of whether such expenditures create assets or not. In other words, we could face a situation where the fiscal deficit targets are met but the revenue deficit targets are not because of the high revenue component of Plan expenditure. For example, the entire budgetary expenditures on Bharat Nirman, the National Employment Guarantee, the Backward Regions Grant Fund, the Jawaharlal Nehru National Urban Renewal Mission, and all new schemes in agriculture such as the National Horticulture Mission are classified as revenue expenditure since they are in effect grants to implementing agencies in the states, even though they finance asset creation on the ground. A similar problem arises with viability gap financing which is a grant clearly linked to investment under private public partnership but which appears as revenue expenditure in the budget.

6.3.10 These problems suggest that even if the fiscal deficit targets are met, it may not be easy for the Centre to cut the revenue deficit from 2.1% in 2006-07 to 0% by 2008-09 while also achieving large increases in Plan expenditure with a high revenue component. Indeed, the very vision of the approach to the 11<sup>th</sup> Plan presented in this Paper, which involves combining innovative financing of infrastructure with a massive decentralized thrust on education, health, and agriculture, may be defeated if the FRBM discipline is insisted upon with the current definition of revenue deficit. Although the states presently do not face this problem to the same extent as the Centre, restrictions on the size of the revenue deficit will limit the extent and pace of devolution to the PRIs and ULBs, which will provide a set-back to the strategic approach being advocated in this Paper.

6.3.11 The only way of meeting the revenue deficit targets of the FRBM as they stand at present

is to adjust the time-phasing of those programmes which are revenue-expenditure intensive. However, as this would include precisely the programmes focussing on social inclusiveness, it may not be easy to do unless non-Plan revenue expenditure (mainly subsidies) is drastically cut.

6.3.12 This raises the issue of whether the inclusion of revenue deficit target in the legislations needs to be reviewed. Internationally, revenue deficits as defined in India are not regarded as essential elements of fiscal responsibility legislation. Fiscal responsibility legislation typically focusses on the fiscal deficit and on the primary deficit (i.e. fiscal deficit excluding interest payments) as the relevant control variables. The case for focusing on the primary deficit is simply that interest costs on accumulated debt are outside the scope of government control and while they may vary with interest rate changes, this variation does not reflect the quality of fiscal control.

6.3.13 More generally, international practice also recognizes the need for counter cyclical fiscal policy and therefore focuses on the cyclically adjusted fiscal deficit. There is a case for redefining our approach to FRBM to conform to international practice in the longer term.

## 6.4 Relative Roles of the Centre and the States

6.4.1 One concern that is sometimes expressed is that economic policy is moving in a direction that involves a dismantling or erosion of the role of the state in the development process. This is clearly not the strategy proposed in this paper. On the contrary, the Paper explicitly recognizes that in particular circumstances, the objective of accelerating growth and making it more inclusive cannot be achieved without a very active, and in many respects expanded, role for the state in some

areas. However, this does not mean an expansion of the state in every area, nor should it be interpreted as underplaying the role of the private sector. In fact the role of the government needs to be restructured. We need to reduce direct intervention in, and commitments of scarce public resources to, areas where the private sector operating under competitive markets can deliver. Public resources that would otherwise be absorbed in these sectors are best directed to the social sectors and rural infrastructure where expansion is sorely needed and which cannot be left solely to market forces. These include some sectors where central government has the principal responsibility, for example the development of that part of the national highway network where traffic is more limited, development of the railways track network, regional airports, which may not attract private investment but are important for connectivity, etc. and others which are primarily the domain of the states, for example agriculture, irrigation, land and water management in the rainfed areas, rural drinking water, education and health, large parts of the road network, and urban infrastructure.

6.4.2 Many of the new focus areas for example health, education, drinking water, urban infrastructure, agriculture, are the responsibility of the states. Initial resource projections show that the states will have a substantial flow of resources during the 11<sup>th</sup> Plan and should be able to meet a large part of the need for expenditure in these areas. Nevertheless, they will need substantial assistance from the Centre. This raises the issue of the form which the central assistance should take. Should it be in the form of centrally sponsored schemes or normal central assistance? Whatever the modality chosen, there is the related issue of the appropriate percentage contribution which the states should make to expenditures under these schemes.

