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# India

## Sustaining Reform, Reducing Poverty

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Poverty Reduction and Economic Management Sector Unit  
South Asia Region



A World Bank Development Policy Review

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## CURRENCY AND EQUIVALENT

Currency Unit = Indian Rupee

**US\$ 1 – INR 46.28**

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## ACRONYMS AND ABBREVIATIONS

<b>ACR</b>	Annual Confidential Report	<b>GATS</b>	General Agreement on Trade in Services
<b>AD</b>	Anti Dumping	<b>GCF</b>	Gross Capital Formation
<b>AIDS</b>	Acquired Immune Deficiency Syndrome	<b>GDP</b>	Gross Domestic Product
<b>AP</b>	Andhra Pradesh	<b>GoI</b>	Government of India
<b>APDRP</b>	Accelerated Power Development and Reform Program	<b>GSDP</b>	Gross State Domestic Product
<b>BE</b>	Budget Estimate	<b>HIV</b>	Human Immunodeficiency Virus
<b>BIFR</b>	Bureau of Industrial and Financial Restructuring	<b>HUDCO</b>	Housing and Urban Development Corporation
<b>BMC</b>	Greater Mumbai Municipal Corporation	<b>ICAC</b>	Hong Kong's Independent Commission Against Corruption
<b>BOP</b>	Balance of Payments	<b>ICAR</b>	Indian Council of Agricultural Research
<b>BPL</b>	Below Poverty Line	<b>ICDS</b>	Integrated Child Development Service
<b>CAD</b>	Current Account Deficit	<b>IDB</b>	India Development Bond
<b>CAG</b>	Comptroller and Auditor General	<b>IDBI</b>	Industrial Development Bank of India
<b>CDS</b>	Current Daily Status	<b>IDFC</b>	Infrastructure Finance Development Company
<b>CDW</b>	Current Weekly Status	<b>IFCI</b>	Industrial Financial Corporation of India
<b>CENVAT</b>	Central Value Added Tax	<b>IMF</b>	International Monetary Fund
<b>CII</b>	Confederation of Indian Industries	<b>IMD</b>	India Millennium Deposit
<b>CIP</b>	Central Issue Price	<b>IR</b>	Indian Railways
<b>CMIE</b>	Center for Monitoring Indian Economy	<b>IT</b>	Information Technology
<b>CPE</b>	Central Public Enterprises	<b>Kwh</b>	Kilowatt/hour
<b>CSO</b>	Central Statistical Organization	<b>LGED</b>	Local Government Engineering Department
<b>CSS</b>	Centrally Sponsored Schemes	<b>LIC</b>	Life Insurance Company
<b>DAP</b>	Di-Ammonia phosphate	<b>MDGs</b>	Millennium Development Goals
<b>DCCB</b>	District Central Cooperative Bank	<b>MMR</b>	Maternal Mortality Rate
<b>DM</b>	District Manager	<b>MOP</b>	Muriate of Potash
<b>EAIF</b>	Emergency Africa Infrastructure Fund	<b>MoF</b>	Ministry of Finance
<b>EAS</b>	Employment Assurance Scheme	<b>MOIC</b>	Ministry of Industry and Commerce
<b>EGS</b>	Employment Guarantee Scheme	<b>MoRD</b>	Ministry of Rural Development
<b>EIF</b>	European Investment Fund	<b>MOU</b>	Memorandum of Understanding
<b>EPF</b>	Employee Provident Fund	<b>m.p.</b>	Market Price
<b>EPS</b>	Employee Pension Scheme	<b>MP</b>	Madhya Pradesh
<b>ERC</b>	Expenditure Reform Commission	<b>MRP</b>	Maximum Retail Price
<b>EUS</b>	Employment Unemployment Survey	<b>MRTTP</b>	Monopolies and Restrictive Trade Practices Act
<b>FDI</b>	Foreign Direct Investment	<b>MSP</b>	Minimum Support Price
<b>FC</b>	Finance Commission	<b>MTRF</b>	Medium Term Reforms Facility
<b>f.c.</b>	Factor Cost	<b>MW</b>	Mega Watt
<b>FCI</b>	Food Corporation of India	<b>NACO</b>	National Aids Control Organization
<b>FICCI</b>	Federation of Indian Chambers of Commerce and Industry	<b>NAFTA</b>	North American Free Trade Agreement
<b>FRBM</b>	Fiscal Responsibility and Budget Management Act	<b>NBFC</b>	Non-bank financial corporation

<b>NCDC</b>	National Cooperative Development Council	<b>RBI</b>	Reserve Bank of India
<b>NDDB</b>	National Dairy Development Board	<b>RCC</b>	Rural Credit Cooperative
<b>NER</b>	Net enrollment rate	<b>REC</b>	Regional Environment Center
<b>NFHS</b>	National Family Health Survey	<b>SBA</b>	Small Borrower Accounts
<b>NGO</b>	Non-Governmental Organizations	<b>SCB</b>	State Cooperative Bank
<b>NHDP</b>	National Highways Development Project	<b>SCARDB</b>	State Cooperative Agricultural and Rural Development Bank
<b>NIPFP</b>	National Institute of Public Finance and Policy	<b>SEB</b>	State Electricity Board
<b>NPA</b>	Non-performing asset	<b>SHG</b>	Self Help Group
<b>NPL</b>	Non-performing loan	<b>SICA</b>	Sick Industries Companies Act
<b>NRI</b>	Non Resident Indian	<b>SME</b>	Small and Medium Enterprise
<b>NSS</b>	National Sample Survey	<b>SPV</b>	Special Purpose Vehicle
<b>OECD</b>	Organization for Economic Cooperation and Development	<b>SPS</b>	Sanitary and Phytosanitary
<b>O&amp;M</b>	Operations & Maintenance	<b>SSA</b>	Sarva Siksha Abhiyan (Education For All)
<b>p.a.</b>	Per Annum	<b>SSI</b>	Small Scale Industry
<b>PC</b>	Planning Commission	<b>TERI</b>	Tata Energy Research Institute
<b>PF</b>	Provident Fund	<b>TFP</b>	Total Factor Productivity
<b>PAC</b>	Public Account Committee	<b>TPDS</b>	Targeted Public Distribution System
<b>PAC</b>	Public Affairs Committee	<b>T&amp;D</b>	Transmission and Distribution
<b>PDS</b>	Public Distribution System	<b>T&amp;V</b>	Training and visit
<b>PEGF</b>	Pre-Export Guarantee Facility	<b>UP</b>	Uttar Pradesh
<b>PLR</b>	Prime Lending Rate	<b>UPS</b>	Usual Principal Status
<b>PMGY</b>	Prime Minister's Gramadaya Yojna (Rural Electrification Program)	<b>UPSS</b>	Usual Principal and Subsidiary Status
<b>PPP</b>	Public Private Partnership	<b>USO</b>	Universal Service Obligation
<b>PRG</b>	Partial Risk Guarantee	<b>UTI</b>	Unit Trust of India
<b>PROST</b>	Pension Reform Options Simulation Toolkit	<b>VAT</b>	Value Added Tax
<b>PSEDF</b>	Private Sector Energy Development Fund	<b>WPI</b>	Wholesale Price Index
<b>PWD</b>	Public Works Department	<b>WTO</b>	World Trade Organization
<b>QR</b>	Quantitative Restriction		

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# INDIA: SUSTAINING REFORM, REDUCING POVERTY

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>i</b>
<b>PART I: ASSESSMENT OF DEVELOPMENT OUTCOMES .....</b>	<b>1</b>
Overview .....	1
Poverty Outcomes and Economic Performance .....	2
Social Outcomes.....	7
Economic and Social Outcomes: A Regional Perspective .....	8
Accelerating Development in India: Goals and Policy Agenda.....	9
<b>PART II: POLICY AGENDA: MANAGING PUBLIC RESOURCES .....</b>	<b>11</b>
<b>II. 1: FISCAL POLICY .....</b>	<b>12</b>
Introduction .....	12
Government Debt Dynamics and External Vulnerability .....	15
Government Debt Dynamics .....	16
External Vulnerability .....	17
Costs of the Fiscal Stance.....	18
Fiscal Reform Priorities .....	21
Tax Reform.....	21
Subsidy Reduction .....	21
Financial Policy .....	23
Fiscal Management.....	25
Government Debt Projections: Why Fiscal Adjustment? .....	26
<b>II. 2: DELIVERY OF PUBLIC SERVICES .....</b>	<b>31</b>
Introduction .....	31
Civil Service Reform.....	31
Size and Structure of the Civil Service.....	31
Costs of the Civil Service .....	32
The Return on Civil Service Expenditures .....	34
Improving Public Service Delivery .....	35
Health, Education and Social Safety Nets.....	37
Health Strategy and Policy Priorities.....	40
Education Strategy and Policy Priorities .....	43
Providing Effective Social Safety Nets .....	45
Towards the Future .....	46

<b>PART III: POLICY AGENDA: IMPROVING THE INVESTMENT CLIMATE .....</b>	<b>47</b>
<b>III. 1: INDUSTRY AND SERVICES .....</b>	<b>48</b>
Performance: Achievements and Challenges .....	48
Investment Climate: Key Constraints and Policy Priorities .....	50
Product Market Distortions.....	50
Factor Market Distortions.....	56
Infrastructure Bottlenecks.....	59
Estimated Impact of a Better Investment Climate on Overall Economic Performance .....	63
<b>III. 2: AGRICULTURE AND RURAL DEVELOPMENT .....</b>	<b>64</b>
Agriculture and the Rural Economy.....	64
Foodgrain (Rice and Wheat) Policy .....	67
Input Policies.....	68
Fertilizer Policy .....	68
Water Resources and Irrigation .....	69
Power Supply to Agriculture .....	70
Product and Factor Markets .....	72
Trade Policies and Regulations .....	72
Access to Land.....	73
Access to Rural Credit.....	75
Enhancing the Productivity of Public Investments .....	76
Agricultural Research and Extension .....	76
Rural Roads .....	77
Rural Electrification.....	78
<b>PART IV: DEVELOPMENT PROSPECTS AND RISKS .....</b>	<b>79</b>
Outlook.....	79
Risks.....	82
Conclusion.....	83
<b>REFERENCES .....</b>	<b>85</b>
<b>STATISTICAL ANNEX .....</b>	<b>96</b>

## Tables

Table 1:	Progress on Social Indicators, 1980-2000 .....	i
Table 2:	Macroeconomic Trends over the Past Two Decades .....	ii
Table 3:	Ratio of Average Wages in the Public and Private Sector .....	vii
Table 4:	Absence Rates from Primary Facilities, 2003 .....	ix
Table 5:	Custom Duty Rates in India and Other Developing Countries .....	xi
Table 6:	Macroeconomic Projections – Baseline and Reform Scenarios.....	xvii
Table 1.1:	Macroeconomic Trends over the Past Two Decades .....	3
Table 1.2:	Sectoral Shares of GDP, 1980/81 and 2001/02.....	4
Table 1.3:	Unemployment Rates, India and Comparator Countries.....	6
Table 1.4:	All India Social Indicators, 1980-2000 .....	7
Table 1.5:	Concentration of Poverty in India .....	8
Table 2.1:	General Government Fiscal Trends.....	12
Table 2.2:	Trends in Central Government Finances.....	13
Table 2.3:	Trends in State Government Finances .....	14
Table 2.4:	Key Macroeconomic Aggregates .....	16
Table 2.5:	Sustainable and Desirable Deficits in the Tenth Plan Context.....	19
Table 2.6:	Government Subsidies .....	22
Table 2.7:	Fiscal Projections .....	29
Table 2.8:	Ratio of Civil Service Salary and Dearness Allowance to GDP for GoI and Selected States.....	32
Table 2.9:	Ratio of Average Wages in the Public and Private Sector for Selected Categories of Employment .....	32
Table 2.10:	Absence Rates from Primary Facilities in Selected States, 2003 .....	39
Table 2.11:	Health Spending in India and Comparator Countries .....	41
Table 2.12:	Education Spending in India and Comparator Countries.....	43
Table 3.1:	GDP, Industry and Services Growth Rates .....	48
Table 3.2:	Un-weighted Average Customs Duty Rates in India and other Developing Countries .....	53
Table 3.3:	Indirect Tax Rates in Selected Developing Countries.....	56
Table 3.4:	GDP, Agriculture Sector Growth Rates .....	65
Table 3.5:	Recent Fertilizer Policy Reforms .....	69
Table 3.6:	GoI Major Domestic Policy and Trade Regulations, January 2003 .....	72
Table 4.1:	Macroeconomic Projections – Baseline and Reform Scenarios.....	80
Table 4.2:	Elasticity of Employment to GDP, 1993/94 – 1999/00, Selected Sectors .....	81

## Figures

Figure 1:	General Govt. Deficit and Debt Stock 1985/86 – 2002/03 .....	iii
Figure 2:	Government Debt/GDP Ratio Projected to 2006/07 .....	vi
Figure 1.1:	Per Capita Income Trends – India and Comparator Countries .....	1
Figure 1.2:	Poverty and Per Capita Income Trends, 1983-1999/00 .....	2
Figure 1.3:	Unemployment Rates (Current Weekly Status), 1987/88-1999/00.....	6
Figure 1.4:	State-Wise Per Capita Income, 3 year average (1998/99 – 2000/01).....	9
Figure 2.1:	General Government Deficit and Debt Stock 1985/86 – 2002/03 .....	12
Figure 2.2:	Primary Deficits and the Implied Difference between the Real Rate of Interest and Growth.....	17
Figure 2.3:	Gross Capital Formation in Private and Corporate Sector and the General Government Deficit including Oil Pool .....	19
Figure 2.4:	Real Interest Rates (1990/91-2001/02).....	20
Figure 2.5:	Government Debt/GDP Ratio Projected to 2006/07 .....	28

Figure 2.6: Projected General Government Fiscal Deficits .....	28
Figure 2.7: Public Expenditures on Education (center and states, in billion rupees at 1993 prices) .....	38
Figure 2.8: Public Expenditures on Health (center and states, in billion rupees at 1993 prices).....	38
Figure 2.9: Prevalence of Diseases by Income Group: All India, 1992 .....	42
Figure 3.1: Private Investment in Industry and Services, (annual average growth rate) .....	48
Figure 3.2: State-Level Industrial Growth, by State, 1990-99 .....	50
Figure 3.3: Bankruptcies as a Share of Total Firms.....	58
Figure 3.4: Cost of Power .....	60
Figure 3.5: Energy Costs as Share of Total Sales.....	60
Figure 3.6: Shipping and Cost Disadvantages in Textiles .....	62
Figure 3.7: Gross Capital Formation in Agriculture and Allied Sectors, Rs.billion, 1993/94.....	66
Figure 3.8: Electric Pumps Only: Irrigation Cost as a Percent of Gross Farm Income in Haryana .....	71
Figure 3.9: Percentage Distribution of Number of Owned Holdings and Area Owned by Farm Size .....	73

### Boxes

Box 1: Who are India's Poor?.....	ii
Box 2: Urgent Need for Reforms in Power Distribution .....	v
Box 3: Summary of Priority Reforms .....	xix
Box 1.1: Who are India's Poor? .....	2
Box 1.2: India's Success in Information Technology(IT) .....	5
Box 1.3: Targets for the Tenth Plan and Beyond.....	10
Box 2.1: Assumptions Underlying Debt/Deficit Projections.....	27
Box 2.2: Karnataka's Lok Ayukta .....	37
Box 2.3: Building a Healthy Environment.....	42
Box 3.1: Key Structural Reforms since 1991 .....	52
Box 3.2: Damaging the Land .....	66
Box 4.1: Summary of Priority Reforms .....	84

### Statistical Annex

Table A1: Gross Domestic Expenditure and Product (shares based on current price data)
Table A2: Gross Domestic Expenditure and Product (Rs. billion current prices)
Table A3: Annual Growth Rates of National Income and Product at Constant Prices (annual growth rates)
Table A4: Gross Domestic Product by Expenditure, National Income and Savings (Rs. billion at 1993-94 prices)
Table A5: Exchange Rates and Prices
Table A6: Central Government Finances Summary
Table A7: Budgetary Classification of Central Government Finances
Table A8: Budgetary Classification of State Government Finances
Table A9: Budgetary Classification of General Government Finances
Table A10: Transfers Between Center and States
Table A11: Outstanding Debt (Center and States)
Table A12: Banking Survey and Interest Rates
Table A13: Balance of Payments
Table A14: Exports and Imports
Table A15: External Debt and Debt Service
Table A16: Financial Sector Indicators

Table A17: Investment Climate

Table A18: Vulnerability Indicators

Table A19: Millennium Development Goals Indicators

Table A20: Development Indicators - India and Comparator Countries

Table A21: Unemployment Rates: Alternative Measures



## INDIA: SUSTAINING REFORM, REDUCING POVERTY

### EXECUTIVE SUMMARY

#### Assessment of Development Outcomes

1. India has continued to make good progress in increasing incomes and improving living standards over the past decade. After the setback associated with the 1991 balance of payments crisis, economic growth picked up, income poverty has continued to decline, and many social indicators, in particular literacy, have continued to improve (Table 1). These developments were supported by the wide-ranging reforms launched in 1991 to open and deregulate the economy. Even though the pace of reforms has slowed since the mid-1990s, cumulative changes so far have been substantial. More sectors have been opened to private activity, trade policy and the exchange rate regime have been further liberalized, and capital markets have been reformed, leading to an improved investment climate.

Table 1: Progress on Social Indicators, 1980-2000

	1980s	1990s	2000
<b>Poverty</b>			
Poverty incidence (%)	44.5	36.0	26.1
Adjusted poverty incidence (%)			28.6
<b>Education</b>			
Overall literacy rate: 7+ years (%)	44	52	65
Female literacy rate as a percent of male literacy rate (%)	53	61	71
Net enrollment rate (NER): grades 1-5 (%)	47	51	77
Female NER as a percent of male NER: grades 1-5 (%)	70	80	81
<b>Health</b>			
Life expectancy at birth (years)	56	60	61
Infant mortality rate 0-4 years (per 1000 live births)	115	79	68
Maternal mortality rate (per 100,000)	n.a.	424	540
Prevalence of HIV (million people)	n.a.	3.5	4.0
<b>Sanitation</b>			
Access to improved water resources (%)	n.a.	68	78
Number of households with toilet facility (%)	n.a.	30	36

2. Development progress has been steady, but uneven. It has been uneven across indicators of living standards, with notable progress in some areas, but little or no progress in others. Maternal and under-five mortality, for instance, has hardly improved, while the new threat of HIV/AIDS is spreading quickly. And unemployment, although still low by international standards, has increased. Progress has also been uneven across regions. There is evidence of divergence in per capita incomes across states, with richer states increasing incomes faster than poorer ones. As a result, poverty has become increasingly concentrated in the country's slower growing states (Box 1).



### Box 1: Who are India's Poor?

Poverty is pervasive in India. It is present in the country's rapidly growing cities and vast rural areas. But it is increasingly concentrated in the country's lagging states and rural areas. Over half of India's poor now live in one of four states: Bihar, Madhya Pradesh, Orissa, and Uttar Pradesh. Over two thirds live in rural areas. In rural areas, the poverty incidence is highest amongst agricultural workers, many of whom are small-scale farmers or casual laborers. People of scheduled castes and scheduled tribes are far more likely to be poor than those of other social groups, as low-caste status and gender barriers still operate as social obstacles that block or exclude them from opportunity.

India's poor suffer not only from lower incomes, but also from lower access to and quality of public services, such as basic health, education, and infrastructure. The poor often lack the leverage to ensure that state institutions serve them fairly and must often pay for education and health services that others receive for free. For example, studies by India's Public Affairs Center indicate that the wealthy and middle classes are more likely to resolve their complaints at a lower cost. Corruption is often a highly regressive tax and the poor pay more of their incomes proportionately than do the wealthy and the middle class.

3. Recent growth trends also give reason for concern (Table 2). Economic growth slowed from an annual average of 6.7% over the five years from 1992/93 to 1996/97, to 5.5% from 1997/98 to 2001/02. Continued strong growth in the services sector was offset by a slowdown in industrial growth and a marked decline in agricultural performance. Growth slowed further to an estimated 4.4% in 2002/03, due to the impact of poor rains on agricultural output in several states.

Table 2: Macroeconomic Trends Over the Past Two Decades

	1980s	1990s	1992/93-1996/97	1997/98-2001/02	2002/03
GDP growth (% per annum)	5.6	5.8	6.7	5.5	4.4
Agriculture	3.4	3.0	4.7	1.8	-3.1
Industry	7.0	5.8	7.6	4.5	6.1
Services	6.9	7.6	7.5	8.1	7.1
Investment rate (% of GDP)	22.0	23.0	23.3	22.5	22.1
Public	10.0	7.8	8.0	6.6	6.3
Private	12.1	15.2	15.3	15.9	15.7
Inflation (WPI, % per annum)	8.0	8.1	8.7	4.9	2.5
General government deficit (% of GDP)	8.1	7.8	7.2	9.3	10.4
Current account balance (% of GDP)	-2.1	-1.4	-1.2	-0.7	1.0
External reserves (months of goods and services imports, end of period)	3.3	5.6	5.9	7.0	11.0

4. The recent growth deceleration was accompanied by a slowdown in investment, especially in the private sector. Firms invested and borrowed heavily in the mid-1990s, building capacity for an expected demand based on continued high growth rates, and assuming continued reforms would generate high returns. In the meantime, trade reforms left some sectors more open to competition, while facing "behind the border" constraints to improved productivity. As the pace of reforms slowed, interest rates rose, and the expected demand failed to materialize, many firms found themselves saddled with excess capacity and debt.

5. The fiscal position of the general government (center plus states) also deteriorated over this period. The overall budget deficit rose from around 7% in 1997/98 to more than 10% by 2002/03, due to a significant increase in government consumption and continued low revenue mobilization. Higher public debt and higher interest rates also added to the debt service burden.

As a result, resources available for public investment became increasingly constrained, with adverse consequences for infrastructure development.

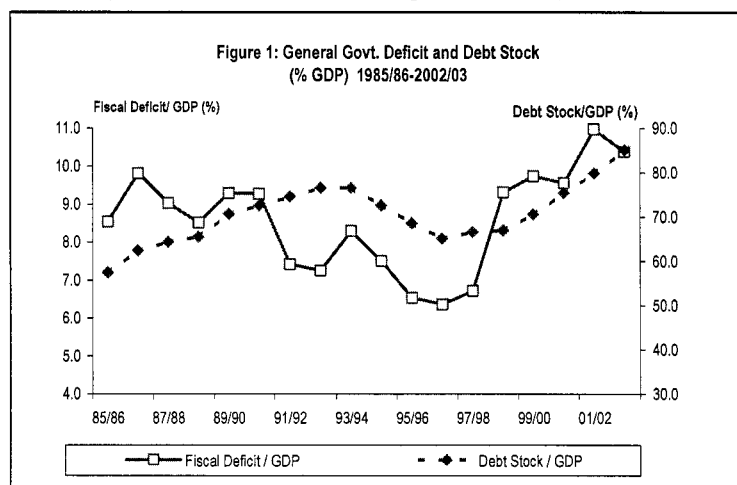
6. At the same time, prudent monetary policy has helped to contain inflation and strengthen the balance of payments. Rapid growth of IT service exports, sluggish domestic demand for imports, and higher remittances turned the current account balance into surplus. Together with modest capital inflows, this has generated a substantial increase in external reserves, which now exceed US\$80 billion, equivalent to almost one year of imports.

7. With one-third of the world's poor and over one billion people, India needs rapid growth to reduce poverty and create enough jobs to sustain income increases for its population. In its Tenth Five-Year Plan, the Government of India (GoI) targets an average growth rate of 8% per annum for 2002/03 to 2006/07. However, there are macroeconomic vulnerabilities and structural impediments that limit India's prospects for accelerating growth and reducing poverty, as the Tenth Plan and the most recent Economic Survey recognize. India's development policy challenges can be grouped into two broad areas: (a) improving the management of public resources, by reducing budget deficits, reallocating spending to more productive investments, and enhancing the quality of service delivery; and (b) improving the investment climate and raising productivity in industry, services, agriculture and rural development.

## Policy Agenda: Managing Public Resources

### *Fiscal Policy*

8. As shown in Figure 1, the general government (center plus states) fiscal deficit has averaged more than 9% of GDP over the past six years (Ninth Plan plus 2002/03). About 60% of this deficit is at the center and 40% at the state level, where much of the recent deterioration in the fiscal situation has occurred. Of particular concern is the sharp increase in revenue deficits, which have more than doubled from less than 3% in the late 1980s to average more than 6% of GDP over the past six years. This trend reflects falling revenues and rising expenditures on interest payments, subsidies, civil service salaries and pensions, administration and defense. In turn, this has crowded out development spending, with negative implications for long-run growth and welfare.



9. These fiscal deficits have largely been financed by borrowing, with a strategic shift towards long-term rupee debt after the 1991 crisis. General government debt rose from 58% of GDP at the end of March 1986 to 85% of GDP by the end of March 2003 (Figure 1). Including debt of public enterprises, total public debt is now 95% of GDP, with contingent liabilities from loss-making public enterprises adding another 12% of GDP. With high primary deficits (more than 3% of GDP) and interest rates close to growth rates, the burden of public debt is expected to continue rising -- unless there is a concerted effort to adjust the fiscal position of the center and state governments, in a progressive and phased manner over the next few years.

10. On the surface, these fiscal indicators are worse than those faced by India in 1991 – and worse than in many other countries that actually suffered a macroeconomic crisis. However, the risk of crisis in India today is mitigated by the country's strong external position. Rising external reserves, and low levels of short-term external debt, give the country a very comfortable cushion to counter any speculative attack. The risk of a speculative attack is further reduced by a pliant financial system (which is willing to hold large amounts of domestic government debt), limited capital account convertibility, and a flexible exchange rate. Thus India is not vulnerable in the short term to the type of collapse suffered by Russia or Argentina.

11. Even so, the Tenth Plan is right to be concerned about the consequences over the medium term of leaving the current fiscal situation unchecked. What has emerged in effect is a mixture of "loose fiscal, tight monetary" policy that has helped to keep inflation low and the external accounts strong. But this has been at the expense of growth and welfare, as growing interest payments have crowded out public investment, and high real interest rates have constrained private investment. Even though interest rates have declined over the past 18 months, public debt dynamics have continued to worsen.

12. There is a lively debate going on in India today as to whether the large fiscal deficit is a serious problem or not, given the high levels of external reserves and food stocks. Indeed, some see fiscal stimulus as desirable to counter the slowdown in private sector activity. However, arguments for fiscal stimulus are not convincing at a time when public debt levels are so high and interest rates may well start to rise from their current low levels. Furthermore, to the extent that the recent increase in external reserves has reflected capital inflows driven by one-off events related to September 11, 2001, it would be risky to slow fiscal reform on a gamble that such flows will continue indefinitely. Nor would it be prudent to assume that India can simply grow out of its fiscal problem. On the contrary, analysis presented in the Tenth Plan suggests that a sizeable fiscal adjustment will be required to generate the level of public savings, and provide space for the level of public and private investment, needed to generate 8% growth.

13. Based on this analysis, fiscal reforms are needed in the following areas:

- **Tax reform.** The Tenth Plan targets an increase in tax revenues from 8.1% of GDP in 2001/02 to 10.3% of GDP by 2006/07. Achieving this goal rests on several key assumptions, including a strong recovery in manufacturing sector growth (as this sector has the highest tax buoyancy) and extending the tax base to the booming services sector. The Kelkar Committee reports on direct and indirect taxes essentially endorse the above approach, requiring that lower tax rates be complemented with the elimination of exemptions, bringing services and agriculture into the tax net, and using information technology to improve tax administration. These reforms deserve the highest priority in view of the substantial decline in the tax ratio during the 1990s and the positive impact higher tax effort would have on reducing primary and revenue deficits in the future.
- **Subsidies.** Financial losses of the power sector reached an alarming Rs.332 billion in 2001/02, or 1.4% of GDP. Recent studies show that the poor do not benefit from cheap electricity, either in urban or rural areas, providing little social justification for continued SEB losses. Therefore, the financial and social case for reform is strong. Proposed reforms in power distribution are summarized in Box 2. Similarly, food and fertilizer subsidies totaled Rs.352 billion in 2002/03, or 1.4% of GDP. These subsidies have distorted farmer cropping and investment decisions, and thereby contributed to natural resource degradation. Proposals for reforms in these areas, and for reallocating funds to more productivity-enhancing public investments, are outlined in the section on agriculture and rural development below. Petroleum subsidies, which totaled Rs.63 billion in 2002/03, or 0.3% of GDP, are also to be phased out over the medium term.

### Box 2: Urgent Need for Reforms in Power Distribution

Reform of power distribution is essential for both fiscal sustainability and spurring growth by providing more efficient supply and quality of power services to industry, farmers and rural areas. Under the framework of the new Electricity Act (2003), reforms are urgently needed in the following areas:

- (a) **Tariffs:** Ensuring that tariffs on average cover costs and yield a reasonable rate of return for the utility, and that regulatory systems have suitable mechanisms and sufficient independence to assure this over time. Achieving phased but time-bound reduction of the cross subsidy paid by industries and services, and improving cost recovery through consumption-based tariffs charged to agriculture and residential consumers.
- (b) **Subsidies:** Ensuring that where, for policy reasons, the government wishes to subsidize power, subsidies are clearly delineated, targeted and funded, within fiscally sustainable levels. Developing alternative mechanisms to deliver subsidies while enabling the utilities to operate on a commercial basis. Moving from present flat-rate tariffs to consumption-based tariffs for agriculture water pumping.
- (c) **Restructuring, commercialization and sector governance:** Separating SEBs into generation, transmission and distribution businesses; and ensuring that the unbundled utilities have independent boards, financial autonomy, and skilled management with full control over operations and labor force. Reducing T&D losses, including theft, and improving operational and managerial efficiency in power distribution and supply.
- (d) **Distribution privatization:** Accelerating privatization of the commercially-viable segments of the distribution business to lock in the gains from improved operational and managerial efficiencies on a sustainable basis. Targeting a broader range of potential investors and actively mitigating the perceived policy and regulatory risks.
- (e) **Strategies for rural areas:** Developing approaches to shift from the present form of subsidy for electricity consumption to innovative models of provision of capital subsidy for improving access in rural areas and for the poor. Facilitating new entry for timely and cost effective provision of electricity services.
- (f) **Competition:** Opening up electricity trading by industries with self generation, along with other power suppliers, by providing open access to transmission and distribution networks in a phased manner along with elimination of cross subsidies during an agreed time frame.

- **Financial sector.** Indian banks have one of the highest ratios of government debt to deposits in the world. Financial institutions (including insurance and provident funds) which have invested heavily in long-term government paper have been making trading profits as interest rates continued to fall, but now face risks from the possibility of rising interest rates. Moreover, state provident funds have also invested heavily in bonds issued by special purpose vehicles and guaranteed by state governments. The growing risk that these guarantees will be called is reflected in the widening spread on state guaranteed bonds relative to central government securities. It's therefore encouraging to note that both the RBI and GoI are working on establishing a clear and transparent framework for guarantees. Returns on provident funds and small savings should also be linked to market benchmarks.
- **Fiscal management.** The central government needs to lead by example, by cutting its own revenue deficits and providing the right incentives for fiscal adjustment at the state level. Fiscal discipline at the center is likely be reinforced (but not guaranteed) by the new Fiscal Responsibility and Budget Management Bill, which mandates the elimination of the center's revenue deficit by March 2008. Three states have passed similar Acts to limit their own deficits, and others are following suit. In addition, the center can help improve fiscal management at the state level by: (a) enforcing global caps on borrowing (both on-budget borrowing and off-budget borrowing through special-purpose vehicles); (b) simplifying the borrowing regime for states by allowing them to borrow responsibly from markets within their global gaps while phasing out borrowing from captive sources; (c) further expanding the volume of center-to-state transfers linked to reforms and performance; (d) breaking down artificial distinctions between plan and non-plan expenditures; and (e) consolidating Centrally Sponsored Schemes, with greater flexibility for states to allocate the funds according to their own needs and priorities.

14. The government debt projections presented in Part II.2, and summarized in Figure 2, illustrate the importance of generating primary fiscal surpluses to stabilize or reduce the debt/GDP ratio. Without

reforms, the debt/GDP ratio continues to rise to 107% by the end of the Tenth Plan period. Under the reform scenario, with lower primary deficits (falling to 0.7% of GDP by 2006/07) and higher economic growth (rising to 8% in 2006/07), the debt/GDP ratio is brought down to 95%. With lower interest payments and subsidies, the reform scenario also frees up more resources for spending on priority programs (including O&M, social services and basic

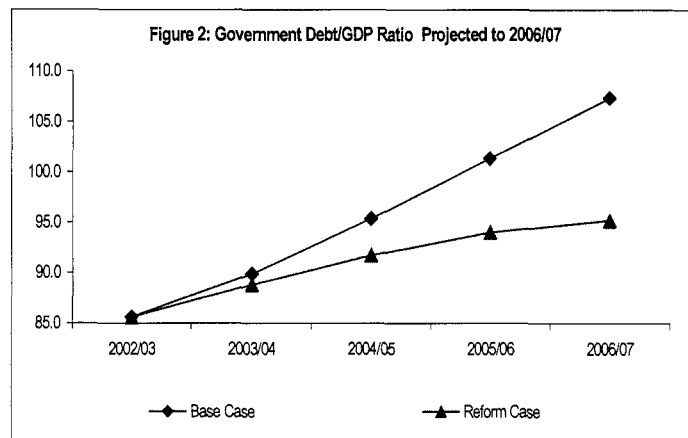
infrastructure). Both of these trends – lower primary deficits and better expenditure composition – would be good for growth and poverty reduction. Without reform, the risks of crisis would steadily build with higher and less sustainable debt levels over the medium term.

#### *Delivery of Public Services*

15. Sustained growth is the most powerful driver of poverty reduction. But poverty reduction also requires investment in human development. Health and education are the most important assets of the poor, allowing them to both contribute to and benefit from growth through higher-paying employment. In addition, when incomes fall below minimum standards, the poor and vulnerable need access to effective social safety nets. Delivery of social services requires increasing the level, but more importantly the quality of public expenditures in these areas. This in turn requires improving the governance and productivity of India's civil service. On the positive side, a variety of reforms are already being implemented at the center, state and local levels, which could be quickly scaled up and disseminated across the country. There is also a growing social demand for good governance. These developments present a real opportunity to raise the performance of the civil service and enhance service delivery. The key is to push ahead with implementation.

16. In terms of aggregate numbers, the Indian civil service is not particularly overstaffed in comparison with other countries. However, there is a pronounced imbalance in skills mix. Staff profiles need to be revisited to reduce the number of administrative and support personnel (particularly at lower grades) and increase the number of staff involved in front-line service delivery, including rural schools and health clinics. In addition, reforms are needed to reduce the fragmentation of bureaucratic structures and responsibilities. Such reforms would help to improve coordination, shorten delivery times, and generate overall efficiency gains.

17. There is also a pressing problem of affordability. The Fifth Pay Commission awards in 1996/97 significantly increased spending on civil service wages, especially at the state level. Beyond the fiscal burden, these high salary awards are questionable since the public sector is now paying a substantial premium to the private sector in many job categories (Table 3). Recent experience would suggest it may be wise to hold off on the practice of holding periodic pay commissions. Instead, GoI and state governments could opt for limited annual wage increases, or even pursue a freeze for 2-3 years, followed by a limited relaxation for skilled positions. Alternatively, a permanent pay commission could be established to continuously analyze and



make recommendations on compensation, in consultation with the states. Whatever system is adopted, greater weight should be given to local market comparators in determining salary levels.

18. The costs of the civil service are raised further by burgeoning pension liabilities at both the center and state levels. In response, GoI recently announced a plan to establish a fully-funded defined contribution scheme for new civil servants. This will force the payment of pension liabilities as they accrue, creating a more transparent and financially viable scheme. However, since this reform will apply only to new civil servants, it will only contain pension costs over the longer term. Indeed, in the short to medium term, fiscal outlays may rise, as GoI has to meet the combined costs of the old and new schemes. Further reforms may therefore be needed, including changes in eligibility criteria, a possible shift of younger civil servants to the new plan, and opening up of the new scheme to private sector workers. These reforms could well serve as a model for the states to reform their own pension plans, and set a benchmark for reforming other pension schemes (including the Employee Provident Fund and the Employee Pension Scheme) over the medium term.

19. As a general rule, recent wage gains were not compensated by any commensurate increase in the overall quantity and quality of government services. To the extent that qualitative improvements have been made, they have often relied heavily upon the application of information technology to streamline and re-engineer business processes. However, even when IT has made many functions redundant, civil servants and powerful unions have often extracted pledges of no job losses as the price of allowing the innovations to go ahead. As a result, many line departments find themselves in an increasingly precarious position, with a growing proportion of their non-plan resources being taken up by salaries, over which they have very limited control. Another fundamental problem haunting India's civil service is the failure to use staff that it has productively. As a result, the cost structure of many government functions is significantly higher than in the private sector.

20. The burden of weak administration falls particularly heavily on the poor, who suffer in terms of skewed government spending, limited access to services, and employee indifference. Therefore civil service reform is an essential element of any poverty reduction program. An effective program of civil service reform will have to include measures to achieve the following three objectives:

- **Improve access to information.** Citizens' charters are one vehicle to empower the public in their dealings with service providers. It is important, however, that such charters be developed in consultation with major stakeholders and widely disseminated. NGOs can also play a vital role in collecting raw data, transforming it into usable information, and disseminating it to a wider audience. Several states are actively using

**Table 3: Ratio of Average Wages in the Public and Private Sector**

Selected Occupations	1993/94	1999/00
Professional, technicians and related workers	1.52	1.72
Engineers	1.07	1.34
Engineering technicians	1.3	1.27
Physicians and surgeons	1.65	2.0
Nurses	2.0	2.0
Teachers	1.75	2.02
Administrative, executive and managerial workers	1.26	1.42
Clerical and related workers	1.6	1.74
Stenographers, typists, etc.	1.69	2.14
General clerks (receptionist, office attendants, etc.)	1.54	1.72
Service workers	2.25	2.45
Sweepers, cleaners, building caretakers	1.79	1.93
All	1.92	2.33

IT to improve access to information and speed up decision making. While there is evidence that computerization by itself seems to have an important effect on reducing corruption, the most successful initiatives combine computerization with extensive business re-engineering. Finally, GoI and a number of states are promoting greater transparency by adopting Right to Information legislation.

- **Strengthen accountability.** Internal audit procedures need to be strengthened, with clear sanctions for corrupt or incompetent officers. However, the key is to strengthen “external” accountability to the public. The recent experience of the Lok Ayukta (Ombudsman) in Karnataka seems to be generating good results. Independence and adequate budgets are keys to the success of such initiatives. In addition, a comprehensive anti-corruption strategy should include: (a) a radical overhaul and simplification of the procedures for imposing major and minor penalties; (b) expanded “whistleblower” protection; and (c) publication of property and tax returns of senior officials. Each state should be asked to pass the Corrupt Public Servants (Forfeiture of Property) Act, which has already been drafted by the Law Commission.
- **Reduce political interference.** This topic is a sensitive one, for the right to transfer civil servants is clearly vested within the political leadership under Article 310 of the Constitution. Yet few would disagree that this power is often abused by both civil servants and politicians. The net result in states such as Uttar Pradesh has been a reduction of average tenure for key senior service positions to less than a year. Compounding this problem has been the relative absence of effective transition mechanisms. Recent successful reform efforts show the value of having an empowered and dedicated manager in place for several years. Karnataka has gone one step further and limited civil service transfers, with transfer data posted on a public website and more objective cadre management committees created to approve transfer requests.

21. Weaknesses in service delivery are of special concern in the social sectors: **education, health and social safety nets.** While India has made substantial progress towards achieving better social indicators over the past two decades, the rates of improvement have not been sufficient to achieve the targets set in the Tenth Plan or even the less ambitious Millenium Development Goals (MDGs). Indeed, progress in health indicators has been slowing down precipitously.

22. Public spending on health and education in India has risen over the past decade, largely due to the sharp increase in wages awarded by the Fifth Pay Commission in 1997. International comparisons suggest that India’s spending on health and education is in line with other countries at similar income levels (although with a more dominant role for the private sector in health, and a more skewed distribution of public spending in education towards the secondary and tertiary levels). While additional funding would help, better outcomes depend crucially on improving the quality of services. As one indication, absentee rates for teachers and medical providers are very high in India, especially in the poorer states (Table 4). Since absentee workers are on the payroll, it is not surprising that public money does not translate directly into better outcomes.

23. The root cause of poor quality services is that governments are not adequately focused on social outcomes. One way to increase the focus on outcomes is to generate and disseminate information regarding progress in service delivery. Parents, patients and beneficiaries should know what they are entitled to and have a place to lodge complaints when they are not received. Providers and policy makers should know (and be constantly learning) about what works. One critical role of the central government, when states have the primary responsibility for health and education, is to be an independent source for measuring outcomes. Over time, such measures

could be used to hold states accountable for improvements – perhaps by conditioning fiscal transfers on progress.

24. There are two deep problems in the *health* sector: a lack of realism concerning the public sector's role in the health system; and a lack of prioritization of the public sector's possible contribution. Most health care is now given in the private sector and, for the poor, by very poorly or untrained practitioners. However, there is no way to expand free publicly-supplied medical care to replace these private practitioners. Rather, the government should aim to

improve the private market, by providing training, public information and accreditation; over time, public financing of private provision could be increased. Government programs should focus on ways to improve health outcomes, including programs outside the health sector (e.g., for clean water and sanitation). Within the health sector, the highest priority for public funds is to combat communicable diseases. Disease control has large externalities and disproportionately benefits the poor. Relative to medical care, most of these activities are also much easier to administer. The largest emerging problem in communicable disease control is the increase in HIV infections and cases of AIDS. While estimates vary, there is no dispute that the infection is spreading rapidly. The primary focus of policy should be on prevention. There are many competing needs for public health infrastructure, and it is important that HIV/AIDS programs neither undercut resources to deal with killers like tuberculosis, malaria and diarrhea, nor get marginalized.