(a) *Centrally Sponsored Schemes Vs Central Assistance*

6.4.3 The role of the centrally sponsored schemes has been discussed on several occasions in the NDC and it is difficult to evolve a consensus on this issue. One view is that since these schemes relate to areas which are in the state sector, the schemes should be transferred to the states along with the funds. There are several operational problems with this approach. If the funds are transferred as part of normal central assistance, the amounts available to each state would have to be determined as per the Gadgil formula, and not on the basis of the specific needs of the states in individual sectors. Transfers based on state-specific needs can be achieved through the mechanism of additional central assistance, but if the funds so transferred are to be linked to sectoral programmes, this is not very different in practice from centrally sponsored schemes. From the point of view of the states, it has the disadvantage that whereas financing under the centrally sponsored schemes is on a 100% grant basis, this is not necessarily so in additional central assistance.

6.4.4 The trend that has evolved in recent years is that central support for programmes in some critical sectors such as the SSA, MDM, NREG has gone as 100% grant through centrally sponsored schemes while other support for example for the JNNURM or the BRGF or AIBP is in the form of additional central assistance, where the grant component has varied across schemes. The states' share of these schemes also varies. There is a case for rationalizing the states' share and fixing it at a reasonable level, keeping in mind the expected revenue buoyancy.

(b) *Flexibility in design*

6.4.5 A problem common to both forms of central assistance is that the central government designs the parameters within which the schemes

operate and this often deprives state governments of the flexibility that may be needed to take account of local conditions. Another problem is that releases of central assistance are linked to timely submission of utilization certificates, a discipline imposed to ensure that transfers lead to actual expenditures. There are complaints that the practice of requiring utilization certificates before releasing subsequent tranches of assistance can harm implementation especially when certain types of works can only be done in certain months of the year. It is necessary to review experience in these areas as part of the prelude to the 11<sup>th</sup> Plan to see if adjustments in existing procedures are possible which would improve the overall efficiency of the planning process.

## 6.5 Decentralization in Planning

6.5.1 We have seen that the sectoral shift in plan priorities discussed above involves increased focus on social sectors that are in the domain of the states. In many of these programmes devolution needs to go further down to the third tier of government, that is, the Panchayati Raj Institutions and the Urban Local Governments. Past experience shows that programmes in health and education, and many types of rural development initiatives including the employment guarantee programme, rural housing, rural drinking water, watershed management etc., are most effective when there is active involvement of the local community, both in designing the programme and in monitoring implementation.

6.5.2 This is explicitly reflected in some of the recent initiatives. The National Rural Employment guarantee, for example, is structured around a system where the projects are selected by the gram panchayat, progress is monitored at the panchayat level, including maintenance of a record of those who have registered for work, and funds are

disbursed only after the gram sabha certifies that the works are satisfactorily completed. Similar oversight can be provided over education and health programmes by village level committees constituted for the purpose.

6.5.3 As for urban areas, these issues have largely been ignored thus far. JNNURM has marked a significant step in addressing this gap. Here as well, the logic of emphasising bottom-up planning from the community and the municipality has being included in the design, with the requirement of a community participation law to be introduced in states' municipality statutes, and the establishment of Area Sabhas in urban areas, similar to Gram Sabhas in rural areas.

### (a) *Institutions for decentralised planning*

6.5.4 Looking ahead, it is necessary to move beyond defining a role for PRIs and urban local governments in individual programmes towards the constitutionally mandated procedure for developing district level plans working from the village/municipal level upwards. Under this procedure, states are constitutionally required to set up District Planning Committees (DPCs). Village level plans covering the functions devolved to PRIs are to be outlined at the gram panchayat level, while municipal plans covering the functions devolved to them have to be created through similar processes as in rural areas. These plans are to be consolidated by the DPC into a district level plan which takes account of the availability of funds from devolution of state plan resources and the earmarked funds flowing from various central schemes. One of the issues which need to be addressed is that a rational district level plan cannot simply be an aggregation of village based plans. There has to be an iterative process where information about district wise constraints and plan intentions at the district level is fed into and

reflected in lower level decisions. If this exercise is taken seriously and if states devolve at least 30% of Plan resources to the district level as has been recommended, then these resources together with the resources flowing from the central government amount to a very substantial sum especially in districts where the National Rural Guarantee is operative. If the process can be made effective, it would permit convergence of the various resource flows taking place and allow holistic planning. Similar mechanisms building up from lower levels need to be established in urban local governments as well, and it is expected that JNNURM will provide the catalyst for this to happen.