25. Progress in *education* has been much greater than in health. This reflects the greater opportunities for communities and parents to monitor and evaluate school performance as compared to health facilities. Nevertheless, there are large variations across states and income groups, and overall progress is insufficient to attain the Tenth Plan goals. To accelerate progress in elementary education, GoI has launched the Sarva Siksha Abhiyan (SSA, or Education for All) program. It aims at providing eight years of schooling for children in the 6-14 age group by 2010. Achieving this goal, which is also formalized in the 93<sup>rd</sup> Constitutional Amendment, will require both additional public resources and improvements in how they are used. Making schools more accountable to the community is critical, possibly as far as giving parents the right to hire and fire teachers through local school committees (as has been tried in Madhya Pradesh). Localities must be allowed the freedom to find their best solutions, while higher levels of government provide measurement of attendance, learning outcomes and other information needed to evaluate progress.

26. Many observers of Indian administration have argued that **decentralization** and local empowerment will ultimately be essential in improving the quality of service delivery at the village level. The most visible achievement of the 73<sup>rd</sup> and 74<sup>th</sup> Amendments to the Constitution,

**Table 4: Absence Rates from Primary Facilities, 2003**  
(in %)

	Primary School Teachers	Primary Health Care Workers
Andhra Pradesh	31	n.a
Assam	31	58
Bihar	26	58
Gujarat	21	52
Haryana	19	35
Karnataka	23	43
Kerala	18	n.a
Orissa	14	35
Punjab	18	n.a
Rajasthan	23	39
Tamil Nadu	17	n.a
Uttar Pradesh	26	42
Uttaranchal	25	45
West Bengal	21	43



ratified in 1992, has been the high degree of political decentralization. However, progress on fiscal and administrative aspects of decentralization has been much more modest and hesitant. In response, India now needs to move from the decentralized patchwork it has created, towards an inter-governmental framework which leads to improved service delivery without increasing fiscal pressures. Good fiscal management would suggest reallocating public funds from central and state schemes into a well-designed fiscal framework for local governments, that would guarantee their autonomy and accountability, while helping them to match resource allocations with local preferences. It would also suggest creating incentives for local governments to collect a share of their revenues from local taxpayers (e.g., through land taxes). Flows of funds from the center and state governments should be dependent on good performance and resource mobilization at the local level.

## **Policy Agenda: Improving the Investment Climate**

### ***Industry and Services***

27. A wide range of structural reforms stimulated industrial and services growth and investment in the early 1990s. However, momentum in the industrial sector slowed in the second half of the decade. Within the industrial sector, the slowdown in manufacturing growth has been even more marked. Despite recent signs of recovery, the manufacturing sector in India still accounts for only 17% of GDP, compared to 35% in China and 25-35% in the South East Asian economies. Furthermore, no significant increase in India's penetration of world markets in industrial products has been observed over the past decade and foreign direct investment (as a share of GDP) is lower than in China and many emerging markets. As a result of these trends, growth in manufacturing employment has averaged only about 2% per annum since the mid-1990s, with most of this growth in the unorganized sector. The organized manufacturing sector provides only about 7 million jobs today. By comparison, the total labor force in India is around 406 million, with a little under one million workers transitioning out of agriculture every year.

28. Against this background, the Tenth Plan calls for higher growth in the industrial sector to create 100 million or so new jobs over the next decade. The Plan notes that sustained industrial growth and employment will require a step up in domestic investment, particularly private investment, coupled with improved productivity. International comparisons indicate that India has intrinsic advantages, such as a large local market and skilled workforce, which should allow the country to emerge as a major hub for manufacturing and labor-intensive service industries. At the same time, recent studies on the investment climate show that the performance of India's industrial and service sectors continues to be constrained by three key sets of factors: (a) product market distortions; (b) inefficiencies in factor markets; and (c) infrastructure bottlenecks. The success with which India can achieve the ambitious targets set in the Tenth Plan will depend crucially on progress in these areas.

29. **Product market distortions.** Inadequate follow-through on a number of key reforms to create a level-playing field for investment, both domestic and foreign, coupled with slow progress in trade policy reforms continue to inhibit industrial sector performance. Tariff protection in India is still substantially higher than in most other developing countries (Table 5). The government has many well justified concerns about the policies of other countries which restrict its exports, and it is one of the most active developing countries in raising these concerns in international fora, such as the WTO. While India has some bargaining leverage to gain concessions from other countries, it should also use the WTO process to advance domestic reforms and protect them from local pressure groups. In particular, the government should move aggressively to reduce import tariffs to a single rate (say, 10%) over the next three to four years and phase out remaining tariff exemptions, specific tariffs and anti-dumping duties. It should also remove other product market distortions by: (a) eliminating the remaining preferential policies for

small-scale players; (b) reducing indirect tax distortions by full and uniform implementation of the new VAT across states; and (c) phasing out remaining limits on FDI (including the ban on FDI in the retail sector).

30. While the “License Raj” has been largely eliminated at the center, it still survives at the state level, along with a pervasive “Inspector Raj”. Starting a business in India requires 10 permits compared to 6 in China, and the median time is 90 days in India compared to 30 days in China. Complaints of delays, corruption and harassment are common. To reduce the costs of investment related to delays and rent seeking, all procedures for entry and exit of firms need to be simplified and expedited, for example through the introduction of “single window” clearances.

**Table 5: Custom Duty Rates in India and Other Developing Countries**

	All goods	Agriculture	Manufacturing
India 2001/02 (CD only)	32.3	41.7	30.8
India 2002/03 (CD only)	29	40.6	27.4
India 2002/03 (CD+SAD: estimate)	35	47.1	33.3
India 2003/04 (CD+SAD: estimate)	32.7	46.8	30.7
Pakistan 2001/02	20.4	21.8	20.2
Pakistan 2002/03 (estimate)	18.2	13.9	18.3
Brazil 2000	14.1	12.9	14.3
China 2000	16.3	16.5	16.2
Indonesia 2000	8.4	6.3	8.9
Thailand 2000	16.6	39.9	14.6
South Korea 2000	12.7	47.9	6.6
105 developing countries (1996-2000)	13.4	17.4	12.7

Notes: Un-weighted average rates. CD=Customs Duty, SAD=Special Additional Duty

31. **Inefficiencies in factor markets**, coupled with a weak bankruptcy framework, have further constrained performance in the industrial and services sectors:

- Restrictions on the *hiring and firing of workers* are identified as one of greatest challenges of doing business in India. Any registered firm wishing to retrench labor can only do so with the permission of the state government, which is rarely granted. GoI has recently announced its intention to raise the limit for seeking permission from 100 to 300 workers. However, to become effective, this requires enactment of legislative changes by parliament. GoI should also consider amending the Contract Labor Act to allow the use of contract labor for all activities – not just for activities of a temporary nature.
- High real *interest rates* are often cited as another major impediment to industrial performance in India. Large, creditworthy borrowers have benefited from the recent decline in interest rates. However, the lack of access to adequate, timely credit on competitive terms continues to constrain the development of SMEs. In response, banks should make efforts to introduce new technologies for SME credit and also to train and motivate branch managers to provide loans to commercially viable SMEs. GoI can help by facilitating the establishment of well-functioning credit information bureaus/credit registries for small borrowers, updating land and property records for small loans, and promoting collateral substitutes.
- Problems with the use and transfer of *land* also critically affect the performance of larger firms. Indeed, some 90% of land parcels in India are reportedly subject to disputes over ownership, which take decades to settle in court. Furthermore, obsolete tenancy and rent

control laws keep a large part of urban real estate off the market. The central government has already abolished the Urban Land Ceiling Act which made changes in land use very difficult. However, only a few states have repealed their corresponding Urban Land Ceiling Acts.

- Outdated *bankruptcy procedures* have, in the past, made industrial restructuring almost impossible. This may change, once the recently enacted Amendments to the Companies Act are put into effect. These will provide a framework for liquidating firms outside the court process. However, repeal of the Sick Industries Companies Act is essential for this framework to become effective. The recently passed law on the enforcement of creditors' rights should also help accelerate the process of industrial restructuring.

32. **Severe infrastructure bottlenecks** continue to constrain India's industrial sector performance. Access to reliable *power* at reasonable costs is a prime concern for most Indian businesses. Not only does industry receive irregular and low quality power, but it is also charged tariffs much above the cost of supply, reducing firm-level competitiveness. As a result, a large majority of Indian firms operate their own (captive) generators, worsening utility finances. Small industries often have to go without power as they can't afford captive generation. Power sector reforms are now widely accepted as fundamental to improving industrial performance. An urgent priority is the need to rationalize power tariffs, depoliticize the tariff-setting process, and implement a phased reduction in cross subsidies that operate against industrial consumers. Time-of-day tariffs need to be introduced for industries with peak and off-peak rates.

33. The above measures need to be accompanied by steps to improve the financial and operational performance of the power utilities through the unbundling and commercialization of SEBs, independent regulation and improved sector governance. Privatization should be accelerated to lock in improved operational and managerial efficiencies on a sustainable basis. The strategy for privatizing distribution should consider focusing on the commercially viable segments of the network, while developing alternate strategies for improving services and targeting subsidies in rural areas. The new Electricity Act (2003) establishes the legal framework for power sector reform and restructuring. But the key will be implementation. GoI can support reforms at the state level by imposing rigorous policies on payments to central generation and transmission utilities, and rewarding progress on reducing SEB losses and improving governance under the Accelerated Power Development and Reform Program.

34. Speedy, reliable door-to-door *transport services* are also critical to India's manufacturing competitiveness. India has one of the most extensive transport systems in the world. However, the sector suffers from severe capacity and quality constraints. The Tenth Plan proposes a number of road upgrading programs totaling 10,000km, along with access-controlled expressways in high-volume corridors. Meeting the Tenth Plan targets will require a significant increase in funding from the private sector. In part, this can be addressed through better cost recovery from users. Much can also be gained in the short to medium term by strengthening the financial performance and accountability of road agencies and state public works departments.

35. Indian Railways (IR) continues to be a patient who resists any bitter medicines, despite plenty of prescriptions available. It has recently entered into operating deficits and depends on central budget for its large investment program. Reforming this sector will require large-scale financial restructuring, involving the shedding (or even ring-fencing) of its non-core assets or businesses. Government policy also needs to address price distortions resulting from the long practice of cross subsidization from freight to passenger services, which causes excessively high freight tariffs, preventing IR from serving the non-bulk high-margin transport market. In the ports sector, total berth capacity is no longer a serious constraint. However, the low productivity

of port equipment and labor continues to cause delays in turnaround and increase costs for cargo and containers, especially in the older ports.

36. GoI is keen to promote greater private sector participation in the provision and funding of infrastructure. In the long run, this requires action to address the policy problems that underlie investors' concerns by raising prices to cost-covering levels and establishing a sound legal and regulatory framework. In the short run, various public-private partnerships involving subsidies, risk-bearing and other forms of government assistance may help attract private investment and close financing gaps. However, they can also risk simply postponing the day of reckoning, and impose serious costs on taxpayers. Therefore, they should be seen, at best, as temporary measures and should be entered into with caution.

### *Agriculture and Rural Development*

37. Promoting more rapid agricultural and rural growth is a major priority for the Government of India. Although agriculture contributes only about a quarter of total GDP today, its importance in the economic, social and political fabric of India is far greater than this number suggests. About 75% of India's poor live in rural areas and a large proportion of the rural poor are dependent on agriculture for employment. Total factor productivity in agriculture declined between the 1980s and 1990s due to the slowdown in productivity gains from the earlier adoption of high-yielding varieties, the decline in public investments in the agriculture sector, and increasing natural resource degradation due to the existing incentive framework. Looking forward, improved agricultural performance will require: (a) rebalancing government expenditures from subsidies towards more productivity-enhancing public investments; and (b) removing the remaining restrictions on domestic trade to improve the investment climate for farmers, while supporting a regulatory framework to ensure fair competition. Development of the non-farm sector will also be essential to provide employment opportunities in rural areas, and support growth of the agricultural sector.

38. The government's **foodgrain policy** has led to mounting buffer stocks and food subsidies in recent years. In response, GoI established a high-level committee to develop a long-term foodgrain policy with the primary goal of maintaining self sufficiency. The committee's proposals to remove the rice levy and all restrictions on foodgrain trade (except in emergency conditions) will improve incentives for the private sector. However, other key proposals raise concerns. In particular, the shift in the underlying principle of the proposed policy from food security to self-sufficiency, that also ties farmers to low value rice and wheat production, will come at the cost of efficiency. The continued large role envisioned for the public sector in foodgrain markets will crowd out private sector participation. And the reversion back to an untargeted public distribution scheme is likely to bring back the earlier problems of subsidies being captured by non-poor families and will result in higher food subsidies.

39. Perhaps the most contentious issue in foodgrain policy is the Minimum Support Price (MSP) for rice and wheat. Steady increases in the MSP in recent years have encouraged increased production, leading to larger government procurement. Strong political pressure from states where the largest procurement takes place has stalled efforts by GoI to contain increases in the MSP. Therefore, the committee's proposal to limit the MSP to cover cash costs plus the returns to family labor, land and capital is a step in the right direction. In the longer run, however, fostering competitive markets would serve as a better avenue for ensuring remunerative returns to farmers. In this scenario, the MSP should be reduced to cover cash costs only, which complemented by other schemes (e.g., TPDS, employment schemes) would serve as a safety net for farmers.

40. The government's agricultural policy of the last three decades has relied on **subsidizing key inputs** to promote more rapid production growth and ensure food security for its population.

However, there is also broad recognition that the rapidly rising subsidy levels are fiscally unsustainable and are crowding out productivity-enhancing public investments in rural infrastructure, irrigation, and technology upgrading. Power and water subsidies, to the extent they encourage inefficient water use, are also leading to salinity, water logging, and declining groundwater tables in many areas. And fertilizer subsidies, that are largely concentrated on urea, have distorted input use. Sectoral priorities are as follows:

- *Fertilizer.* In 2001/02, the government announced its policy to rationalize fertilizer pricing and to implement the recommendations of the Expenditure Reforms Commission for a phased program of price increases and complete decontrol of urea by April 2006. Since then, a number of reform actions have been implemented. Continued commitment to the proposed timetable will lead to a significant reduction in fertilizer subsidies over the next few years.
- *Water.* The government's national water policy promotes the adoption of a comprehensive and integrated approach to planning and managing water resources. It puts priority on: (a) delivery of good quality water services; (b) demand-driven investments in rehabilitation and maintenance of infrastructure through greater participation of users in managing systems; and (c) cost recovery of at least O&M costs to ensure longer-term financial and fiscal sustainability of operations. To encourage full adoption of these reforms at the state level, GoI recently introduced an incentive program to encourage recovery of O&M costs.
- *Power.* The large subsidy on the price of electricity to farmers has contributed to the severe financial crises of SEBs. This in turn undermined the SEBs' ability to undertake required investments and maintain day-to-day operations, resulting in deteriorating power services to consumers, including farmers. The incidence of subsidies is also heavily regressive. India should move towards a more transparent and targeted subsidy mechanism. For this to work, it is indispensable that there is recovery of at least operating costs, universal metering of consumption, payment discipline, and improved delivery efficiency of electricity providers.

41. **Product and factor markets.** While progress in economic and trade reforms has helped to improve the incentive framework for agriculture over the past decade, the sector is still hampered by the continuing over-regulation of domestic trading activities for major agricultural commodities. On the positive side, GoI has temporarily lifted several key regulations such as storage, transport and credit control in recent years. However, the over-hang of their possible re-introduction discourages both local and foreign investments. Moreover, while GoI has lifted these regulations, some state governments have not lifted the associated state controls. This inevitably raises marketing margins, putting downward pressure on farm prices and raising costs to consumers, while reducing the competitiveness of exports.

42. Agricultural import tariffs have increased in recent years to an un-weighted average (including the Special Additional Duty) of about 47%, compared to an average non-agricultural import tariff of about 31%. With a few exceptions, India is no longer explicitly taxing or using licensing, export bans or quotas as it did in the past to deliberately restrict agricultural exports and depress domestic prices. However, since 2001 it has been exporting stocks of rice and wheat accumulated by FCI at prices far below prevailing domestic prices. It is questionable whether these subsidized exports are in India's long-term interests in a more open international agricultural market. India should also consider reducing its WTO agricultural tariff bindings, mostly now at 100% or more, as a way of providing an external constraint on domestic lobbies pressing for high tariffs.

43. *Access to land.* The distribution of land ownership in India has become less skewed since the 1970s, with an increasing share owned by marginal to semi-medium farmers. The trend towards landlessness has also been arrested. However, regulations aimed at increasing security tenure for tenants have had unintended adverse effects, leading to large-scale self cultivation by landlords or the adoption of wage labor contracts. Where their implementation was incomplete, they may also reduce land access and equity. There is now a growing consensus, as reflected in a number of government policy statements, about the need to revisit and re-formulate current tenancy legislations. In considering tenancy reform, it would be critical to draw lessons from states who do not have tenancy restrictions. There are some states where the benefits from relaxing tenancy laws are likely to be higher than in others, due to the more advanced commercialization of agriculture (and significant amounts of informal leasing) and stronger political commitment to reform. These states could serve as a starting point for pilots, and yield important insights for policy debate and tenancy reforms in other states.

44. The Department of Land Resources introduced a scheme in the mid-1990s to pilot computerization of land records in selected districts nationwide. Some states have not only scaled up the program statewide, but also implemented the program in partnership with the private sector. These initiatives have reportedly contributed to more efficient and rapid service as well as reduced opportunities for corruption through increased transparency. Over the longer term, the focus will have to shift towards a more holistic approach to improving land administration systems at the state level. To be successful, the land administration system would have to meet several other key standards of performance, including security, costs, fairness, and sustainability.

45. *Access to rural credit.* India has a wide network of rural finance institutions, but a large number of the rural poor remain under-served or completely left out of the formal financial system. A key factor constraining improved access to rural credit relates to inefficiencies in the formal rural finance institutions. The government should aim to improve the performance of the regional rural banks and the rural credit cooperatives by enhancing regulatory oversight and supervision, reducing government control and ownership, and strengthening the legal framework for loan recovery and the use of land for collateral. Other priorities for improving access to rural credit include: (a) liberalizing interest rates by removing the existing “cap” for small loans (that has the perverse effect of rationing credit available to small rural borrowers); (b) improving credit information on rural households, by designating an agency that could take the lead in collecting and disseminating information on micro borrowers; (c) facilitating the scaling-up and sustainability of existing low-cost micro-finance models, such as the self-help group bank linkage model and the Grameen bank replicators; and (d) removing legal and regulatory obstacles to the development of innovations that can help reduce the costs and risks associated with rural finance.

46. Increased emphasis on **productivity-enhancing investments** will be critical to raising agricultural growth and developing the rural non-farm sector. However, to be effective, new investments need to be matched by improvements in the quality of public spending, particularly a greater focus on O&M, which also involves significant institutional reforms. If anything, the growth rate is likely to slow down over time, as the deteriorating fiscal situation and the sluggish progress on the reform agenda worsen the investment climate. Sectoral priorities are as follows:

- India’s public agricultural *research and extension system* is one of the largest in the world. However, over time, the efficiency and effectiveness of these services have been increasingly called into question. There is a need for a more regionally-differentiated research strategy, and greater coordination between the public and private sectors. Similarly, the top-down, narrow crop-focused approach to agricultural extension has become outmoded and ineffective in meeting the needs of farmers. In the future, the

public extension system will need to become more demand-driven, with stronger synergies between public and private extension efforts.

- Most government programs for *rural roads* are designed to address the immediate rural accessibility problem, without a carefully-designed policy and institutional framework to ensure the sustainability of these investments. Additional funds should be allocated for rural road maintenance, with greater coordination provided by the Ministry of Rural Development. Community participation offers significant potential for mobilizing local support for resource generation, land acquisition and tailoring of rural road programs to local needs.
- India's *rural electrification* program has in the past focused on extending the grid supply to villages and remote areas. However, access by rural households remains low and power-based economic activities in the electrified villages is minimal. GoI plans to accelerate the rural electrification program over the coming decade. This needs to be matched by a more conducive policy environment, with adequate incentives for service providers and more effective targeting of subsidies to poorer farmers and rural consumers. Decentralized generation should be encouraged, as reforms are put in place to privatize the commercially viable parts of the sector.

### **Development Prospects and Risks**

47. Continued progress on poverty reduction will require both higher growth and improved delivery of health, water, sanitation and education services. Many of these goals are reflected in the Tenth Plan, which projects an average growth rate of 8% per annum and rapid progress across a range of social indicators. However, the plan period started with a deceleration of growth to an estimated 4.4% in 2002/03. Some of the deceleration was due to external factors, including the impact of flooding in some areas, and drought in many others, on agricultural output. While some recovery in growth is expected in 2003/04, as the external environment improves, this bounce back is unlikely to be sustained – without a major push to reinvigorate the reform agenda. In the absence of major external or domestic shocks, current policies in India are likely to translate into a continued growth slowdown, averaging around 5% per annum over the Tenth Plan period (Table 6).

**Table 6: Macroeconomic Projections - Baseline and Reform Scenarios**

	Ninth Plan	Baseline Scenario	Reform Scenario
	1997/98-2001/02	2002/03-2006/07	2002/03-2006/07
Real GDP growth at factor cost (% per annum)	5.5	5.0	6.5
Agriculture, forestry and fishing	1.8	1.5	2.2
Industry	4.5	5.3	7.1
Services	8.1	6.4	8.0
Investment (% of GDP)	22.5	20.5	27.7
Public	6.6	6.4	7.3
of which: general government	3.1	3.0	3.7
Private	15.9	14.1	20.4
Consumption (% of GDP)	78.8	80.5	73.5
Public	12.5	12.0	12.4
Private	66.3	68.5	61.1
General Government (% of GDP)			
Fiscal deficit	9.3	11.8	10.3
Primary deficit	3.5	3.6	2.2

48. On the other hand, implementation of a comprehensive reform program (as summarized in Box 3) would allow India to achieve a growth rate of 8% per annum by the end of the Tenth Plan period, with positive impacts on employment and poverty reduction. Reforms to reduce fiscal imbalances at the center and in the states would create space for increased private investment. Improvements in the composition of expenditure, with relatively less spending on civil servants' wages and pensions, subsidies and interest payments, and a shift towards O&M and investments in key infrastructure, would further "crowd in" private investment. Improvements in the investment climate, through the removal of remaining bottlenecks in product and factor markets, and in key infrastructure areas, would increase the productivity of both public and private investment across the economy, including in India's poor rural areas. More effective delivery of health and education services, as well as social safety nets, would help accelerate social progress, empowering India's citizens to both contribute and benefit from faster economic growth.

49. Accelerating growth and poverty reduction in India cannot be achieved without also accelerating growth in India's lagging states. If the trends of the past few years continue, the richer states would have to grow at nearly 10% per annum to reach an all-India average of 6.5% during the Tenth Plan period. This is rather unlikely. Therefore, implicit in the envisaged reform scenario is a special effort to correct fiscal imbalances, reallocate public resources to priority programs, improve public service delivery and strengthen the investment climate in lagging states. Primary responsibility for these reforms lies with the state governments. But the central government can also play an important role in catalyzing and setting the pace for reforms at the state level.

50. Of particular importance for poverty reduction and rural incomes are policies to increase agricultural productivity. In the short run, the removal of subsidies to foodgrains could reduce agricultural output in a few states that benefit most from these subsidies. However, these are also states where significant agricultural diversification can take place. More importantly, this reform



would free up resources for agricultural research and development and rural infrastructure. Simultaneously, faster growth in industry and continued rapid growth in services can provide jobs for the labor force released from agriculture.

51. India's large fiscal imbalances pose a serious threat to sustained growth and development over the medium term. The persistence of current fiscal trends will, at best, limit growth and job creation. And slower growth would, in turn, speed up the deterioration in debt dynamics. If this negative cycle continues, a full-fledged fiscal crisis cannot be ruled out over the medium term. Of course, it is politically easy to downplay this risk, hoping that higher growth and lower interest rates will eventually solve the fiscal problem. However, experience suggests it would be unwise to sit back and wait for such a virtuous circle to emerge. Instead, the central and state governments will have to be pro-active in reducing the fiscal deficit, shifting expenditures into more productive areas, and removing structural impediments to higher private investment and productivity. The sooner the roadmap for these reforms is put in place, and concrete action taken to show commitment to follow through, the more manageable will be the adjustment path, and the quicker the pay-off in terms of higher growth and poverty reduction.

52. There are of course other potential risks to implementing an ambitious reform agenda. Domestically, Indian politics are often distracted by general or state elections, and tensions with neighboring countries. Externally, the global recovery is expected to be slow. While India is still a relatively closed economy, and therefore somewhat protected from global trends, it does suffer from a loss of market share to its major competitors, especially China, where reforms have moved ahead much more rapidly. And the inflow of remittances into India and other countries in the region may well slow down, as the impact of one-off events weakens. As a result, it would be risky to gamble on the recent strength in the balance of payments continuing and providing a counterweight to the deteriorating fiscal situation.

53. India can be rightly proud of its development record over the past two decades. It reflects the emergence of a much wider consensus about the importance of opening up the Indian economy to competition. The results in terms of more rapid growth and poverty reduction are impressive. But India has still fallen behind its main competitors in East Asia – and poverty remains a reality for many Indians, especially those living in the poorer states of the North and East. The government is right to set ambitious targets for growth and social development during the Tenth Plan. The key now is to implement the policy and institutional changes needed to achieve these goals. Sustained progress will no doubt be difficult, especially in the politically-charged areas of labor, power and agricultural reform. But it also promises high returns for poverty reduction in India.

### **Box 3: Summary of Priority Reforms**

#### **Fiscal Policy**

- Progressively reduce the primary deficit at the center and in states by completing tax reforms (eliminating exemptions, bringing services into the tax net, and implementing a uniform state VAT), reducing power sector losses, and phasing out petroleum subsidies.
- Reduce financial sector risks by implementing the new securitization law, linking returns on provident funds and small savings to market benchmarks, and establishing a clear framework for managing state government guarantees.
- Improve fiscal management by imposing greater fiscal discipline on state borrowing and transfers, breaking down artificial distinctions between plan and non-plan expenditures, and consolidating Centrally Sponsored Schemes.
- Improve the composition of public expenditures, by reducing the share spent on wages, pensions, interest payments, and agricultural subsidies, and increasing investment and O&M for priority social, infrastructure and agriculture programs.

#### **Delivery of Public Services**

- Reduce administrative fragmentation and reform civil service pay policy and pensions. Improve the performance of the civil service and quality of service delivery by improving public access to information, strengthening accountability, and reducing political interference.
- Refocus health, education and social safety net programs on outcomes. The central government can play an important role as an independent source for measuring progress towards agreed goals.
- Improve the private market for health care through training, public information and accreditation. Priorities for public funds are to provide clean water and sanitation, and to combat communicable diseases (including HIV/AIDS prevention).
- Support the SSA goals by providing increased public resources and improving resource use in elementary education. Schools should be more accountable to communities, with more local autonomy to find the best solutions.
- Develop a well-designed fiscal framework for local governments, that would guarantee their autonomy and accountability. Flows of funds from the center and states should be dependent on good local fiscal performance and resource mobilization.

#### **Investment Climate for Industry and Services**

- Speed up trade reform by reducing average import tariffs and phasing out tariff exemptions, specific tariffs and anti-dumping duties. Remove other product market distortions by eliminating preferential policies for small-scale players, implementing a full and uniform VAT, and phasing out remaining FDI restrictions.
- Reduce inefficiencies in factor markets by easing restrictions on hiring and firing of workers, improving SME access to credit, addressing problems in the use and transfer of land, and updating bankruptcy procedures.
- Ensure access to reliable power at reasonable costs by rationalizing power tariffs and improving the financial and operational performance of SEBs (Box 2).
- Address capacity and quality constraints in the transport sector by improving public sector performance (for roads and rail), mobilizing private sector investment (including better cost recovery for roads), phasing out price distortions (for rail), and improving the efficiency of existing capacity (for ports).

#### **Agricultural Policy and Rural Development**

- Put in place a market-based foodgrain policy which protects the poor through targeted safety nets, while mitigating drastic supply shocks through a cost effective and well-managed price stabilization mechanism.
- Reduce input subsidies which are fiscally unsustainable and distorting input use. Savings should be used to fund more productive investments in agricultural research and extension, rural roads, and rural electrification.
- Reduce regulation of domestic trading activities for major agricultural commodities and eliminate remaining trade policy distortions, including subsidized exports of rice and wheat.
- Improve access to land by revisiting current legislation on land tenancy, and building on successful initiatives to improve land administration. Devise market-based solutions to improve rural access to a larger range of financial services, at lower cost.



## PART I: ASSESSMENT OF DEVELOPMENT OUTCOMES

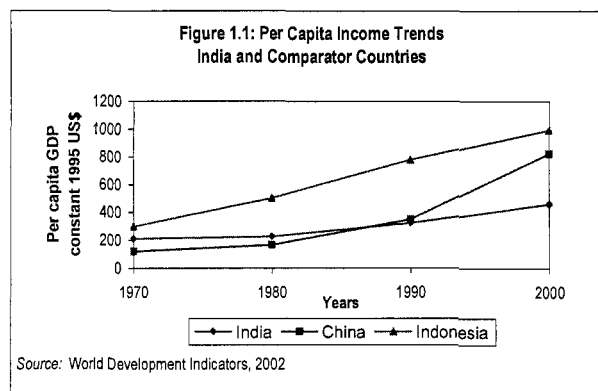
### Overview

1.1 India has continued to make progress in increasing incomes and improving living standards over the past decade. After the setback associated with the 1991 balance-of-payments crisis, economic growth picked up, income poverty has continued to decline, and many social indicators have continued to improve. These developments were supported by wide-ranging reforms launched in 1991 to open and deregulate the economy. Reforms included abolition of all quantitative restrictions on non-consumer goods, reduction in tariffs, unification of the exchange rates, adoption of more liberal rules for Foreign Direct Investment (FDI), and introduction of current account convertibility. Even though the pace of reform has slowed since the mid 1990s, cumulative changes so far have been substantial. More sectors have been opened to private activity, trade policy and the exchange-rate regime have been further liberalized, and capital markets have been reformed, leading to an improved investment climate.

1.2 Development progress has been steady, but uneven. It has been uneven across indicators of living standards, with noteworthy progress in some areas, but little or no progress in others. Poverty and improving education indicators improved, particularly for females. On the other hand, maternal and under-five mortality have hardly improved. The ratio of females to males for children under four has deteriorated, especially in richer states. And unemployment, although still low by international standards, has increased in rural areas and among educated youth. Progress has been uneven in urban and rural areas, with urban-rural inequality increasing in most individual states and also at the all-India level. Progress has been uneven also regionally. There is evidence of divergence in per capita incomes across states, with richer states increasing incomes faster than poorer ones. Because in India increases in per capita growth are strongly correlated with declines in poverty incidence, and because population growth has declined faster in richer states, poverty has become increasingly concentrated in the country's slower growing states. Aggregate outcomes at the all-India level thus mask sharp and increasing inequalities in income and social development levels across the country, with large parts of the heavily populated north and eastern states remaining particularly poor and undeveloped. There are large disparities not only between poorer and richer states, but also between rural and urban areas, between women and men, and between castes.

1.3 Recent trends also give reason for concern. Economic growth has slowed since 1997/98, from an annual average of 6.7% between 1992/93 and 1996/97 (Eighth Plan period), to 5.5% between 1997/98 and 2001/02 (Ninth Plan period). Growth slowed further in 2002/03, to an estimated 4.4%, due to the impact of poor rains on agricultural output. And fiscal performance deteriorated at the center and in states, with rising deficits and worsening public expenditure composition limiting the prospect for accelerating growth and poverty reduction.

1.4 With one third of the world's poor and over one billion people, India needs rapid growth and job creation to reduce poverty and sustain income increases for its growing population.<sup>1</sup> It starts the twenty-first century with per capita income around half that of China and Indonesia, countries that in 1970 were at comparable stages of development (Figure 1.1). In its Tenth Five Year Plan for

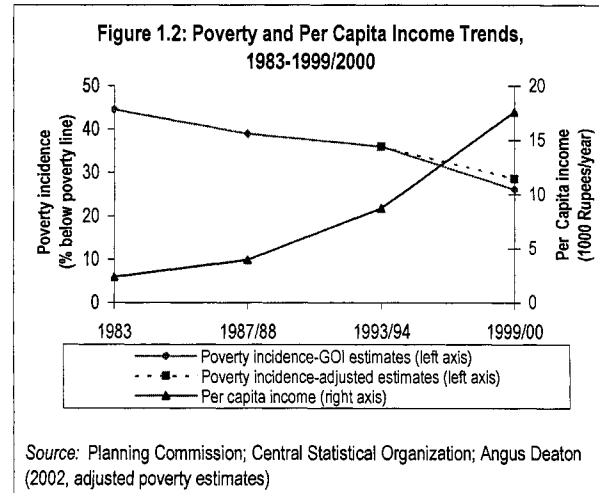


<sup>1</sup>Poverty estimated using internationally comparable poverty estimate for the mid 1990s, based on an international poverty line of US\$1 per day with adjustments for purchasing power across countries (Datt and Ravallion, 2002).

2002/03-2006/07, the Government of India (GoI) targets an average growth rate of 8% per annum. Accelerating poverty reduction does require setting India on a higher growth path. This chapter reviews the development outcomes of recent years. The remainder of the report proposes policies to accelerate development in India.

## Poverty Outcomes and Economic Performance

1.5 Income poverty declined in the 1990s, broadly in line with earlier trends (Figure 1.2).<sup>2</sup> As a result, the share of the population living below the poverty line declined from nearly half in the early 1980s, to a little over a quarter in 1999/00 (26% according to GoI official estimates or 28.6% according to alternative estimates).<sup>3</sup> Internationally comparable poverty estimates also show a decline in the proportion of people living on less than US\$1/day, from 46% in the early 1990s to 39% in 1999/00. These findings are consistent with other data sources that show increases in real agricultural wages over the 1990s, highly correlated with poverty incidence, and in consumption expenditures in the National Sample Survey's (NSS) 1999/00 employment unemployment survey (EUS).



### Box 1.1: Who are India's Poor?

Poverty is pervasive in India. It is present in the country's rapidly growing cities and vast rural areas. But it is increasingly concentrated in the country's lagging states and rural areas. Over half of India's poor now live in one of four states: Bihar, Madhya Pradesh, Orissa, and Uttar Pradesh. Over two thirds live in rural areas. In rural areas, poverty incidence is highest amongst agricultural workers, many of whom are small-scale farmers or casual laborers. People of scheduled castes and scheduled tribes are far more likely to be poor than those of other social groups, as low-caste status and gender barriers still operate as social obstacles that block or exclude them from opportunity.

India's poor suffer not only from lower incomes, but also from lower access to and quality of public services, such as basic health, education, and infrastructure. The poor often lack the leverage to ensure that state institutions serve them fairly and thus lack access to public facilities or receive goods and services of inferior quality. They must often pay for education and health services that others receive for free. For example, studies by India's Public Affairs Center (Shekhar and Balakrishnan 1999) indicate that the wealthy and middle classes are more likely to resolve their complaints at a lower cost. Corruption is often a highly regressive tax and the poor pay more of their incomes proportionately than do the wealthy and the middle class (World Bank 2002a).

<sup>2</sup> The conventional definition of poverty equates it with income or expenditure levels. In India, GoI's Planning Commission defines poverty as the level of per capita consumer expenditure sufficient to provide an average daily intake of 2400 calories per person in rural areas and 2100 calories per person in urban areas, plus a small allocation for basic non-food items. This report relies on income poverty estimates from the National Sample Survey's quinquennial rounds ("thick samples" of 1983, 1987/88, 1993/94, and 1999/00).

<sup>3</sup> Changes in the questionnaire design of the 55<sup>th</sup> Round (1999/2000) of the National Sample Survey render the official poverty estimates for that year not strictly comparable to those from previous rounds. Several researchers attempted to correct for the changes in the survey methodology. Most estimates (Sundaram and Tendulkar 2002, Deaton 2002, and Ravallion and Datt 2002) point to a 5 to 10 percentage point reduction between 1993/94 and 1999/00. Based on the national accounts, Bhalla (2002) contends that conventional poverty measures overstate India's poverty and understate recent progress. However, there are conceptual and measurement differences that lead to discrepancies in the per capita income growth rates implied by CSO's national accounts statistics and NSSO's household level statistics.

1.6 Most of the reduction in income poverty has been driven by economic growth, a result of increases in average consumption per capita (Deaton and Drèze 2002). Although India's per capita growth rates never reached East Asian levels, the acceleration of growth in the 1980s and 1990s translated into a near doubling in per capita income over the last two decades, and a one third increase in the 1990s alone (Figure 1.2).<sup>4</sup> Aggregate growth has reduced poverty, but the pattern of growth was also decisive (Ravallion and Datt 1995). Rural consumption growth reduced poverty in both rural and urban areas. Urban growth benefited the urban poor somewhat, but had no impact on rural poverty. Economic growth has also been a key determinant for the improvement in some social indicators in particular in poor states, where the private sector provides education and health services to a large share of the population.

1.7 **Macroeconomic performance.** Overall, India's economy performed well in the 1980s and in particular after the reforms of the 1990s (Table 1.1). Inflation remained low and external balances improved. GDP growth accelerated, from only 3.5% per annum in the 1960s and 1970s, to nearly 7% per annum between 1992/93 and 1996/97.<sup>5</sup> Growth was led by industry and services in the 1980s and by services in the 1990s (Table 1.2). Agriculture, forestry and fishing expanded slowly throughout the two decades. The structure of the Indian economy changed considerably as a result of these trends, with the share of agriculture declining to one fourth of total output and the share of services increasing to nearly half.

**Table 1.1: Macroeconomic Trends Over the Past Two Decades**

	1980s	1990s	1992/93-1996/97	1997/98- 2001/02	2002/03
GDP growth (% pa)	5.6	5.8	6.7	5.5	4.4
Agriculture, Forestry and Fisheries	3.4	3.0	4.7	1.8	-3.1
Industry	7.0	5.8	7.6	4.5	6.1
Services	6.9	7.6	7.5	8.1	7.1
Investment rate (% of GDP)	22.0	23.0	23.3	22.5	22.1
Private	10.0	7.8	8.0	6.6	6.3
Public	12.1	15.2	15.3	15.9	15.7
Inflation (WPI, % per annum)	8.0	8.1	8.7	4.9	2.5
General government deficit (% of GDP)	8.1	7.8	7.2	9.3	10.4
Current account balance (% of GDP)	-2.1	-1.4	-1.2	-0.7	1.0
External reserves (months of goods and services imports, end of period)	3.3	5.6	5.9	7.0	11.0

Notes: \*Eighth Plan period

\*\*Ninth Plan period

Source: Central Statistical Organization

1.8 Recent trends give rise for concern. First, fiscal aggregates of the general government (center plus states) deteriorated since 1997/98, with the overall budget deficit expanding from 7% to over 10% of GDP between 1997/98 and 2002/03. This deterioration has been due to a decline in revenue mobilization, and a significant increase in government consumption, driven by higher wages and pensions of civil

<sup>4</sup> Econometric analysis (Ravallion and Datt 1996 and 2002) using 23 surveys over the 1958-1991 period and private consumption per capita data from the national accounts reveal an elasticity of -1.2, obtained by regressing the log of the headcount poverty index against the log of private consumption per capita.

<sup>5</sup> A recent study by the Reserve Bank of India (RBI 2002c) identified two regime shifts in India's GDP growth series over the past two decades, which caused increases of the trend growth rate of GDP. The first occurred in 1981/82, in the wake of an oil shock and a severe drought. The second break occurred in 1990/91 as a result of the structural reforms and stabilization that followed the balance of payments crisis.

servants, food subsidies, and debt service. The effects of nuclear tests, tight monetary policy to keep inflation low, and higher interest rates worldwide, contributed to higher interest costs. As a result, resources available for public investment became increasingly constrained, with adverse consequences for infrastructure development and to a lesser extent for social programs. Interest rates have declined since, primarily because of low investment demand in India and the current low interest rate regime worldwide. For government and prime borrowers. However, the public debt burden remains high and small and medium-scale enterprises continue to face high interest costs. With the exception of the post 1990 crisis, when fiscal policy clearly encouraged macroeconomic stability and growth, it can be argued that fiscal policy has contributed to keeping growth below potential.

**Table 1.2: Sectoral shares of GDP, 1980/81 and 2001/02**

Sectoral share of GDP f.c. (%)	1980/81	2001/02
Agriculture, forestry and fishing	38	25
Industry	26	26
Services	36	49
	100	100

Source: Central Statistical Organization

1.9 Second, economic growth decelerated, to 5.5% on average between 1997/98 and 2001/02, and to 4.4% in 2002/03 (Table 1.1). Output from agriculture, which had performed poorly throughout the 1990s, actually contracted by 3.1% in 2002/03. Industrial growth slowed markedly between 1997/98 and 2001/02, and expanded at average rates below those of the 1980s. The only exception is the services sector, which continued to expand rapidly.

1.10 **Sectoral Output Performance.** **Agricultural** output expanded slowly in the 1980s and 1990s. Growth slowed further since 1997 partly as a result of exogenous factors (extensive droughts in many states due to poor monsoons and flooding in some northern states). Two main factors contributed to the growth slowdown. First, the impetus from the green revolution that induced productivity increases in Punjab, Haryana, Andhra Pradesh and western Uttar Pradesh, dwindled. Second, public investment in agricultural infrastructure was limited. The minimum support price for foodgrains has given farmers little incentive to diversify and filled government storage facilities with grain stocks, while keeping the market price for foodgrains artificially high. Slow agricultural growth is of concern less because of its contribution to India's overall output or food security concerns, and more because of the sector's importance in the country's economic, social and political fabric. The sector still provides employment to a large share of India's population, and an even larger share of the poor.