6.5.5 Among the reform conditions in JNNURM is a law for community participation through platforms called Area Sabhas and Ward Committees. The Area Sabha – meant for registered voters in one or more polling booths - is similar to that of the Gram Sabha. Area Sabhas will be linked to the Ward Committee through Area Sabha Representatives. There will therefore be a 3-tier structure for decentralised planning in urban areas, composed of the Municipality, the Ward Committee, and the Area Sabha. With this in place, activity mapping can be taken up to define what each of these 3 tiers will do, in a manner similar to rural decentralised planning.

6.5.6 The creation of such robust planning processes at the local and district/metropolitan level could also result in increased rural-urban linkages. With 3,682 urban local bodies in the country spread across the 593 districts in the country, such linkages could allow urban economic engines - with their access to markets, infrastructure and credit - to become the flywheel of rural growth, resulting in a more inclusive form of growth in the country. It is critical to note that effective functioning of DPCs cannot occur unless both rural and urban planning processes are well-defined.

6.5.7 The success of this approach depends critically upon the extent to which state governments are willing to implement it effectively. Progress in this respect has been mixed. The PRIs have been politically empowered, elections take place regularly in almost all states and the relevant functions have also been devolved, as intended, in most states. However, there has been much less action in devolving funds and functionaries, which are the other two legs on which the structure must rest. The extent of financial devolution varies. While some states have devolved a significant proportion of the state budget to the PRIs, many others have not yet done so. Many states have also not yet constituted the District Planning Committees which are to play a crucial role in decentralized planning.

6.5.8 There is also a great need for capacity building at the PRI level to ensure that plans evolved at the ground level are technically viable and effectively coordinated with plans at the higher level. With this purpose in view, the Backward Regions Grant Fund, which covers all districts where NREGA is operative, has already been entrusted to the Ministry of Panchayati Raj with an explicit capacity building component. Active involvement of NGOs assisting the PRIs has proved to be very effective in many cases, and efforts should be made in the 11<sup>th</sup> Plan to encourage such involvement. There is a case for earmarking a small portion (say 1%) of the budget provision for centrally sponsored schemes to be utilised by the Ministry of Panchayati Raj in capacity development programmes to support DPCs where these have been constituted.

(b) *Accountability*

6.5.9 Devolution of funds to local and intermediate panchayats must be accompanied by greater accountability. Transparency can be a very

effective tool to increase accountability and the Right to Information Act enacted in 2005 is a major step in this direction. It allows concerned stakeholders, including especially potential beneficiaries or those acting on their behalf, to obtain the information necessary to enforce accountability. Combined with use of the internet, which will gradually become a feasible proposition even in rural areas as facilities to access the internet are extended, it can empower beneficiaries in a manner which enables them to enforce their rights. For example, the decision to provide the list of villages electrified under the RGGVY, or the list of villages where drinking water has been provided, or the list of villages provided with all weather roads on a website monitoring the progress of Bharat Nirman, will increase the pressure on the system to deliver and will focus attention on non performance.

### *(c) Civil Society Organisations*

6.5.10 The CSOs work in the remotest of remote areas where even the Government has no reach. Their role in strengthening the capacity of PRIs has been favourably commented upon above. In addition to capacity building, many CSOs have a proven track record of creating awareness, mobilising social capital and implementing programmes at the grass roots level. They have shown impressive results in this area. Recognising this experience, the 11<sup>th</sup> Plan should aim at encouraging partnerships between CSOs and government, particularly between CSOs and PRIs which also extend to joint implementation. The choice of CSOs for this purpose must of course be left to the PRIs but the guidelines for government programmes, both central and state government programmes, should allow room for such participation. However, such decentralisation of responsibilities of implementation and agency

choice will put premium on other forms of responsibility at higher tiers of government, the most important of which is monitoring and evaluation.

6.5.11 The central government will shortly announce a policy for the voluntary sector which will recognise the enormous positive contribution which the sector can make in the development process. State governments should consider a similar initiative.

## **6.6 Monitoring Outcomes instead of Outlays**

6.6.1 Monitoring and evaluation of government programmes is crucial to learn lessons about the design and implementation of programmes which can help increase their effectiveness. Traditionally, plan monitoring has been done by tracking expenditure levels achieved in relation to outlays. This tracking is not as easy to achieve as is often supposed. In many programmes funds are transferred from the budget of the government to societies at lower levels which are tasked with implementation. The accounting system in these societies is far from satisfactory and often tracking of outlays depends on utilisation certificates received from such societies which are subsequently found to be based on insufficient discipline for expenditure control.