1.11 **Industrial** growth slowed sharply after the mid-1990s. Following liberalization in the early 1990s, output and investment in the sector expanded rapidly. However, because demand failed to expand as rapidly as expected, and facing greater competition from imports, the sector was left with excess capacity. Simultaneously, the domestic policy environment was not supportive of productivity increases. Severe infrastructure bottlenecks, such as expensive and unreliable power supply, poor roads, and several remaining distortions in product and factor markets, combined with lower external demand and rising interest rates, led to a slow down in industrial growth and investment from 1997/98 onwards. The sector has only recently begun to show signs of recovery, namely with the index of industrial production suggesting a recovery, particularly in the capital goods subsector.

1.12 Growth of the **services** sector has been strong and broad based. One of the reasons for the rapid growth of services in the 1990s is the rapid expansion of India's information technology (IT) sector, which has turned India into one of the world's leading providers of software (Box 1.2). But other services

<sup>6</sup> A recent study by the Reserve Bank of India (RBI 2002c) identified two regime shifts in India's GDP growth series over the past two decades, which caused increases of the trend growth rate of GDP. The first occurred in 1981/82, in the wake of an oil shock and a severe drought. The second break occurred in 1990/91 as a result of the structural reforms and stabilization that followed the balance of payments crisis.

have also expanded, namely transport, trade, and financial services. The national accounts reflect an increase in the value added of public administration. However, if GDP estimates were corrected for the “spurious” addition to growth caused by the use of the wage bill to estimate value added of government services, aggregate GDP growth between 1997/98 and 1999/00 would have been lower by about half a percentage point annually (Acharya 2002a).

#### **Box 1.2. India’s Success in Information Technology (IT)**

India has emerged as a leader among developing countries in providing cross-border IT services. Although the IT industry in India has more than three decades of history, its take-off into a major software business is a recent phenomenon, with the southern city of Bangalore, and more recently Hyderabad, Chennai, Mumbai and Pune emerging as competitive IT hubs. Some critics assert that India’s “new economy” has little to offer to the majority of Indians who are not engineers, and that India’s IT sector is essentially an export enclave. Others point out that India cannot live of IT services alone. Although there is some truth to these assertions, India’s new economy, beyond making an increasing contribution to GDP and exports, also sets an example for the old. It has grown from US\$ 1 billion (or 0.3% of GDP) in 1990/91, to US\$ 9.6 billion (or 2% of GDP) in 2001 and the share of IT (mainly software) in total exports, has jumped from 1% in the early 1990s, to 18% in 2001. Several factors contributed to this take-off: the existence of a skilled, English speaking workforce coming out of India’s engineering schools and earning lower wages than European and US counterparts, low dependence of IT on physical infrastructure, and introduction of current account convertibility and easing of controls and regulations in the early 1990s.

IT-enabled services such as back-office operations, remote maintenance, accounting, public call centers, medical transcription, insurance claims, database, and other bulk standards processing, are also expanding rapidly in India. While at an earlier stage of development, IT-enabled services (which require an English speaking workforce and reliable telecommunications infrastructure) have the potential for broader job creation than IT itself.

1.13 **Investment**, which in the past had enabled phases of acceleration and stability in periods of slowdown (RBI, 2001), declined markedly since 1997/98, raising concerns about future growth trends.<sup>7</sup> Public investment was clearly crowded out by expanding public consumption and debt service. Several economists (Sundarajan and Thakur 1980 and RBI 2001) agree that the slowing down of public investment in the 1990s contributed to the slowing of private investment, as there appears to be a crowding-in phenomenon between certain types of public and private investments. Private investment slowed for several reasons. Following the high growth rates of the early 1990s, firms invested and borrowed heavily in the mid 1990s, building capacity for a continued expansion in domestic demand. Businesses invested based on the expectation that the pace of regulatory and infrastructure reform and investment would remain rapid and thus contribute to higher productivity of investment. In the meantime, trade reform left some sectors more open to competition, while they still faced behind the border constraints to improved productivity. As the pace of reform slowed, interest rates rose, and the expected demand from high overall growth rates failed to materialize, many firms found themselves saddled with excess capacity and debt.

1.14 **External sector.** India’s integration into the global economy increased during the 1990s. The real depreciation of the rupee after the 1990/91 crisis promoted exports and the reduction of import barriers allowed more foreign goods into the country. Exports of goods and non-factor services rose from 7.5% of GDP in 1990/91 to 10.5% in 2001/02.

1.15 The balance of payments has strengthened considerably in recent years. The performance of merchandise exports has been somewhat erratic as the stimulus from the steep real depreciation of the rupee in the early-1990s has faded, and been replaced by upward pressure on the currency. Sluggish domestic demand growth, however, has more than offset the impact of gradual relaxation of import barriers, and import growth has been modest in recent years. The trade deficit, therefore, has roughly halved since 1990/00 from around US\$12 billion to around US\$6 billion this year. Exports of IT services have increased sharply, and remittances have edged up. The current balance, which swung into a deficit of 3.4% of GDP in 1990/91 and a further deficit of 1.7% in 1995/96, has shifted into small surplus.

<sup>7</sup> Given the low degree of openness of India’s economy, external demand has played a small role in influencing the course of business cycles.



1.16 Capital inflows picked up strongly in response to the reforms of the early-1990s but have subsequently been more modest. Foreign direct investment and equity inflows have eased from their peaks, and borrowing from both official and private creditors has typically been more moderate. The level of external debt has risen modestly and has fallen from almost 40% of GDP in the early-1990s to around 23%. The combination of an improving current balance and even modest capital inflows, however, has been enough to allow a substantial building of reserves, which have risen from US\$17 billion in 1995/96 to around to more than US\$80 billion currently – equivalent to almost 12 months of imports.

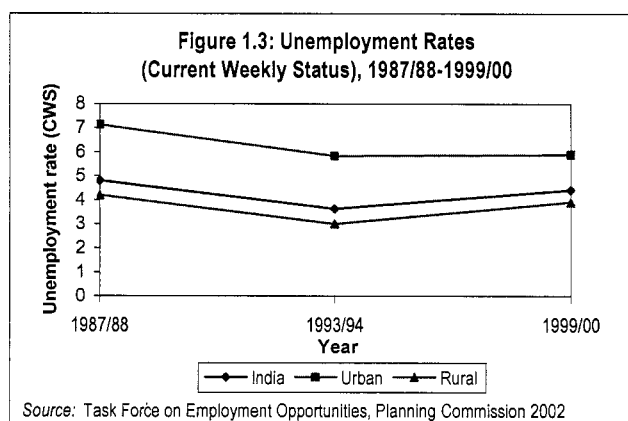
1.17 The external sector, however, continues to play a relatively modest role and India remains considerably more closed than other large Asian economies, where exports account for much larger shares of GDP – 29% in China, 34% in Indonesia and 41% in South Korea. India's share of world merchandise exports edged up from 0.5% in 1990 to 0.7% in 2001, but remains relatively modest for the size of the economy. GoI's cautious approach to opening the economy further in recent years reflects a desire to avoid a repetition of the balance of payments crisis of the early-1990s, especially as fiscal imbalances re-emerge and domestic vested interests, concerned about their ability to compete against foreign companies, increase their resistance to further trade liberalization.

1.18 **Unemployment** rates in India are not high by international standards (Table 1.3), but recent trends have raised concern, as reflected in GoI's Tenth Plan. Unemployment rates based on National Sample Survey (NSS) data have been traditionally low in India, regardless of which of the four unemployment measures (UPSS, UPS, CDW, and CDS) is used.<sup>8</sup> All four measures, however, show an increase in unemployment between 1993/94 and 1999/00, explained almost entirely by an increase in unemployment in rural areas (Figure 1.3 and Statistical Annex Table A21). An analysis of disaggregated unemployment figures in the rural sector suggests that this deceleration in rural employment growth is due to a decline in employment in agriculture, due to slow agricultural growth, combined with low capacity of rural industry and services to absorb the labor released from agriculture. The share of employment in the organized sector remains low, and unemployment rates are high among certain population groups, such as urban educated youth, and in certain states, such as Kerala, Tamil Nadu, and West Bengal.

**Table 1.3: Unemployment Rates, India and Comparator Countries**

Countries	Year	Unemployment Rate (%)
India	1999/00	4.4
China	1996	3.0
Indonesia	1998	5.5
Brazil	1998	9.0
Pakistan	2000	5.9

Source: World Employment Report 2001 (ILO)



<sup>8</sup> The NSSO provides four different measures of unemployment, which capture different facets of the labor market situation: Usual Principal Status (UPS), Usual Principal and Subsidiary Status (UPSS), Current Weekly Status (CWS), and Current Daily Status (CDS).

## Social Outcomes

1.19 Social progress in India has been uneven. **Education** indicators have improved markedly, but progress in **health** has been mixed (Table 1.4). For the first time since independence, the absolute number of illiterates in India declined between 1991 and 2001. Literacy rates rose, in particular for women. Enrollment rates of primary-aged children rose and the gap between the enrollment ratios of boys and girls declined.

**Table 1.4: Progress on Social Indicators, 1980-2000**

	1980s	1990s	2000
<b>Poverty</b>			
Poverty incidence (%)	44.5	36.0	26.1
Adjusted poverty incidence (%)	na	na	28.6
<b>Demographics</b>			
Population (million)	685	846	1027
Rate of population increase (%)	2.4	2.2	na
Overall sex ratio, 0-4 age group (females per 1000 males)	978	955	927
<b>Education</b>			
Overall literacy rate: 7+ years (%)	44	52	65
Female literacy rate as a percent of male literacy rate (%)	53	61	71
Net enrollment rate (NER): lower primary (%)	na	71	77
Net enrollment rate (NER): upper primary (%)	na	70	74
Female NER as % of male NER: lower primary (%)	na	84	90
Female NER as % of male NER: upper primary (%)	na	78	86
Dropout rate in grades 1-5 (%)	54	45	40
<b>Health</b>			
Life expectancy at birth (years)	56	60	61
Infant mortality rate 0-4 years (per 1000 live births)	115	79	68
Under-five mortality rate (per 1000 live births)	152	94	95
Maternal mortality rate (per 100,000)	na	424	540
Malnourished children below age 3 (%)	na	53	47
Prevalence of HIV (million people)	na	3.5	4.0
<b>Sanitation</b>			
Access to improved water resources (%)	na	68	78
Number of households with toilet facility (%)	na	30	36

*Notes:* Poverty estimates are for 1983, 1993/94 and 1999/00. Demographics and literacy rates are for 1981, 1991 and 2001. Enrollment rates are for 1981, 1991 and 2000. Dropout rates are for 1982, 1993 and 1999. Health and sanitation data for 1992/93 and 1998/99. HIV prevalence is for 1998 and 2001. Improved water resources defined as access to piped drinking water and handpumps  
*Sources:* Poverty - Planning Commission (based on NSS), adjusted poverty estimates - Deaton (2002); Demographics - Census; Education - NSS, Census, Dept. of Education, GoI; Health - Census, NFHS, Sample registration System; HIV-NACO; Sanitation-Census, NFHS

1.20 Health indicators improved slowly or, in some cases, not at all in the 1990s. Between 1992/93 and 1998/99, the infant mortality rate fell from 79 to 68 per 1,000 live births and population growth slowed. However, progress has been absent in reducing India's high maternal mortality and under five mortality rates, and limited in addressing malnutrition. Many of these outcomes have to do not only with health policy, but also with slow progress in improving access to safe water and sanitation.

1.21 Other trends raise concern. An estimated four million people in India are now infected by the HIV/AIDS and the rate of infection is increasing. The overall sex ratio for children under four continued to deteriorate in the 1990s.<sup>9</sup> And although polio has disappeared from most countries, India is one of the seven where polio is endemic, and in 2002 accounted for 85% of all confirmed polio cases in the world (World Health Organization 2002).

1.22 These trends are worrisome and also somewhat surprising. Worrisome, because they suggest that increased public expenditures alone will be insufficient to improve outcomes. Public expenditures on health and education have increased over the 1990s. Surprising because the 1990s witnessed a large increase in compensation to civil servants, including education and health professionals, which could have contributed to improvements in the delivery of basic education and health services. There is no evidence that it did. On the contrary, households (in particular poor households) are increasingly resorting to the private sector to provide education and health services.

### Economic and Social Outcomes: A Regional Perspective

1.23 India's good aggregate performance masks increasing divergence in per capita incomes, poverty, and other indicators of well being between richer and poorer states. There is no evidence of convergence in per capita incomes across states, as suggested by a number of time-series studies covering different time periods, including a 2002 analysis of 1980-98 growth data for India's 14 most populous states (Sachs, Bajpai and Ramiah 2002).<sup>10, 11</sup>

1.24 Although poverty declined in poorer and richer states, the extent of progress in poverty reduction varied. In richer states the rate of poverty reduction has been greater, while in the poorer states poverty reduction has been more limited. An important part of the explanation is that regional economic growth has been unbalanced, slower in the states that were poorer to start with. As noted by Deaton and Drèze (2002), the states with the poorest initial conditions grew more slowly than the rest, resulting in an increase in regional inequality.<sup>12</sup> Faster population growth in those states with initially higher incidence of poverty has led to a concentration of poverty in India's northern and eastern states (Table 1.5). In 1999/00, 76% of India's poor lived in poorer states, or states with per capita incomes lower than the all India average. Indeed, 54% of the poor now live in four states alone: Uttar Pradesh, Bihar, Orissa, and Madhya Pradesh. Making progress in poverty reduction in India requires, therefore, accelerating growth in India's lagging states.

Table 1.5: Concentration of Poverty in India

% of total number of poor	1983	1987/88	1993/94	1999/00
Poorer states*	70	70	71	76
Richer states**	27	28	26	22
Others	3	2	3	3
	100	100	100	100

Notes: \* includes AP, Assam, Bihar, Kerala, MP, Orissa, Rajasthan, UP, and W. Bengal

\*\* includes Gujarat, Haryana, Karnataka, Maharashtra, Punjab, and Tamil Nadu

Source: Staff calculations, based on Planning Commission

1.25 As will be discussed in Part II of this report, these are also states with weaker state institutions, and where government finances are most severely stressed. Recent research by the World Bank and the Confederation of Indian Industry suggests that a weaker investment climate in these lagging states may also be behind this slower growth, as will be discussed in more detail in Part III.

<sup>9</sup> The difference is due to female infanticide, the neglect of female children, and lately, the abortion of female fetuses.

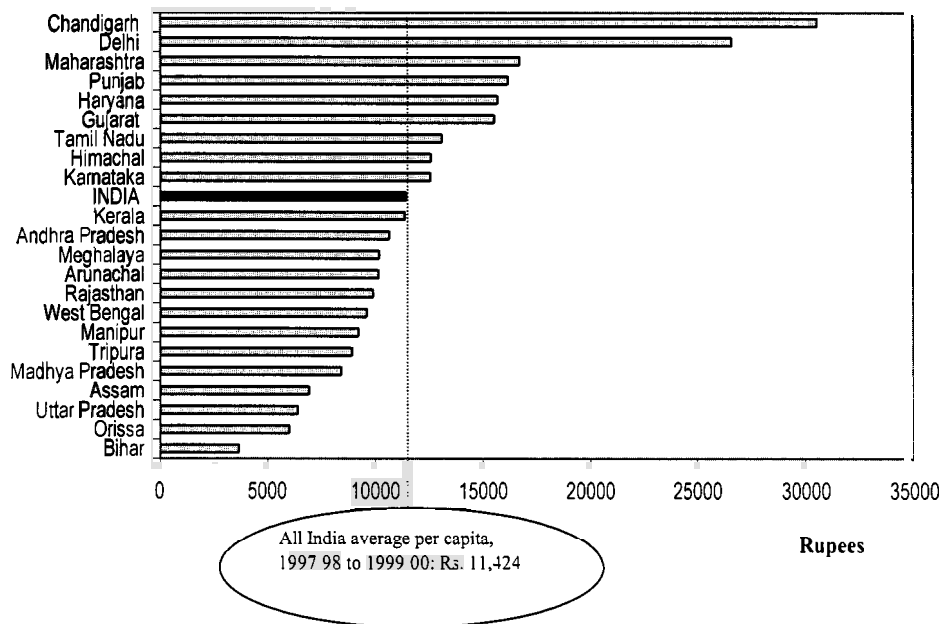
<sup>10</sup> See, for instance, Nair (1985), Chaudhury (1966), Majumdar and Kapoor (1980), Rao, Shand, and Kalirajan (1999), and Aiyar (2001).

<sup>11</sup> This is similar to the findings for China's provinces.

<sup>12</sup> Recent trends suggest that relative economic performance of India's poorest states is improving, partly because they are growing faster and partly because growth in previously fast growing states is slowing. These trends should be interpreted with caution because: (a) recent GSDP estimates are subject to considerable revisions; and (b) establishing convergence or divergence rigorously requires a time series longer than just 4-5 years.

1.26 These diverging trends in growth and poverty reduction have translated into large disparities of incomes and other indicators of living standards (Figure 1.4). Average per capita incomes in 1997-2000 varied from over 15,000 rupees in Maharashtra, Punjab, Haryana and Gujarat, to below 7,500 rupees in Orissa and Uttar Pradesh, and below 5,000 rupees in Bihar. While the relative position of a state is rarely identical across different indicators, broadly speaking, disparities in per capita income between richer and poorer states are mirrored in other development indicators, e.g., of poverty, health, education, safe water, and sanitation. The average person born in the state of Maharashtra in the mid-1990s was expected to live 65 years, whereas a person born the same year in the states of Bihar, Orissa, or Assam would not be expected to live past 57. The exception is the sex ratio, the number of females per thousand males, which is worse and deteriorating faster in richer states, such as Haryana, Maharashtra, Delhi and Punjab, than in poorer ones.

**Figure 1.4: State-Wise Per Capita Income**  
3 year average (1998/99 to 2000/01)



Source: Central Statistical Organization

### Accelerating Development in India: Goals and Policy Agenda

1.27 Increasing growth to 8% and accelerating progress in a wide range of living standards indicators are the goals set out in Government of India's Tenth Plan (Box 1.3). However, there are macroeconomic vulnerabilities and structural impediments that limit India's ability to accelerate development, as the Plan and the most recent Economic Survey recognize. Meeting these goals will require a radical departure from current policies. Some of these structural weaknesses may already help explain the growth slowdown of the past five years, suggesting that the high growth rates of the mid-1990s were an outlier, rather than a shift to a higher growth trend. They also help explain the mixed performance in improving living standards and the persistence of regional disparities.

### **Box 1.3: Targets for the Tenth Plan and Beyond**

#### **Macroeconomic**

- Increase annual economic growth to 8% during the Tenth Plan and to 9.3% during the Eleventh Plan
- Double per capita consumption level in 13 years: private consumption expenditure to grow at 6.9% per annum and per capita consumption growth at 5.3% per annum in the Tenth Plan
- Achieve 12.4% per annum growth in exports
- Restore agricultural growth to 4% per annum; increase industrial growth to 8.7%, services growth to 9.3% per annum over the Tenth Plan period
- Reduce the Gross Fiscal Deficit of the center and states from 10.4% of GDP in 2001/02 to 6.5% of GDP in 2006/07
- Increase investment rate to 28% and savings rate to 27% of GDP<sub>mp</sub>

#### **Poverty**

- Reduce the poverty ratio by 5 percentage points to 21% by 2007 and by 15 percentage points to 11% by 2012

#### **Demographics**

- Reduce the population growth rate from 21.3% between 1991 and 2001 to 16.2% between 2001 and 2011

#### **Employment**

- Provide gainful, high-quality employment to at least the addition to the labor force
- Reduce the unemployment rate to 5.3% by 2006-07

#### **Education**

- Ensure all children in school by 2003; all children to complete 5 years of schooling by 2007
- Reduce gender gaps in literacy and wage rates by at least 50% by 2007
- Increase literacy rate to 75% within the Plan period

#### **Health**

- Reduce Infant Mortality Rate from 70 to 45 per 1000 live births by 2007 and to 28 by 2012
- Reduce Maternal Mortality Rate to 2 per 1000 live births by 2007 and 1 per 1000 live births by 2012
- Reduce the average prevalence of underweight children under three from 47% to 40% by 2007
- Reduce severe under-nutrition in children in the 0-6 year age group by half
- Achieve zero-level growth of HIV/AIDS infection by 2007
- Increase utilization of public health facilities from 20% at present to 75% by 2010

#### **Sanitation**

- Provide all villages sustained access to potable drinking water within the Plan period
- Clean major polluted rivers by 2007 and other notified stretches by 2012

#### **Environment**

- Increase forest and tree cover to 25% by 2007 and 33% by 2012

*Source:* GoI Tenth Five year Plan for 2002/03 to 2006/07

1.28 The next two parts of this report look at the policy agenda to raise growth and achieve the goals of the Tenth Plan. These reforms can be grouped into two broad areas: (a) improving the management of public resources, by reducing budget deficits, reallocating spending to more productive expenditures, and enhancing the quality of service delivery; and (b) improving the investment climate and raising productivity in industry, services, agriculture and rural development. The final part of this report looks at the potential impact of these reforms on growth and poverty reduction, and the main risks that may jeopardize realization of these results.

## **PART II: POLICY AGENDA - MANAGING PUBLIC RESOURCES**

2.1 The public sector has always played a major role in India's development strategy. Reforms during the 1990s reduced the role of the state and improved the environment for private investment. However, developments in the public sector continue to have a major impact on the prospects for economic growth and poverty reduction. In this context, the recent deterioration in the fiscal position at the center and in the states is a cause for concern. The center and states combined are now spending almost all of their revenues on interest payments, subsidies, civil service salaries and pensions, administration and defense. Of particular concern are power sector losses that are placing massive stress on virtually all state budgets. As a result, there are limited resources for public investment, at the same time as large deficits are threatening to crowd out private investment. And even when funds are available, the delivery of services to the poor is constrained by weaknesses in public institutions and the regulatory framework for private sector contributions.

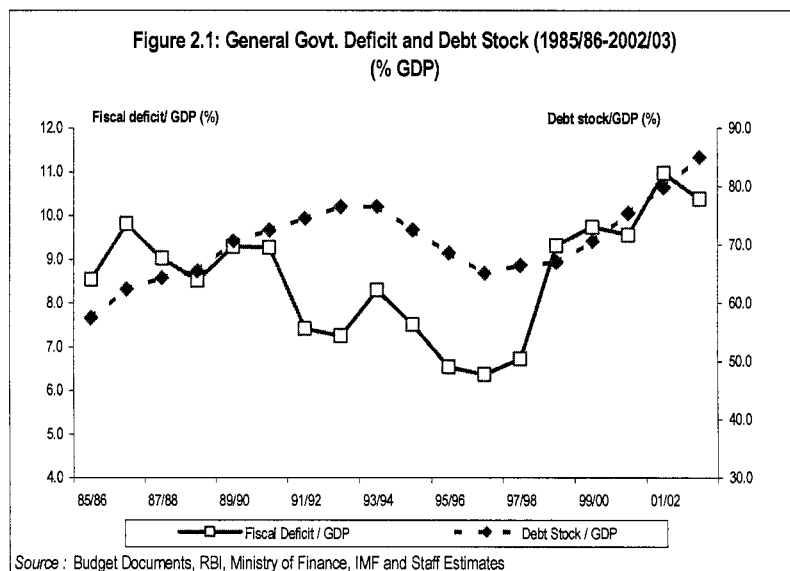
2.2 Part II.1 reviews the current debate around fiscal sustainability, and proposes a number of reforms in fiscal policy and public resource management to steadily reduce the primary deficits at the center and state levels, and improve the composition of public expenditure. Part II.2 considers longer-term reforms in the civil service to improve the delivery of public services. It then looks more closely at the situation in the health and education sectors, as well as for social safety nets, and suggests possible reforms to improve the prospects of achieving the targets set by the Tenth Plan and the Millennium Development Goals.



## II.1:FISCAL POLICY

### Introduction

2.3 India's balance-of-payments (BOP) crisis in 1991 followed an acceleration in growth to 5.6% per annum during the 1980s from a trend annual rate of 3.5% per annum over the previous three decades. But large fiscal deficits fed into current account deficits and depleted foreign exchange reserves, pushing India to the brink of default in 1991. Figure 2.1 shows that the general government fiscal deficit (center and states consolidated) averaged 9% of GDP before the crisis. Subsequently, it fell sharply during the period of high growth and fiscal restraint that marked the Eighth Plan period, but resumed growing equally sharply after 1997/98, returning to the 9-10% of GDP range during the Ninth Plan period.



2.4 Figure 2.1 also shows that the general government debt-to-GDP ratio rose from approximately 58% in 1985/86 to 85% of GDP in 2002/03, at which time public sector debt (general government plus central public enterprises) stood at 95%. Contingent liabilities from guarantees in support of loss-making public enterprises, largely in the power and irrigation sectors, amounted to 12% of GDP.

2.5 In addition to the big rise in the debt burden, the deterioration in the quality of the fiscal stance during the 1990s has been another serious concern. Table 2.1 shows trends in revenues and expenditure for the general government, with data values over 1985/86-1989/90, the five years preceding the 1991 crisis,

**Table 2.1: General Government Fiscal Trends**  
(% of GDP)

	85/86-89/90	8th Plan	9th Plan	02/03
	Avg.	Avg.	Avg.	Est. <sup>1/</sup>
<i>Revenues</i>	19.4	17.9	17.0	18.4
<i>Current expenditure<sup>2/</sup></i>	22.1	21.5	23.1	25.3
Social services	5.4	5.0	5.6	5.7
Economic services	6.5	5.8	5.5	6.5
General services	9.5	10.3	11.7	12.8
<i>Capital expenditure<sup>3/</sup></i>	6.4	3.6	3.2	3.5
<i>Gross fiscal deficit</i>	9.0	7.2	9.3	10.4
<b>Memo</b>				
Primary deficit	5.3	2.1	3.5	3.8
Revenue deficit	2.6	3.6	6.1	6.9
Interest	3.8	5.1	5.8	6.5
(Irrigation+power+transport)/GDP	4.7	3.5	3.5	3.8
(Interest+ admin.+ pensions)/GDP	6.3	8.1	9.2	10.1
(Interest+ admin.+ pensions)/Revenue	32.6	45.1	54.3	54.8

Notes: <sup>1/</sup> Revised estimates for the center and budget estimates for the states

<sup>2/</sup> Refers to Revenue expenditure in the budget

<sup>3/</sup> Refers to Capital outlay and net loans and advances from the center to the states

Sources: GOI budget documents(2003/04 and various issues), RBI bulletins, CSO, Handbook of Statistics on Indian Economy 2001/02 (RBI), Staff estimates



as a benchmark. The 1990s are divided into the period of rapid growth, 1992/93-1996/97, which coincided with the Eighth Plan; and the slowdown, 1997/98-2001/02, which coincided with the Ninth Plan period.

2.6 Revenues fell considerably during the Ninth Plan period relative to the second half of the 1980s. While 2002/03 shows a large revenue increase, it is based on the budget estimate for states, which tends to be optimistic. Compared to the average for the second half of the 1980s, capital expenditure fell by over three percentage points of GDP during the Ninth Plan, while the sum of interest, administration and pensions rose by three percentage points of GDP and a massive 22 percentage points of revenue. Revenue deficits more than doubled with spending on interest, administration and pensions crowding out that on social and physical infrastructure. Even the fiscal improvement secured during the Eighth Plan period involved a large compression of capital spending.<sup>12</sup>

**Table 2.2: Trends in Central Government Finances**  
(% of GDP)

	85/86-89/90	8 <sup>th</sup> Plan	9 <sup>th</sup> Plan	02/03	03/04
	Avg.	Avg.	Avg.	RE	BE
<i>Revenues</i>	10.4	9.2	8.9	9.7	9.3
Tax revenue (net)	7.8	6.8	6.2	6.7	6.8
Non tax revenue	2.5	2.5	2.7	3.0	2.6
<i>Current expenditure</i>	12.9	12.1	12.7	13.9	13.4
Interest payments	3.2	4.3	4.6	4.7	4.5
Subsidies	1.8	1.2	1.3	1.8	1.8
Salaries	0.0	1.1	1.0	1.3	1.2
Pensions	0.4	0.4	0.7	0.6	0.6
Defense	2.5	1.6	1.7	1.7	1.6
<i>Capital expenditure</i>	4.3	2.2	1.8	1.8	2.0
Capital outlay	2.6	1.4	1.1	1.2	1.5
Net lending <sup>1/</sup>	1.7	0.8	0.7	0.6	0.4
<i>Gross fiscal deficit <sup>2/</sup></i>	6.9	5.1	5.6	6.1	6.1
<b>Memo</b>					
Primary deficit	3.7	0.8	1.0	1.3	1.6
Revenue deficit	2.5	2.8	3.8	4.3	4.1

Notes: BE=Budget Estimates; RE=Revised Estimates

<sup>1/</sup> Excludes state's share of net small savings loans

<sup>2/</sup> Divestment receipts are treated as a financing item and not as revenues in computing the deficit

Sources: Budget documents (2003-04; various issues), Staff estimates

2.7 Table 2.2 contains information on fiscal developments at the center. Revenues declined substantially during the Ninth Plan period relative to the pre-crisis benchmark, while interest payments, subsidies,<sup>13</sup> civil service salaries<sup>14</sup> and pensions, administration and defense literally consumed 100% of revenues. The primary deficit more than halved based on the same comparison, while the revenue deficit increased substantially – which is explicable by the displacement of capital spending by rising interest payments. The fiscal deficit has been reduced, but the quality of the fiscal stance has worsened.

<sup>12</sup> It was hoped the private sector would step into the breach and invest in infrastructure; but this has not happened on the desired scale except for telecommunications. As noted in RBI (2003a), III-46, a bigger private role in infrastructure would require institutional reform and “economically efficient user charges to ensure the reasonable return on investment”.

<sup>13</sup> Explicit budgetary subsidies.

<sup>14</sup> Excluding railways and posts and telecommunications.

According to the revised estimates (RE) for 2002/03, there has been an encouraging increase in revenues compared to the Ninth Plan average; but interest payments, the primary deficit, the revenue deficit and the gross fiscal deficit have all increased.

2.8 Table 2.3 captures trends in revenues and expenditure at the consolidated state level. The story here mirrors that of the center, except that the gross fiscal deficit rose significantly after falling during the Eighth Plan period. Revenue deficits have grown alarmingly, while capital expenditure was cut in part to accommodate growing interest payments. The share in central taxes plus grants almost fully explains the decline in revenues during the Ninth Plan period relative to the second half of the 1980s. Once again, the signs of a deterioration in the fiscal stance are unmistakable. Interest spending has risen, capital expenditure has declined and developmental spending stagnated, even though the states have primary responsibility under the Constitution for poverty reduction and welfare of the population.

**Table 2.3: Trends in State Government Finances**  
(% of GDP)

	85/86-89/90	8th Plan	9th Plan	02/03
	Avg.	Avg.	Avg.	BE
<i>Revenues</i>	12.2	11.8	11.0	12.0
Share in central taxes	2.7	2.6	2.4	2.5
Grants from the center	2.2	2.1	1.7	2.2
<i>Current expenditure</i>	12.3	12.6	13.3	14.5
Education	2.6	2.5	2.7	2.7
Health and family welfare	0.8	0.7	0.7	0.7
Agriculture and allied services	1.1	0.9	0.8	0.7
Rural development	0.8	0.7	0.5	0.5
Interest payments	1.4	1.9	2.4	3.0
Administrative services	1.2	1.2	1.2	1.2
Pensions	0.4	0.7	1.0	0.9
Other	3.9	4.0	4.0	4.6
<i>Capital expenditure</i>	2.7	1.9	1.9	2.2
Capital outlay	1.9	1.5	1.5	1.8
Loans and advances (net)	0.9	0.4	0.4	0.4
<i>Gross fiscal deficit</i>	2.8	2.6	4.2	4.7
<i>Financed by:</i>				
Internal debt (net)	0.5	0.5	0.7	0.6
Loans from center (net)	1.8	1.2	0.9	0.5
Provident and insurance funds (net)	0.4	0.5	0.6	0.5
<b>Memo:</b>				
Primary deficit	1.4	0.7	1.8	1.6
Revenue deficit	0.1	0.7	2.3	2.5

Source : State Finances - RBI bulletin (various issues), Staff estimates

2.9 While a mechanical comparison of the numbers for the general government, center and states<sup>15</sup> shows that most of the increase in the general government's revenue deficit between the second half of the 1980s and the Ninth Plan period is traceable to a big deterioration in state finances, the underlying causes

<sup>15</sup> Note that the general government gross fiscal and primary deficits differ from the sum of the respective deficits at the center and states because of the netting out of interest paid by the states to the center and net lending from the center to the states (which is a component of capital expenditure).

are a complex mix of fiscal developments at the center and states. For example, regarding devolution, transfers (tax shares, grants and loans) from the center to states declined from 7.4% of GDP in 1985/86 to 5% in 2002/03. Similarly, the impact of the Fifth Pay Commission, which has had a big impact at the level of the states, is one where the latter were following the example of the center (Acharya 2001, 2002a). The states have also suffered from rising interest rates over the 1990s in part because of the high, administratively-determined interest rates on “small savings” loans (Rao 2000).

### **Government Debt Dynamics and External Vulnerability**

2.10 In spite of the growing debt burden and rising revenue deficits, one view is that the large fiscal deficit is not a serious problem because RBI’s foreign exchange reserves are at record levels as are food stocks.<sup>16</sup> This view asserts that the high fiscal deficit has served to countervail the slowdown in the private sector and that India will eventually grow out of its debt problem. Developments over the past 18 months superficially appear to support this viewpoint: inflation and interest rates have reached their lowest levels ever; foreign exchange reserves have continued their remarkable growth; and according to banks, the demand for credit from industry remains low, while there is considerable excess capacity in manufacturing.

2.11 Arguing in favor of a fiscal consolidation is the worsening trend in debt dynamics discussed below in the context of Table 2.4 and Figure 2.2. It is one thing to run a 10% deficit when general government debt is less than 60% of GDP, as it was in 1985/86, and quite another when it is more than 25 percentage points of GDP higher, as it is today, with guarantees amounting to another 12% of GDP. Moreover, the increase in the general government debt-to-GDP ratio has accelerated from less than 2 percentage points of GDP per year over the first three years of the Ninth Plan period (1997/98 to 1999/00) to over 4.5 percentage points of GDP per year over the last three years (2000/01 to 2002/03) in spite of the low interest rates. While interest rates on government debt have fallen sharply at the margin, these will have to persist for several years to improve debt dynamics, which are driven by the weighted average yield of all outstanding debt minus the growth rate.

2.12 Therefore, the second issue on which a judgment is needed is how long interest rates will stay low and whether this will be sufficient to stimulate growth without a fiscal adjustment and faster structural reforms. Interest rates been driven by a combination of weakness in the world economy, which has pushed OECD interest rates to 50-year lows,<sup>17</sup> and capital inflows. To the extent that capital flows into India have been driven by one-off events since September 11, 2001 including fears of increased scrutiny of accounts held overseas as part of anti-money laundering drives or by the instability in Iraq more recently, it would be risky to slow fiscal reform on a gamble that such flows will continue indefinitely.<sup>18</sup> On the other hand, the increase in IT-related exports and remittances from abroad, which have contributed to unprecedented back-to-back current account surpluses over the past two fiscal years, might well continue, although the bulk of the increase in RBI reserves is still explained by the capital account. If capital flows subside and the global economy picks up, interest rates will once again be determined by medium-run inflationary expectations as molded by fiscal and macro fundamentals. These are now analyzed and strengthen the case for a fiscal adjustment.

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<sup>16</sup> For a statement of this view and a refutation, see RBI (2003a), page IV - 23.

<sup>17</sup> World Bank (2003c), page 4.

<sup>18</sup> Interestingly, a coincident reserve build-up has been observed in all the South Asian countries.

### Government Debt Dynamics

2.13 Table 2.4 provides data on fiscal deficits for the general government, as well as current account balances and reserves. Also included are data on net public debt, defined as general government debt minus net domestic assets and net foreign assets of RBI plus its non-monetary liabilities; and on RBI foreign exchange reserves. Net public debt compactly captures the joint position of public debt dynamics and international liquidity.<sup>19</sup>

**Table 2.4 : Key Macroeconomic Aggregates**

	Pre-crisis period 85/86 - 89/90	Crisis 90/91	8th Plan avg.	9th Plan avg.	02/03 RE	03/04 Proj.
<b>% GDP</b>						
Gross fiscal deficit <sup>1/</sup>	9.0	9.3	7.2	9.3	10.4	9.8
Revenue deficit <sup>1/</sup>	2.6	4.0	3.6	6.1	6.9	6.2
Primary deficit <sup>1/</sup>	5.3	4.8	2.1	3.5	3.8	4.1
Debt outstanding <sup>2/</sup>	70.6	72.5	65.1	79.8	85.0	
Net public debt <sup>2/, 3/</sup>	60.1	63.8	53.8	70.2	76.3	
<b>Memo</b>						
Interest/Revenue %	19.4	24.6	28.5	34.0	35.3	
Forex reserves \$ bn <sup>2/</sup>	4.0	5.8	26.4	54.0	75.4	
Current account balance/GDP %	-2.2	-3.1	-1.2	-0.7	1.0	
Real GDP growth %	5.9	5.6	7.1	5.5	4.4	

Notes : BE= Budget Estimates, RE=Revised Estimates

<sup>1/</sup>For the general government. The figures for 2002/03 are revised estimates for central govt. and budget estimates for state governments. For 2003/04, the figures are budget estimates for center and staff estimates for states.

<sup>2/</sup>For end of last fiscal year in period. External debt is at current exchange rates.

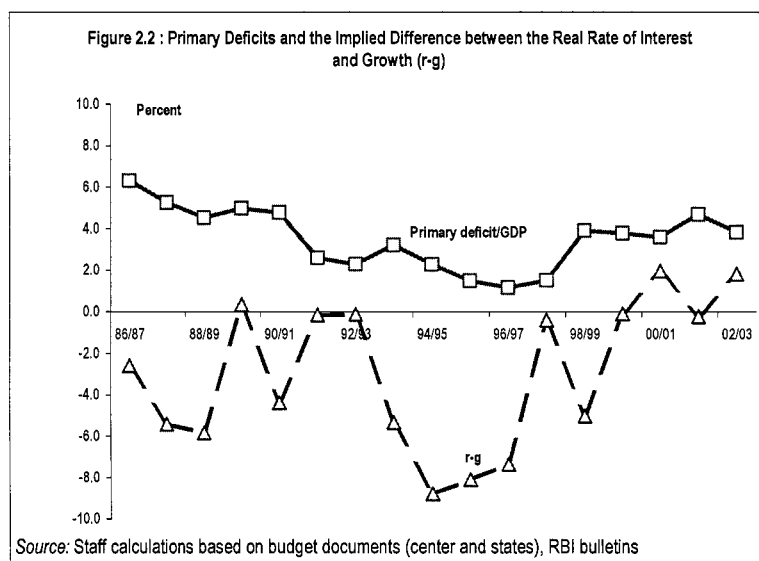
<sup>3/</sup>See text for definition

Source: Government budget documents, Handbook of Statistics on Indian Economy 2001-02, Staff estimates

2.14 Except for the primary fiscal deficit and current account balance, Table 2.4 depicts an across-the-board deterioration during the Ninth Plan relative to the second half of the 1980s and an even more striking deterioration relative to the Eighth Plan. General government debt fell from 71% of GDP at the end of 1989/90 to 65% at the end of the Eighth Plan period but then rose an alarming 15 percentage points by the end of the Ninth Plan, and another five percentage points the following year, notwithstanding the record lows in interest rates. Net public debt displays a similar trajectory: the rapid accumulation of reserves is being offset by rising government debt and sterilization.

<sup>19</sup> Analyses of public debt sustainability for Turkey, for example, use the notion of net public debt.

2.15 Interest payments consumed less than 20% of total revenues in the pre-crisis period compared to over 30% during the Ninth Plan period, while revenue deficits doubled from less than 3% in the second half of the 1980s to 6% during the Ninth Plan period and beyond, capturing a deterioration in the quality of the fiscal stance with spending on social and physical infrastructure crowded out by rising interest and other current payments as shown in Table 2.1 above. At the same time, general government debt dynamics have taken a sharp turn for the worse over the past four years, as shown in Figure 2.2, which graphs the primary deficit and implied difference between the real interest rate on the stock of government debt and the real growth rate of GDP.<sup>20, 21</sup> Primary deficits fell from pre-crisis levels during the Eighth Plan period, but have grown steadily since. The implied gap between the real interest rate on the stock of government debt and the growth rates has charted a clear upward trend after 1994/95 and has been either close to zero or positive since 1999/00, a trend that has been maintained in spite of the record lows in interest rates over the last 18 months. The average implied difference between real interest rates and growth rates rose from –6.0 percentage points during the Eighth Plan period to –0.74 percentage points during the Ninth Plan period, while the primary deficit rose from an average of 2.1% to 3.5% of GDP. Government debt dynamics have accelerated on both counts. In conjunction with the large volume of guarantees in support of loss-making public enterprises (especially in the power and irrigation sectors), this means that government debt is on a considerably faster upward trajectory than hitherto observed.