6.6.2 More generally, while expenditure is an important measure of the pace of implementation, it is not a measure of effectiveness. For that, it is necessary to go from outlays and expenditures to final outcomes. The central government has made a start with the budget of 2005-06 but there are internal difficulties. In the case of education for example, starting from expenditures as a first step, one can track intermediate outcomes such as the construction of school facilities, the filling of

vacancies and training of teachers, success in enrollment and reductions in drop out rates but the final outcome is really the quality of education provided. All the intermediate steps are relevant and also well worth monitoring, but the ultimate test of the strategy must be defined in terms of final outcomes. Often this can only be determined over a period of time.

6.6.3 At times the causal chain in determining outcomes may involve factors outside the programme itself. This is evident, for example, in the case of health where improvements in health status are often the result not of interventions in the area of curative health but in the provision of clean drinking water, sanitation and education on hygiene, all of which are targeted by other programmes.

6.6.4 These considerations point to the need for professional and systematic monitoring of programmes conducted by independent agencies outside those actually implementing these programmes. Such independent monitoring however requires that there be agreed benchmarks on the basis of which to evaluate subsequent performance. The Planning Commission is considering making it a firm condition that all proposals submitted to it must require sufficient benchmarking before approval. It also plans to strengthen its evaluation capacity by involving research institutes and civil society organisations which have the capability of undertaking rigorous evidence based evaluation. State governments would be well advised to take similar steps to improve the quality of Plan programmes.

**Government Finance Projection for Eleventh Five Year Plan (2007-12)- Central and State Government**  
(as per cent of GDP)

9.0% growth target Scenario with FRBM target: Centre's Tax Buoyancy=1.25

Rate of Inflation = 4.5 percent

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Plan Average Eleventh Plan
<b>CENTRE</b>							
1. GBS to Plan	4.38	4.36	4.51	4.97	5.53	6.09	5.09
of which							
(i) Plan revenue Expenditure	3.64	2.77	2.34	2.87	3.44	4.02	3.09
2. Total Non-Plan	9.91	9.57	9.16	8.86	8.48	8.12	8.84
of which							
(i) Interest payments	3.54	3.37	3.18	2.98	2.79	2.61	2.99
(ii) Defence	2.26	2.20	2.20	2.30	2.30	2.30	2.26
(iii) Pay & Allowances	1.01	0.98	0.95	0.92	0.89	0.85	0.92
(iv) non-plan grant to States	0.90	0.85	0.72	0.62	0.55	0.47	0.64
(v) Subsidies	1.17	1.10	1.03	0.96	0.89	0.82	0.96
(vi) Other Non-Plan	1.04	1.06	1.07	1.08	1.08	1.07	1.07
3. Total Expenditure	14.29	13.93	13.67	13.83	14.01	14.21	13.93
4. Gross tax revenue	11.20	11.51	11.83	12.18	12.55	12.94	12.20
Less : Share of States	2.91	3.13	3.22	3.32	3.42	3.53	3.32
5. Net Tax to Centre	8.29	8.38	8.62	8.86	9.13	9.41	8.88
6. Non-tax Revenue	1.93	1.88	1.82	1.76	1.70	1.64	1.76
7. Total Revenue Receipt	10.22	10.26	10.44	10.62	10.83	11.05	10.64
8. Gross Fiscal Deficit	3.77	3.40	3.00	3.00	3.00	3.00	3.08
9. Revenue Deficit	2.15	1.00	0.00	0.00	0.00	0.00	0.20
<b>STATES</b>							
10. States Plan	4.62	4.95	4.97	5.51	6.63	7.26	5.86
of which							
(i) Revenue Expenditure	2.36	2.64	2.65	3.19	3.80	4.43	3.34
11. Total Non-Plan	11.08	10.42	10.24	10.02	9.78	9.55	10.00
of which	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(i) Interest payments	2.37	2.26	2.17	2.08	2.00	1.95	2.09
(iii) Pay & Allowances	3.28	3.25	3.21	3.16	3.09	3.01	3.14
(iii) Pension	1.21	1.22	1.21	1.20	1.19	1.17	1.20
(vi) Other Non-Plan	3.72	3.69	3.64	3.58	3.51	3.42	3.57
12. Total Expenditure	15.71	15.37	15.20	15.53	16.41	16.81	15.86
13. Tax Revenue	9.11	9.43	9.63	9.85	10.07	10.32	9.86
of which							
(i) State Own Tax Revenue	6.20	6.30	6.41	6.53	6.65	6.78	6.54
(ii) Share from Centre	2.91	3.13	3.22	3.32	3.42	3.53	3.32
14. Non-tax Revenue	3.64	3.44	3.07	3.18	3.34	3.49	3.31
of which							
(i) plan grant from Centre	1.45	1.33	1.12	1.38	1.65	1.93	1.48
(ii) non plan grant from Centre	0.90	0.85	0.72	0.62	0.55	0.47	0.64
(ii) State own non-tax Revenue	1.30	1.26	1.23	1.18	1.14	1.09	1.18
15. Total Revenue Receipts	12.75	12.87	12.70	13.03	13.41	13.81	13.16
16. Gross Fiscal Deficit	2.35	2.50	2.50	2.50	3.00	3.00	2.70
17. Revenue Deficit	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Budgetary Support for Plan*</b>	<b>7.55</b>	<b>7.99</b>	<b>8.35</b>	<b>9.10</b>	<b>10.50</b>	<b>11.42</b>	<b>9.47</b>

**Assumptions for Projection: -**

*Assumptions for Central Finance*

marginal rate of interest (nominal)	7.0%
tax buoyancy	1.25
annual growth in non tax revenue	12.5%
annual growth in pay & allowance	10%
Growth in ONP	10%
States' share in Central Tax	29%

*Assumptions for State Finance*

marginal rate of interest (nominal)	8.5%
tax buoyancy	1.15
annual growth in own non tax revenue	10%
annual growth in pension	13%
annual growth in pay & allowance	12%
Rate of Growth in ONP	12%

\* This total rules out the component of grant to States, which is an expenditure in the Central budget and a receipt in the States budgets

## Chapter 7

# Conclusions

7.1 Prepared after widespread consultations, the Approach Paper is the first step in defining the objectives and targets of the 11th Plan and identifying the associated challenges and implications for policy. A number of important conclusions emerge which need to be considered by both the Central and the State Governments as we move to formulate the detailed strategy for the 11th Plan.

### 7.2 Objectives and Targets

7.2.1 A major advantage in formulating the 11th Plan is that India's economic fundamentals have improved enormously and we now have the capacity to make a decisive impact on the quality of life of the mass of our people, especially on the poor and the marginalized. This objective cannot be achieved, however, if we simply follow a business as usual approach. Let alone acceleration, even if the rate of growth in the last few years is to be sustained, it needs support. Besides, growth has not been sufficiently inclusive thus far and this is a significant shortcoming which needs to be corrected.

7.2.2 Traditionally, the rate of growth of GDP has been at the centre of planning and for good reasons. In a low income country, it is only through rapid economic growth that the production base of the economy can be expanded to sustain a higher standard of living for the people. A faster growing economy also makes it easier to generate the resources needed to finance many of the social development programmes. However both arguments also highlight the fact that growth is not an end in itself - it is a means to an end which

must be defined in terms of multi-dimensional economic and social objectives. The 11th Plan must, therefore, not only set targets for the rate of growth of GDP, but also set monitorable targets for other dimensions of performance reflecting the inclusiveness of this growth.

The monitorable targets that emerge from the Approach Paper are given in Box No.10. The 11th Plan should be formulated in a manner whereby these national targets are further disaggregated into appropriate targets for individual states. Policies and programmes must then be identified both at the central and state levels to ensure that these targets are achieved by the end of the 11<sup>th</sup> Plan period.

7.2.3 The growth target for the 11<sup>th</sup> Plan must build on the average growth of 8% in the last 4 years of the 10<sup>th</sup> Plan. A feasible objective is to accelerate from 8% growth at the end of the 10<sup>th</sup> Plan to 10% by the end of the 11<sup>th</sup> Plan, yielding an average GDP growth rate of about 9% in the 11th Plan. Achievement of this target and continued growth rate of 10% in the 12<sup>th</sup> Plan would lead to a doubling of per capita income over the next two Plan periods. The structure of growth should also be such as to promote a wide spread of benefits. Doubling agricultural GDP growth to around 4%, is particularly important in this context. This must be combined with policies to promote rapid growth in non-agricultural employment so as to create 70 million job opportunities in the 11<sup>th</sup> Plan. If these objectives are achieved, the percentage of people in poverty could be reduced by 10 percentage points by the end of the Plan period.