2.16 Foreign exchange reserves steadily built up after the 1991 crisis with a dramatic increase of US\$22 billion over the past fiscal year, about 40% of it after November 2002. An unknown part of this might have been driven by capital inflows related to fears of the Iraq war, and therefore, this pace of accretion might not be maintained.<sup>22</sup> Furthermore, the reserve accumulation of the past few years has been facilitated by the sluggishness of the private sector, which has prevented fiscal deficits of the order of 10% of GDP from feeding into sizable current account deficits.<sup>23</sup> Table 2.4 shows that the current account deficit averaged 2.2% of GDP in the five pre-crisis years, but less than 1% during the Ninth Plan period even though fiscal deficits were of similar size. This suggests crowding out and a relative tightening of monetary policy, discussed later in this chapter.

### *External Vulnerability*

2.17 Reserves at US\$75 billion at the end of 2002/03, which have now climbed to over \$80 billion, imply a healthy cushion against external vulnerability based on standard measures.<sup>24</sup> An additional factor

<sup>20</sup> For details of the calculations underlying Figure 2.2, see Pinto and Zahir (2003).

<sup>21</sup> A recent analysis of public debt dynamics is contained in Lahiri and Kannan (2002). For related analyses, see Buiter and Patel (1992), Acharya (2001), Ahluwalia (2002a), Srinivasan (2001), Cashin et al (2001).

<sup>22</sup> See RBI (2003b) and Kapur and Patel (2003).

<sup>23</sup> See Ahluwalia (2002a), Acharya (2001) and IMF (2002).

<sup>24</sup> GOI (2002b) contains a cross-country comparison of external debt indicators, which puts India in a favorable light.

boosting liquidity has been the shift towards long-term rupee debt in government financing after the 1991 crisis. The average maturity of dated securities issued more than doubled from 6.6 years in 1997/98 to 14.3 in 2001/02.<sup>25</sup> Moreover, about 90% of central and state government securities are held by nationalized banks, State Bank of India, RBI and LIC and the remaining are held by Unit Trust of India, NABARD, employees provident funds and private banks.<sup>26</sup>

2.18 Since the 1991 BOP crisis, interest rates have been liberalized, India has become more integrated into the world goods and capital markets and fiscal fundamentals have deteriorated relative even to the late 1980s. IMF (2002) notes that “total public sector debt relative to GDP in India is much greater than in Argentina and Brazil, while the ratio for Turkey recently shot up (during the crisis) to around that of India.” And further, primary fiscal deficits are larger – in fact, the other three countries have generally run primary surpluses over the last decade.<sup>27</sup> Cross-country comparisons are complicated by a number of factors such as the currency composition of debt, its maturity, whether or not the real exchange rate is in equilibrium, whether privatization proceeds are included in revenues (thereby artificially boosting the primary surplus, as in Argentina);<sup>28</sup> and the size of contingent liabilities and potential balance sheet problems in the banking and corporate sectors, a potent factor in the East Asian crisis of 1997/98. Further, countries with unsustainable public debt dynamics which eventually experienced crisis, such as Russia and Argentina, simultaneously had low international liquidity. This combination proved intractable, even with substantial bailout packages; indeed, bailout packages could backfire in these circumstances, as they provide the means for private portfolio investors to exit and leave the country burdened with senior IFI loans denominated in hard currency.

2.19 India’s public debt dynamics have worsened, with state government finances in a state of crisis, significant NPAs in the financial system and a large volume of guarantees. But reserves are high and bolstered by limited capital account convertibility, a flexible exchange rate and the relatively long-term nature of capital inflows, plus a pliant financial system which willingly holds long-term, rupee-denominated government paper. Hence, India is not vulnerable to the type of collapse suffered by Russia or Argentina. But it is vulnerable to sub-standard growth without a fiscal adjustment.

### **Costs of the Fiscal Stance**

2.20 The growth target for the Tenth Plan is 8% per year as part of a strategy of doubling per capita GDP by the end of the Eleventh Plan period. In order to achieve it, chapter two of the plan document notes that the investment rate will need to rise by four percentage points to a little over to 28%, with domestic savings contributing an additional 3.5 percentage points and the rise in the current account deficit (CAD) the balance of 0.5 percentage points. The ICOR is assumed to fall from 4.5 to 3.6, investments to grow at 14% per annum compared to the long-run growth rate of 6.5%, and consumption by 6.9% per annum. The chapter notes that private household savings rose over the Eighth and Ninth plans in response to the cut in tax rates and consequent rise in disposable income. This could slow down in the Tenth plan period because of the need to raise the tax/GDP ratio, and highlights the need to increase public savings from -1.7% in the base year of the Tenth plan (2001/02) to +2.1% in its last year (2006/07). Unless this happens, the plan document is quite specific that the growth target is unlikely to be reached. It also cautions that the CAD should not be used to slacken the public savings target, and that a safe upper limit is 3% of GDP.

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<sup>25</sup> RBI (2002a).

<sup>26</sup> RBI (2001b), Table 111.

<sup>27</sup> IMF (2002), chapter III, page 37.

<sup>28</sup> On this specific point and how it may have put a better complexion on debt dynamics, see Mussa (2002).

2.21 The plan document then compares the fiscal deficits projected under the above savings-investment scenario (the “desirable deficit” from a growth perspective) with the fiscal deficit that would achieve sustainability, defined as a stabilization of the government debt/GDP ratio. The comparison is summarized in Table 2.5.

**Table 2.5: Sustainable and Desirable Deficits in the Tenth Plan Context**

	Sustainable Deficit <sup>1/</sup>		Desirable Deficit <sup>2/</sup>	Base Year
	(1)	(2)	(3)	
	g=6.5	g=8.0		
Combined	7.4	8.6	6.8	9.3
Center	4.4	5.2	3.6	4.9
States	3.0	3.4	3.2	4.5

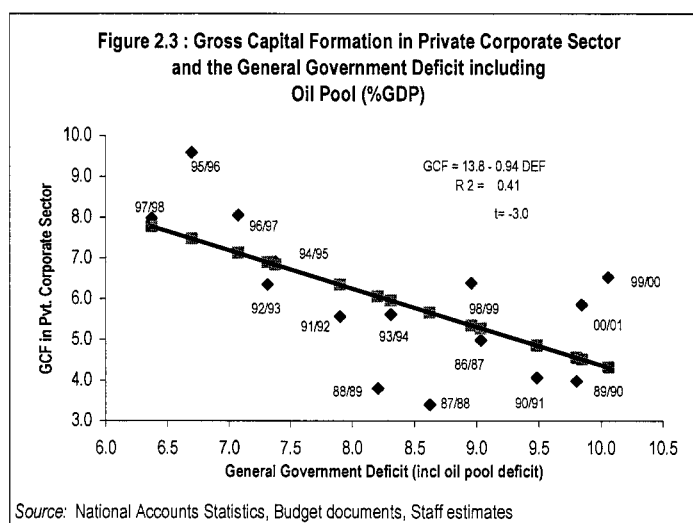
Notes:<sup>1/</sup> Table 2.21 of Tenth Plan

<sup>2/</sup> Table 2.22 of Tenth Plan

Source: Tenth Five Year Plan, Gol

Comparing columns (1) and (3) indicates the sizable fiscal correction needed at the level of the states to achieve sustainability even if growth of 8% is achieved. Comparing columns (2) and (3) shows that an even bigger fiscal correction is needed to generate the needed public savings for investment and growth. Thus, achieving debt sustainability is “easier” than generating the public savings consistent with 8% growth. In other words, growth could continue to be sub-standard even if a crisis does not erupt; avoidance of crisis is not enough.

2.22 India has a relatively closed capital account and substantial government ownership of financial institutions. The incentives would favor government financing needs coming first with a residual claim for the private sector. Further, the higher the deficit, the higher the real interest rate and therefore the fewer the private sector investment projects likely to be profitable, increasing the severity of crowding out. Not surprisingly, there is a well-documented negative association between fiscal deficits and private investment, shown in Figure 2.3.<sup>29</sup> While one could argue that a rise in fiscal deficits was needed to counteract the cyclical slowdown of the private sector, real interest rates for borrowers have remained high after 1996/97 and through 2001/02, averaging over 12% per annum as shown in Figure 2.4 based on Table 1 in Mohan (2003). There may be several reasons explaining the high real interest rates, including the interest rate liberalization of 1993/94, a sharp worsening in public debt dynamics and a pronounced shift towards long-term rupee debt in deficit financing, as discussed above. What has emerged in effect is a mixture of a “loose fiscal – tight money” policy<sup>30</sup> that has helped to keep inflation low and prevented worsening public debt dynamics from spilling



<sup>29</sup> See World Bank (2000) and Reynolds (2001).

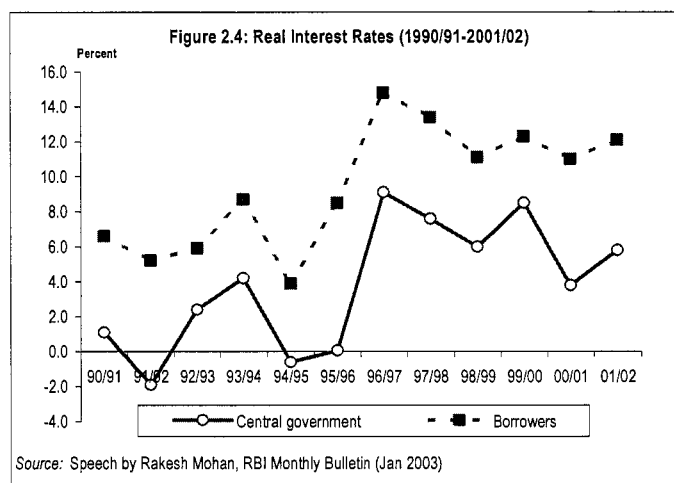
<sup>30</sup> The term “loose fiscal-tight money” refers to the additional burden on monetary policy to achieve stabilization goals and foreign exchange reserve targets given the deterioration in public finance fundamentals after 1996/97, meaning higher real interest rates for the private sector. As RBI (2003a) paragraph 4.67 notes, “The growing reliance on market borrowing for financing the fiscal deficit has been accompanied by restraint on reserve money growth and moderation of inflationary pressure. This has also had the effect of raising interest payments”. And paragraph 4.85: “Continuing foreign exchange inflows and the recessionary conditions enabled the Reserve Bank to move to a softer interest rate regime in spite of a rising fiscal deficit.” But the continuance of inflows suggests that interest rates are still “too high” in a relative sense.

over into the current account and depleting reserves, as happened in the late 1980s and led to the 1991 crisis; but this has been at the expense of growth and welfare, as rising interest payments have crowded out spending on social and physical infrastructure. Even though interest rates have declined sharply over the past 18 months or so for a variety of reasons in the external environment, public debt dynamics have continued to worsen.

2.23 In addition, there are significant micro barriers to financing the private sector, which could also act to prevent the decline in marginal interest rates on government debt from translating into low lending rates to the real sector, except for the best credits. The Indian financial system is segmented and must conform to various minimum lending and portfolio composition requirements. For example, the prime lending rate tends to be kept high because it cannot be exceeded when lending to the priority small scale sector, which might partly be motivated by the inefficient policy of small-scale industry reservations.

2.24 Insurance companies must hold at least 50% of their assets in government debt and provident funds at least 50% in central government debt and 25% in state government debt. Annual inflows into small (postal) savings, which compete with banks for deposits, are invested wholly in government debt. These have grown from an average of 7.9% of GDP in the Eighth Plan to nearly 10% currently and consume nearly the whole increase in net household financial saving. The administratively-determined interest rates for these instruments were set artificially high, at 10.5-13% until 2000 and are still 7.5-9%, with tax concessions. This worsens public debt dynamics while raising the cost of funds for banks and hence lending rates to the private sector. Moreover, banks are under pressure to reduce their NPAs, which attracts them even more towards holding government debt. And non-bank financial corporations (NBFCs), which held little government debt and funded riskier firms, represented an average of 7.7% of GDP in the Eighth Plan but only 1.1% during the Ninth. Their decline probably contributed to the rapid growth in bank deposits after 1996. Therefore dominant government ownership of the financial sector, the portfolio problems of banks, the investment rules for insurance companies and PFs, and interest rates on small savings all create a natural proclivity towards lending to the government. This is reinforced by the incentive structure in banks, whereby managers complain of being subject to criminal investigation if a loan to a private enterprise goes sour.

2.25 A last point is that the substantial shift in the composition of government spending away from capital expenditure directly inhibits private investment and reinforces the macro and micro crowding out discussed above. An empirical investigation in RBI (2002c) concludes that: (a) a rise in government consumption crowds out private consumption; (b) a rise in public investment in manufacturing crowds out private investment; and (c) public investment in infrastructure has strong positive complementarities with private investment. Thus, the rise of revenue deficits accompanied by an offsetting decline in government social and infrastructure spending has also contributed to crowding out the private sector.





## Fiscal Reform Priorities

2.26 In addition to the Tenth Plan document, concerns about the fiscal situation have been expressed in key government reports and pronouncements. According to the *Economic Survey, 2002-03*, "Higher fiscal deficits, besides constraining growth have resulted in higher government borrowings.... The revenue deficit which constituted 49.4% of the fiscal deficit in 1990/91 accounted for 70.2% of fiscal deficit in 2001/02.... While the expenditure composition both for the center and states continues to reflect a preponderance of wages, salaries, interest payments and subsidies, there has been some welcome relief on the interest rates in recent months. The high fiscal deficit continues to complicate the task of conducting counter-cyclical fiscal policies and augmenting outlays on the much needed social and physical infrastructure, and poverty alleviation programs." During the 2003/04 Union Budget discussions, the Finance Minister informed the Rajya Sabha on March 14, 2003 that "Of our revenue, 50% is swallowed by payment of just interest on (government) debt. Another 20% goes on subsidies and 25% on defense. What am I left with?"<sup>31</sup> And RBI (2003a) page IV - 1, notes that "...fiscal performance during the reform period, however, was characterized by a clear divide in the mid-1990s in the attainment of fiscal targets. There was evidence of the successful fiscal correction during 1991/92 to 1996/97 (except for 1993/94) in terms of a significant fall in the fiscal deficit and in public debt as a proportion of GDP. Since then there has been a significant reversal of trend. Indeed, many deficit indicators presently are even higher than the levels prevailing at the time of the crisis in 1991. The revenue deficit has not only persisted, but has grown in size during this period. .... Several pointers indicate a reversal of the fiscal consolidation process in the recent years. These include decline in tax to GDP ratio, downward rigidity in current expenditure, steady deterioration in public investment in productive sectors, slow progress of PSUs restructuring and faster accumulation of public debt."

2.27 In view of the preceding analysis, fiscal reforms are needed to ensure a phased reduction in the primary and revenue deficits of the center and state governments, and to reallocate expenditure toward more productive uses. Following are proposals for policy reforms in four key areas: (a) tax reform; (b) subsidy reduction; (c) financial policy; and (d) fiscal management.

### *Tax Reform*

2.28 The gross tax revenue of the central government fell from 10.3% of GDP in 1991/92 to 8.6% in 2001/02.<sup>32</sup> The goal is to raise taxes back to 10.3% of GDP by the end of the Tenth Plan. Plan projections assume a big increase in tax buoyancy from 0.8 during the Ninth Plan to 1.26 during the Tenth. Most of this increased buoyancy is expected to come from indirect taxes, customs duty in particular. Achieving this goal rests on several key assumptions: (a) complete withdrawal of import tariff exemptions (except on strategic imports); (b) a strong resumption of manufacturing sector growth, as this sector has the highest tax buoyancy; and (c) extending the tax net to include the booming services sector. The states' own tax collection is projected to be raised from 5.9% of GDP in the base year to 6.6% by the end of the Tenth Plan. This increase crucially rests on the implementation of a unified VAT covering all goods and services.

2.29 While the decline in the tax-to-GDP ratio during the 1990s is partly due to the "costs of reform", which reflects the reduction in customs and excise duties to increase competition and enhance efficiency, it also reflects the costs of incomplete reform. The shift towards direct taxes has failed to fully compensate for the reduction in indirect taxes implemented as part of the reforms during the 1990s. As the Kelkar Committee reports<sup>33</sup> emphasize, the lowering of tax rates needs to be complemented with the elimination of exemptions, the bringing into the tax net of services and agriculture and improved information technology-based tax administration. These reforms deserve the highest priority in view of the decline in the tax/GDP ratio during the 1990s and the direct positive effect this will have on reducing

<sup>31</sup> Times News Network, Times of India, New Delhi, March 14, 2003.

<sup>32</sup> Tenth Plan, Chapter 2, paragraph 2.110.

<sup>33</sup> Report of the Task Force on Direct Taxes, Report of the Task Force on Indirect Taxes, MOF, December 2002.

primary and revenue deficits. In this respect, while tax administration has been given due prominence in the Union Budget for 2003/04, there has been a tendency to increase exemptions and special rates, even in excise despite the rationalization of main rates; and there has been no move to tax agricultural income, which will perpetuate incentives to disguise non-agricultural income as agricultural income.

### ***Subsidy Reduction***

**2.30 Subsidies.** Table 2.6 presents trends in explicit subsidies of the central government. In addition, implicit subsidies as a result of below-cost power tariffs are also presented. The central food subsidy amounted to Rs.242 billion with fertilizer subsidies adding another Rs.110 billion, a total of 1.4% of GDP in 2002/03. Foodgrain and input subsidies have distorted farmer cropping and investment decisions and thereby contributed to natural resource degradation (soil nutrient imbalances, water logging, salinity, etc.). At the same time, public investments in agriculture over the last decade have declined in large part due to the pressing need to meet subsidy requirements in the foodgrain, fertilizer, irrigation, and power sectors. The main reform goal therefore would not be to achieve fiscal savings, but higher growth in agriculture by shifting central expenditures from food (subject to the maintenance of a minimum social safety net) and fertilizer subsidies towards productivity-enhancing investments, including irrigation, rural infrastructure, and research and extension. These issues are taken up in Part III.2 of this report. The petroleum subsidy amounts to about 0.4% of GDP and is to be phased out over the medium term.

**Table 2.6: Government Subsidies**

	97/98	98/99	99/00	00/01	01/02	02/03 RE	03/04 BE
<b>(Rs billion at current prices)</b>							
Food (incl sugar)	79.2	92.1	94.8	121.0	175.1	242.0	278.0
Fertilizer	99.2	116.0	132.4	138.0	126.0	110.1	127.2
Petroleum	-	-	-	-	-	62.7	81.2
Interest subsidies	0.8	14.3	13.7	1.1	2.1	7.7	1.8
Others	6.2	13.6	3.9	8.3	8.9	23.8	10.9
Total subsidies	185.4	235.9	244.9	268.4	312.1	446.2	499.1
<b>% GDP</b>							
Food (incl sugar)	0.5	0.5	0.5	0.6	0.8	1.0	1.0
Fertilizer	0.7	0.7	0.7	0.7	0.5	0.4	0.5
Total subsidies	1.2	1.4	1.3	1.3	1.4	1.8	1.8
<b>Memo (%)</b>							
Food (incl sugar)/GFD	10.7	9.5	8.9	10.0	12.1	16.3	16.7
Food /Revenue	5.9	6.2	5.2	6.3	8.7	10.2	10.9
SEB losses/GDP	0.9	1.2	1.4	1.2	1.4	-	-

Source: Government budget documents (various issues), Annual Performance of SEBs, Planning Commission (several issues)

**2.31 Power sector reform.** This is a key reform for both fiscal sustainability and spurring growth by more efficient provision of power services to industrial and commercial users and more reliable supply to the rural areas. Estimated SEB losses in 2001/02 were Rs.332 billion, approximately three times those in 1996/97.<sup>34</sup> To put this in perspective, the gross fiscal deficit of the states was 4.4% of GDP in 2001/02, or about Rs.1183 billion. Subtracting from this the actual subsidy paid by the states to SEBs of Rs.83 billion gives a fiscal deficit net of the subsidy of Rs.1100 billion. This means that if the total losses of SEBs are consolidated with the fiscal deficits of the states, these would rise on average by 30%. Given the low

<sup>34</sup> Source: Planning Commission, Government of India: *Annual Report (2001-02) on the Working of State Electricity Boards & Electricity Departments*, May, 2002. The actual financial loss is even greater because of collection problems.

level of the actual subsidy received, SEBs have been defaulting on their payments to central government agencies (suppliers and lenders) to finance a part of these losses. Bond issues by SEBs guaranteed by the state governments, which are rapidly adding to the contingent fiscal liabilities of the states, are another source of financing.<sup>35</sup> SEBs have also been “borrowing” from their own employees by running arrears on related pension and PF obligations. A consequence has been inability to maintain SEB assets.