## Box No. 10

### *Monitorable Socio-Economic Targets of the 11<sup>th</sup> Plan*

#### **Income & Poverty**

- Accelerate growth rate of GDP from 8% to 10% and then maintain at 10% in the 12<sup>th</sup> Plan in order to double per capita income by 2016-17
- Increase agricultural GDP growth rate to 4% per year to ensure a broader spread of benefits
- Create 70 million new work opportunities.
- Reduce educated unemployment to below 5%.
- Raise real wage rate of unskilled workers by 20 percent.
- Reduce the headcount ratio of consumption poverty by 10 percentage points.

#### **Education**

- Reduce dropout rates of children from elementary school from 52.2% in 2003-04 to 20% by 2011-12.
- Develop minimum standards of educational attainment in elementary school, and by regular testing monitor effectiveness of education to ensure quality.
- Increase literacy rate for persons of age 7 years or more to 85%.
- Lower gender gap in literacy to 10 percentage points.
- Increase the percentage of each cohort going to higher education from the present 10% to 15% by the end of the 11<sup>th</sup> Plan.

#### **Health**

- Reduce infant mortality rate (IMR) to 28 and maternal mortality ratio (MMR) to 1 per 1000 live births.
- Reduce Total Fertility Rate to 2.1.
- Provide clean drinking water for all by 2009 and ensure that there are no slip-backs by the end of the 11<sup>th</sup> Plan.
- Reduce malnutrition among children of age group 0-3 to half its present level.
- Reduce anemia among women and girls by 50% by the end of the 11<sup>th</sup> Plan.

#### **Women and Children**

- Raise the sex ratio for age group 0-6 to 935 by 2011-12 and to 950 by 2016-17.
- Ensure that at least 33 percent of the direct and indirect beneficiaries of all government schemes are women and girl children.
- Ensure that all children enjoy a safe childhood, without any compulsion to work.

#### **Infrastructure**

- Ensure electricity connection to all villages and BPL households by 2009 and round-the-clock power by the end of the Plan.
- Ensure all-weather road connection to all habitation with population 1000 and above (500 in hilly and tribal areas) by 2009, and ensure coverage of all significant habitation by 2015.
- Connect every village by telephone by November 2007 and provide broadband connectivity to all villages by 2012.
- Provide homestead sites to all by 2012 and step up the pace of house construction for rural poor to cover all the poor by 2016-17.

#### **Environment**

- Increase forest and tree cover by 5 percentage points.
- Attain WHO standards of air quality in all major cities by 2011-12.
- Treat all urban waste water by 2011-12 to clean river waters.
- Increase energy efficiency by 20 percentage points by 2016-17.

7.2.4 A basic objective of the 11<sup>th</sup> Plan must be to extend access to essential public services such as health, education, clean drinking water, sanitation, etc., to those who are deprived of them. Our failure on this count is a major reason for wide-spread dissatisfaction and the feeling of exclusion from the benefits of growth. Recognizing that the provision of good quality education is the most important equalizer in society, the Sarva Shiksha Abhiyan has tried to universalize elementary education. The focus must now be on reducing the drop out rate from 52% in 2003-04 to 20% and also achieving a significant improvement in the quality of education. The literacy rate must be increased to 85% and the gender gap in literacy narrowed to 10 percentage points. Compulsions that force a child to work must be removed so that every child can go to school.

7.2.5 It is also time to bridge the large gaps in health status indicators which currently place India below some of the world's poorest countries. The 11th Plan must ensure substantial improvement in health indicators such as maternal mortality, infant mortality, total fertility rate, and malnutrition particularly among children and set monitorable targets for these areas. Success in this area involves convergence of multiple efforts in many sectors other than health and family welfare. Supply of safe drinking water and access to sanitation to all must be a top priority. In addition, we must address the lack of education, especially in women, which has severely limited our ability to improve nutrition and control neo-natal diseases.

7.2.6 The 11th Plan must also pay special attention to gender equity and help create an

enabling environment for the social, economic and political empowerment of women. The shameful practice of female foeticide, which is reflected in low and falling sex ratio for age group 0-6 must be stopped. The Plan must focus on ways of improving women's socioeconomic status by mainstreaming gender equity concerns in all sectoral policies and programmes. Special efforts must be made to ensure that the benefits of government schemes accrue in appropriate proportions to women and girls.

7.2.7 Protection of the environment is extremely important for our well-being, but it is even more so for future generations who will bear the brunt of environmental degradation. The 11th Plan must aim at significant improvements in this area. Forest cover must be increased by 5 percentage points. Determined steps must be taken at the level of state government to improve air quality in all major cities to meet WHO standards. As our rivers and water bodies are seriously threatened by unrestricted discharge of effluents and sewage, urban waste water must be fully treated. This essential requirement to clean up our rivers should receive priority attention from state governments especially in areas of large urban and industrial concentration. Moreover, appropriate policies must be designed and implemented to increase energy efficiency by 20 percentage points and thus limit the harmful effect of carbon combustion on the environment.

7.2.8 In addition to the monitorable targets listed in Box 10, many new social interventions are needed to help achieve the objective of inclusiveness. Some important interventions proposed in this Approach Paper are listed in Box No.11.

### Box No. 11

#### *Important New Social Interventions*

- Provide one year of pre-school education for all children to give those from underprivileged backgrounds a head start.
- Expand secondary schools with provision of hostels and vocational education facilities to assure quality education to all children up to Class X.
- Expand facilities for higher and technical education of quality with emphasis on emerging scientific and technological fields.
- Provide freedom and resources to select institutions so that they attain global standards by 2011-12.
- Provide emergency obstetrics care facilities within 2 hours travel from every habitat.
- Ensure adequate representation of women in elected bodies, state legislatures, and the Parliament.
- Provide shelter and protection to single women including widows, handicapped, deserted, and separated women.

### 7.3 Policies for Faster and More Inclusive Growth

7.3.1 The Approach Paper has identified areas where new policy initiatives are needed to achieve the 9% growth target and its desired sectoral composition. These will be spelt out in greater detail in the Plan. Some critical issues, however, can be identified at this stage.

### 7.4 Investment Requirements

7.4.1 One set of issues concerns the aggregate resource requirement. An average growth rate of 9% over the 11<sup>th</sup> Plan period will require an increase in domestic investment rates from 27.8% in the 10<sup>th</sup> Plan to 35.1% in the 11<sup>th</sup> Plan. Half of this increase is expected to come from private investment in agricultural farms, small and medium enterprises, and in the corporate sector. The rest will come from public investment, with a focus on critical infrastructure sectors.

7.4.2 Private investment has been buoyant in the last two years and this buoyancy can be expected to continue as long as GDP growth prospects

remain favourable. Steps must nevertheless be taken to continuously improve the investment climate. The central government has already done much in this area to encourage private investment, both domestic and foreign, by creating a competitive environment which encourages entrepreneurship. These policies have yielded positive results and must continue to be strengthened.

7.4.3 It is particularly important to take steps to encourage entrepreneurship and expansion among small and medium enterprises. State governments have a major role to play in this context by improving the investment climate. Many state governments are taking steps in this direction but much more can be done, such as streamlining of multiple taxes and reduction of the rigours of the Inspector Raj. As far as the Centre is concerned, it must ensure that there is financial inclusion for MSMEs and that the financial system functions in a way which supports the investment needs of MSMEs. Innovative forms of financing to help start or expand new businesses such as microfinance, venture capital funds, private equity funds etc. must be encouraged.

## 7.5 Public Investment and the Plan size

7.5.1 The Approach paper draws attention to the need for increases in public investment in several areas. These would have to come from a combination of investment undertaken through the Plan budgets of the central and the state governments and increased investment by the public sector, financed by internal and extra budgetary resources. The Plan size will need to make provision for the addition to the public investment financed through budgets of the central and state governments and also the planned expansion in public services, much of which is not investment but revenue expenditure.

7.5.2 Given the constraints on the fiscal deficit imposed by the FRBM legislation, achievement of the desired Plan size will depend critically upon achieving an increase in tax revenues as a proportion of GDP and a fall in non-Plan expenditure as a percentage of GDP. Determined action on both fronts should make it possible to achieve a level of GBS for the Plan (Centre plus States combined) which, expressed as a ratio of GDP, is 2.5 percentage points of GDP higher than in the 10<sup>th</sup> Plan. The increase in tax revenues depends critically upon achievement of the growth targets and good revenue buoyancy. Fortunately the experience in recent years holds great promise for revenue buoyancy both for the central government and the state governments. Effective control on non-Plan expenditure in practice means control of subsidies, especially untargeted subsidies that are not aimed at the poor and vulnerable sections. It also means levy of rational user charges in many areas to limit the demands for Budgetary Support.

## 7.6.Policies Towards Agriculture

7.6.1 The objective of doubling the growth rate of agricultural GDP to 4 percent per annum is

critical to ensure the inclusiveness of growth. This however poses major policy challenges in the immediate future. It is necessary to adopt region-specific strategies focusing on the scope for increasing yields with known technologies and the scope for viable diversification, keeping in mind marketing constraints. It is necessary to improve the functioning of the agricultural development administration, especially the extension system which is the key to bridging the knowledge gap. Particular attention must be given to water management problems in the dryland rainfed areas. Implementation of a region-specific strategy depends critically upon state level agencies. The central government can at best help by providing financial assistance and policy guidance.

7.6.2 These issues have been comprehensively examined by the National Farmers Commission which has submitted its reports containing several recommendations. The NDC Committee on Agriculture is expected to submit its report in December 2006. The 11<sup>th</sup> Plan will draw on these reports to shape a credible strategy for agriculture clearly defining the relative roles of the Centre and the states.

## 7.7 Promoting Access to Health and Education

7.7.1 Achieving the 11<sup>th</sup> Plan targets for health and education requires a greatly expanded role for the state in these areas. This is because access to essential public services such as health, education, clean drinking water, and sanitation is not an automatic outcome of rising incomes. It calls for deliberate public intervention to ensure delivery of these services. It is in this context that the National Rural Health Mission has been launched in order to improve the access and availability of quality health care, sanitation, and nutrition. Achievement of these targets also requires a conscious effort in

capacity mobilization of the state at various levels to provide such services through public action. This can be supplemented wherever possible by private effort but there can be no doubt that even after allowing for the scope for expanded supply by the private sector, the bulk of the responsibility will fall on the public sector. For this reason, plan expenditure in education and health will have to increase substantially. However, mere increases in expenditure will not suffice unless accountability is also improved. For locally delivered services, such as elementary education and health, more active supervision by the PRIs can make a difference. For secondary and higher education, as well as for tertiary health care, other methods of monitoring performance and enforcing accountability are necessary. Both the Centre and the States have to cooperate in finding ways to improve monitoring and enforce accountability. Measures to bring about effective devolution to PRIs will help improve local involvement and accountability. Civil Society organizations can play a major role in assisting PRIs in this area.

## 7.8 Developing Infrastructure

7.8.1 The biggest constraint on rapid growth in the years ahead will be the lack of physical infrastructure and its poorer quality compared with our competitors in other developing countries. The deficiencies in our roads, ports, railways, airports, electric power system and also various types of urban infrastructure must be overcome during the 11<sup>th</sup> Plan period if the industrial sector is to achieve the targeted growth of 10%. Both the Centre and the states have responsibility in this area as different types of infrastructure fall under different jurisdictions.

7.8.2 A start has been made in the 10<sup>th</sup> Plan to address these gaps in infrastructure, but much more needs to be done. Public investment in this area

must be increased. However, the total resources required to correct the infrastructure deficit exceed the capacity of the public sector. The strategy for infrastructure development must therefore encourage public private partnerships wherever possible. However the PPP strategy must be based on principles which ensure that PPPs are seen to be in the public interest in the sense of achieving additional supply at reasonable cost. PPPs must serve to put private resources into public projects and not the other way around.

## 7.9 Rural Infrastructure

7.9.1 The development of rural infrastructure is crucial for ensuring inclusiveness and for giving a new deal to rural areas. The Bharat Nirman Programme has made a good start in the 10<sup>th</sup> Plan and will continue into the 11<sup>th</sup> Plan. The programmes must be adequately funded and vigorously implemented so that every village has road connectivity, drinking water, rural housing and rural telecom connectivity. Homestead sites must be provided to all by 2012. The implementation of the National Rural Employment Guarantee Programme and the Backward Regions Grant Fund provides two additional sources of funding infrastructure development in the most backward districts of our country.

## 7.10 Special Focus on Weaker Sections

7.10.1 Despite special programmes for the development of the weaker sections there are many groups in our society that do not benefit adequately from development. The 11<sup>th</sup> Plan must pay special attention to the needs and requirements of the SCs, STs and minorities and other excluded groups to bring them at par with

the rest of society. The central and the state governments' implementation of the special plan for SCs and STs leaves much to be desired. These two strategic policy initiatives to remove socioeconomic disparities should receive special attention in the 11<sup>th</sup> Plan. The 15 point programme for the welfare of minorities circulated to all state governments must be implemented with serious concerted effort.

The strategy for faster and more inclusive growth outlined in this Approach Paper presents formidable challenges and requires determined action by both the Centre and the states. Achieving these targets will not be an easy task, but it is definitely feasible. The knowledge that the economy is in many ways better placed today than it has ever been should help us achieve such ambitious targets.

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