2.32 SEB operations also entail significant T&D losses (technical as well as commercial losses and theft) which in some states are as high as 40-50%. Owing to poor collections, outstanding receivables of various state utilities have grown from Rs.145 billion in 1996/97 to Rs.248 billion in 1999/2000. Tariffs covered only 68% of the cost of supply in 2001/02. At the same time, there is high dispersion in tariffs, with commercial and industrial users cross-subsidizing agricultural and domestic consumers and being charged rates far in excess of the cost of supply. As a result of this and the poor quality of supply, many manufacturing companies install their own generators. Moreover, recent studies show that subsidies are regressive and the poor benefit little from subsidized electricity, either in urban or rural areas, providing little justification for continued subsidies to consumers.<sup>36</sup>

2.33 The financial and social case for reform is clear, as are the essential elements. Average tariffs need to be raised to reflect cost of supply; universal metering of consumption is required, especially for agricultural and domestic consumers; payments discipline needs to be enforced; and a targeted subsidy scheme needs to be introduced for poor households and farmers so that the cross-subsidy burden on industrial and commercial users can be eliminated. It is also accepted that there will be greater incentive to sustain reform with privatization of the distribution business. However, political will has often been found wanting especially in raising tariffs for farmers, or implementing better governance. The fundamental problems affecting the sector stem from the apparent unwillingness of the state and central governments to allow the sector to function along commercial and economic lines. GoI has recently initiated a few potentially decisive steps to give stronger incentives to states for reforming their power sectors. For these to work, privatization of distribution, stronger action on tariffs, governance improvement and financial restructuring are needed.

2.34 Parliament has passed a new Electricity Act, while MoF has instituted the Accelerated Power Development and Reform Program (APDRP) in support of power reforms. Other measures include the work of the Deepak Parekh Committee on state-specific reforms, and decisions to rate SEBs by independent rating agencies. The Ahluwalia Committee had recommended that the past-due arrears of SEBs to central government agencies, which amounted to Rs.415 billion at the end of February 2001, be compensated by bonds issued by the respective state governments, guaranteed by GoI and carrying a tax-free interest rate of 8.5% per annum.<sup>37</sup> A tripartite agreement involving RBI, state governments and the Ministry of Power was signed in March 2003 in this regard. Under this agreement, state governments have also agreed that in case of default of SEBs on payments of bills to central agencies, RBI would deduct at source a corresponding amount due to the states. While initial signs are encouraging, the effectiveness of this agreement in imposing a hard budget constraint on states, and thereby providing a stronger incentive for reform, will depend on its continued enforcement by GoI. APDRP is another potentially effective step. However, for APDRP to provide incentives to states for reform, the scheme needs to clearly link assistance strictly to tangible and irreversible measures on reversing SEB losses and improving governance. Without such linkage, APDRP may weaken the resolve to reform.

### ***Financial Policy***

2.35 Since 1992/93, varying but relatively small sums of money have been spent to assist nationalized banks, regional rural banks, UTI, IDBI and IFCI, with another 0.8% of 2002/03 GDP identified to help UTI, IFCI and IDBI. The banks' reported gross non-performing loans (NPLs) were 10.4% of loans as of

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<sup>35</sup> Credit Rating and Information Services of India Limited (CRISIL) (2002).

<sup>36</sup> World Bank (2001b) and (2002j).

<sup>37</sup> Report of the Expert Group, Settlement of SEB Dues, May 2001.

March 2002; net of provisions the figure was 5.5%; and net non-performing loans as a percent of assets were 2.3% or about 1.5% of GDP. While some financial analysts have suggested that NPLs are substantially understated by various “evergreening” methods, a doubling of the gross figure would put net NPLs at less than 7% of bank assets, or about 4.5% of GDP. Another indicator of risk, lending for stocks, real estate, and commodities, is less than 4% of lending. While off-balance sheet operations are equal to nearly 60% of the balance sheet, three-fourths are forward exchange contracts (half by the foreign banks) mostly related to exports and imports and often with RBI as the counter-party.<sup>38</sup> While these numbers are low in comparison with East Asia and China, this has to be looked at in the context of public sector debt that is over 90% of GDP in an environment of worsening government debt dynamics.

2.36 There are two key reform issues. The first is how to enhance the role of the financial system in efficient resource allocation. The second is how to minimize risks. The first topic is closely related to the fiscal stance. So long as deficits are high, a high proportion of bank assets will be invested in government debt. As of March 2002, about 28% of bank assets were invested in government debt and another 5.6% was with the RBI. Indian banks have one of the highest ratios of government debt to deposits in the world, similar to Latin American countries and much higher than most East Asian comparators, even after the crisis. A fiscal adjustment would clearly help and also relieve crowding out.

2.37 Measures are also needed to contain risk and manage NPAs. In this connection, the new Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act (2002), which allows banks to take over collateral more easily, could push debtors to pay up. Similarly, establishment of Credit Information Bureaus should help in sharing information on credit risk, which would lower transactions costs while also helping to control NPLs. It would particularly help with SMEs, which at present suffer from very high real lending rates owing to the perception of high risk, as noted in Mohan (2003). One topic that is relevant at present is interest rate risk. Financial institutions which have invested in long-term government paper have been making large trading profits as interest rates continued to fall, but now face risks from the possibility of rising interest rates. In an attempt to counteract this, RBI has issued a directive on creating an Investment Fluctuation Reserve. While banking regulation has improved, some of this has been offset by easing regulations to encourage restructurings and lending for housing and infrastructure, which is beset by a weak framework for user charges.

2.38 Insurance and provident funds are heavily invested in government debt, and will face losses as interest rates rise. Moreover, state provident funds have also invested in special purpose vehicles (SPVs) guaranteed by the state. Many of these assets are now no longer earning interest, making the performance of the state provident funds even more dependent on debt servicing by cash starved states, now that the guarantees are beginning to be called. The ability of these provident funds to meet their obligations is likely to affect public confidence in government debt issues more broadly. Finally, the administratively set returns on the provident funds are significantly above market rates, which encourage the management to engage in risky investments in the non-regulated portion of their portfolio and, more generally, create a potential contingent liability for the central and state governments along the lines of UTI. Linking rates on the provident fund more closely to the market, and reducing the role of administratively fixed rates, would help control the continued build-up of these problems. A similar link to rates on small savings would save interest costs for states.

2.39 **Guarantees.** A critical issue at the state-level pertains to contingent liabilities stemming from borrowings of parastatals guaranteed by state governments. According to a recent study, such guarantees have risen sharply after 1996, mostly in connection with borrowings by State Electricity Boards (SEBs) and special purpose vehicles (SPVs) established in connection with large irrigation projects.<sup>39</sup> CRISIL estimates that of the market borrowings by state-level entities guaranteed between 1995 and 2002, Rs.440 billion will be called over the next five years. While this may not seem much, this estimate excludes

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<sup>38</sup> While not a serious issue at present, this could potentially encumber RBI reserves and bears monitoring.

<sup>39</sup> CRISIL (2002).

guaranteed loans from banks/FIs such as NABARD, HUDCO, LIC, NCDC, REC, public sector banks and regional rural banks. Moreover, the guarantors themselves, i.e., the state governments, are already heavily indebted. Not surprisingly, the spread on state guaranteed bonds relative to central government securities widened from 2-2.5% in 2000 to over 4% in 2002. Another problem is that even when state-guaranteed bonds are not being serviced, creditors do not treat this as an NPA unless the guarantee is invoked and payment not received for two quarters after this. There is reluctance to invoke guarantees and so defaults remain hidden, adding to the uncertainty and instability. Given the extensive list of creditors, a default will hurt the integrity and credibility of public institutions. There is need for a clear and transparent framework for guarantees to contain the problem. One idea is to create a guarantee redemption fund<sup>40</sup>, though the question is how this will be funded given fiscal constraints. Besides, it will work only in conjunction with a correction of the fundamental problems in power and irrigation.

### ***Fiscal Management***

2.40 There is growing recognition that to improve fiscal policies fiscal institutions need to be strengthened. This will require changes at the central level, the state level, and in center-state fiscal relations. The central government needs to lead by example, by getting its own house in order and providing the right incentives for fiscal adjustment at the state level. At the same time, it needs to give states sufficient flexibility to use their limited resources efficiently.

2.41 **Legislating for fiscal prudence.** The Fiscal Responsibility and Budget Management Bill (FRBM), passed by the Lok Sabha (lower house of parliament) in early 2003, mandates elimination of the center's revenue deficit by March 2008. The FRBM pertains only to the central government, but three states – Karnataka, Punjab, and Tamil Nadu -- have so far passed similar Acts to limit their own deficits, and others are following suit. The proof of the usefulness of these pieces of legislation will be actual progress towards their fiscal goals. A useful feature of these Acts is the requirement that the central and concerned state governments annually publish multi-year fiscal strategies, that is, develop time-bound road maps for restoring fiscal sustainability, and publicly monitor progress against these. This exercise has the potential of enhancing the credibility of India's fiscal policy if carefully implemented.

2.42 **State borrowing.** While states will ultimately have to be responsible for their own fiscal adjustment, reforming the borrowing regime within which they operate ("hardening their budget constraints") will also help induce fiscal reform. Global borrowing caps – covering both on-budget borrowing and off-budget borrowing through state-level public enterprises and special purpose vehicles the debt-servicing of which becomes a contingent liability of the budget – should be introduced and enforced by GoI, using powers under Article 293 of the Constitution (for progress to date in this regard, see the next paragraph). In return for much tighter control by GoI over the total annual quantum of borrowing, states could be given much greater freedom over how they arrange that borrowing. States should be allowed to borrow responsibly from the markets within their global cap, and borrowing from captive sources – small savings, negotiated loans, GoI loans – should be phased out. If necessary, a safety-net for uncreditworthy borrowers can be provided.

2.43 **Performance and reform-based transfers.** The volume of center-to-states transfers linked to reform and performance needs to be expanded. In this regard, the creation of the Fiscal Reforms Facility (FRF), as per the recommendation of the Eleventh Finance Commission, and the APDRP for the power sector are steps in the right direction. The Fiscal Reform Facility provides grant funding for states which reduce their revenue deficit as a ratio of revenue receipts. Though the funding attached to the FRF is small given its universal coverage (only 2% of all transfers to the states), it has had a significant impact. First, it has required states to draw up "Medium Term Fiscal Restructuring Plans" (MTFRPs) which, for the first time, have placed fiscal policy at the state-level in a medium-term strategic framework. Second, the borrowing levels agreed on under the MTFRPs have started to take on the nature of global borrowing

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<sup>40</sup> RBI (2003e).

caps, and thus have helped GoI to start to discipline state borrowing in an environment characterized by multiple borrowing windows. (Less progress, however, has been made in preventing states circumvent central controls on budget borrowing through use of off-budget special purpose vehicles. Orders issued by GoI and RBI seem to have had little impact in this regard.) In 2002/03, the FRF also started to provide authorization for qualifying states to borrow additional funds from the market. Multilateral agencies also provide financing to reforming states through GoI. It would be useful for assistance to fiscal reformers to be passed on as grants to states, rather than loans, both to increase the incentives for reform, and to help such states reduce their debt burden. Public reporting of access by various states to reform facilities and reasons for both access and denial to access will help ensure transparency and consistency.

**2.44 Measures to simplify expenditure management.** While India's five-year plans help provide a strategic framework for development efforts, the division of budgetary resources into "plan" and "non-plan" is increasingly recognized as counter-productive. It adds complexity to the budgeting process, and also perpetuates a perception that plan spending is always better than non-plan, and should always be increased. This militates against fiscal correction, and leads to chronic under funding of maintenance (non-plan) relative to capital spending (plan). Unfortunately, substantial GoI assistance is provided for state plan spending making elimination of the plan/non-plan distinction at the state level a complex and unpopular proposition. But GoI could take the lead by abolishing the distinction at the central level. GoI could also propose to states that its financial support to them would be delinked from their annual plans. Funding currently provided as plan support would be provided on the basis of an agreed and explicit set of criteria – which initially could be based on those currently in place – but could be termed "development support" rather than "plan support". Any such move would require consensus among states to succeed. GoI could help build this support by announcing that this move would enable funding for non-plan areas, such as maintenance.

**2.45 Centrally Sponsored Schemes (CSSs)** are provided by GoI to the states, largely (though not entirely) as grants, for the achievement of national goals such as poverty alleviation and universal enrollment. However, they have tended to proliferate, and there are now more than 300, leading to budgetary rigidity and poor implementation at the state level. A practical solution would be to consolidate the CSSs into a smaller number of programs, with a minimum size, and flexibility for the states to run these as per their needs and priorities. Some central ministries have already moved in this direction by adopting a cafeteria approach whereby a cluster of CSSs are clubbed together under one umbrella scheme and the selection of individual schemes from this cluster is left to the states.

### **Government Debt Projections: Why Fiscal Adjustment?**

**2.46** The case for fiscal adjustment is illustrated by general government debt projections to the end of the Tenth Plan period, 2006/07, under a base-case scenario of "no reform" versus a "reform" scenario. In both scenarios, the debt trajectory is driven mainly by the primary (non-interest) fiscal deficit as, based on actual developments in recent years, interest rates are unlikely to be substantially below growth rates, absent an undesirable reversion to financial repression. However, given the extraordinarily low interest rates because of the weak global economy, it is assumed that real interest rates remain below the growth rate for a year or two, depending upon the scenario (even though, as noted above, the average interest rate on government debt has been close to or above growth rates for the past four years). Two other factors deserve emphasis: extrapolating from current trends, the pressure to fully absorb SEB losses into state fiscal deficits will grow, effectively raising the general government primary deficit by this amount; and it would be prudent to assume that guarantees, which amounted to 12% of GDP in 2002/03, and which have generally been made in support of loss-making enterprises, will devolve at the rate of 1% of GDP per year over the projection horizon.<sup>41</sup>

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<sup>41</sup> Note that this assumption pertains only to the existing stock of guarantees, and does not take account of any new guarantees which may be issued after 2002/03.

2.47 An implication of the above is that if the goal is to either stabilize or reduce the debt/GDP ratio, generating primary fiscal surpluses is a must. Therefore, the focus of reform will have to be on cutting the primary deficit and raising growth. Moreover, it is envisaged that the cut in the primary deficit will be achieved without reducing capital expenditure. Thus, cuts in the primary deficit will automatically mean cuts in the revenue deficit, improving the quality of public spending. However, as discussed below, the net impact on the revenue deficit will also depend upon the path of interest payments.<sup>42</sup> In terms of fiscal measures, revenue mobilization needs to be given top priority, as in a comparative international context, revenues are low and debt is high while spending is roughly in line with other countries.<sup>43</sup> The major policy levers flowing out of the preceding analysis are raising tax revenues, reducing SEB losses and eliminating the petroleum subsidy, supplemented with structural reforms to spur growth. The base case assumes that fiscal and structural reforms will proceed slowly or not at all, while the reform scenario assumes a systematic plan to implement the needed fiscal and structural reforms over the Tenth Plan period. Box 2.1 summarizes the assumptions underpinning the two scenarios.

### Box 2.1: Assumptions Underlying Debt/Deficit Projections

The **initial level of general government debt** is 85.6% of GDP, its level at the end of 2002/03, (including about 0.8% of GDP proposed for bailouts in connection with UTI, IDBI and IFCI).

The **primary deficit** of the general government stays at 3.5% of GDP in the *base case*, a little below its average level over the past six years.<sup>44</sup> In the *reform scenario*, the primary deficit goes down linearly from 3.5% of GDP to 0.7% by the last year. This comes from raising central government revenue by 1.7 percentage points and state revenues by 0.7 percentage points by the terminal year as envisaged in the Tenth Plan document; and eliminating the petroleum subsidy of 0.4% of GDP. It is assumed that taxes rise as a result of eliminating exemptions, widening the tax net to include services and implementing the state VAT.

**Food and fertilizer subsidies** amount to about 1.4% of GDP. Under reforms, 0.5% of GDP is maintained as a minimum social safety net; the balance of 0.9% is phased out while productivity-enhancing investments in agriculture, such as rural infrastructure and research and extension, increase by the same amount. There is no change in the base case.

**SEB losses** remain 1.5% of GDP in the *base case* and go linearly to zero by the terminal year as a result of aggressive power sector reforms in the *reform scenario*.

**Divestment receipts** remain 0.5% of GDP in both scenarios.

**Guarantees** (contingent liabilities, CL) accumulated as of end 2002/03 devolve at the rate of 1% of GDP per year in both scenarios.

**Growth, real interest rates and inflation (%)** are as follows:<sup>45</sup>

	2003/04	2004/05	2005/06	2006/07
Growth (base)	5.5	5.0	5.0	5.0
Real interest rate (base)	4.0	5.0	5.5	5.5
Inflation (base)	5.5	5.0	5.0	5.0
Growth (reform)	5.5	7.0	7.5	8.0
Real interest rate (reform)	4.0	6.5	7.5	8.0
Inflation (reform)	5.0	3.5	3.5	3.5

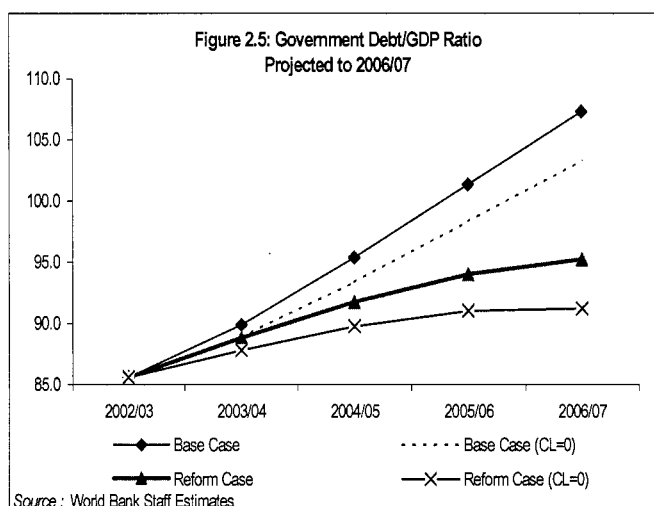
<sup>42</sup> GoI has initiated debt swaps and prepayment of external debt in order to reduce interest payments. However, these measures are unlikely to be a substitute for a fundamental fiscal adjustment.

<sup>43</sup> IMF (2002), III: "The Fiscal Situation in International Perspective".

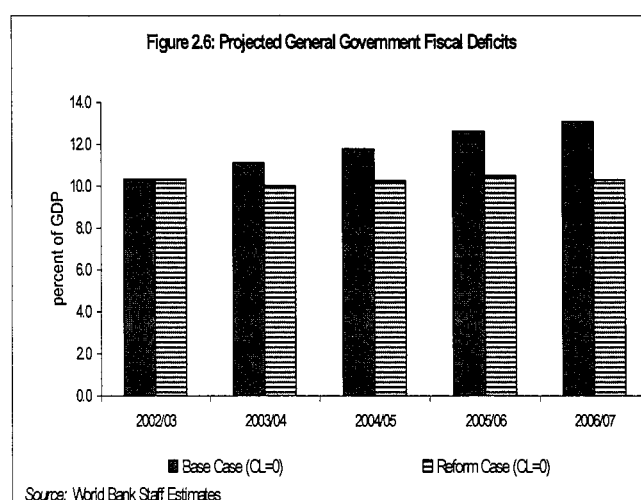
<sup>44</sup> The primary deficit incorporates a portion of seigniorage in the form of RBI profits and dividends, which enter non-tax revenue.

<sup>45</sup> The 8% Tenth Plan target would imply a growth rate of 8.9% per year over the remaining years of the Tenth Plan period, which seems unattainable at this point. The base case assumes a compound average growth rate of 5% during the Tenth Plan period and the reform scenario, 6.5%, reaching 8% in the terminal year.

2.48 The debt/GDP trajectory under Scenarios 1 and 2 are presented in Figure 2.5. In the base case, the general government debt/GDP ratio reaches 107% by the end of the Tenth Plan period. In the reform scenario, it reaches 95%. These results are being driven by the general government primary deficit, SEB losses and the calling of guarantees, and underline the need for implementing fiscal and structural reforms. The broken lines are debt/GDP excluding contingent liabilities, which would lower the debt/GDP ratio to 103% by 2006/07 in the base case and 91% in the reform scenario.



2.49 Figure 2.6 projects the general government fiscal deficit/GDP ratio under the two scenarios described above. For this exercise, the calling of guarantees is ignored in projecting debt levels and hence interest payments. While SEB losses are factored into the projection of debt levels and interest payments, they are not included in the deficits shown in Figure 2.6 for comparability with present deficit reporting practices; thus, the “true” picture especially under the base case is likely to be worse than depicted in Figure 2.6 unless power sector losses are aggressively eliminated. In the base case, deficits rise steadily to 13% of GDP, as one would expect with primary deficits at 3.5% of GDP, debt exceeding 100% of GDP and nominal interest rates of some 10%. Under reforms, deficits remain in the 10% of GDP range because of the drag exerted by the high debt stock and the impact of rising interest rates as growth picks up; deficits will decline slowly as debt levels are brought under control.<sup>46</sup> The only sure way to bring about a faster decline is to achieve primary fiscal surpluses.



<sup>46</sup> The deficit projections here, which are repeated in Table 2.7, are substantially higher than those reported in Table 2.5 based on the macroeconomic framework for the Tenth Plan. The reason is that Table 2.5 is formulated on the basis on either achieving debt sustainability (at a minimum) or the growth target of 8% per annum (much more difficult); in this sense, it embodies an ideal outcome. In contrast, the projections in Figure 2.5 and Table 2.7 are more in the spirit of a probable outcome given conditions at the end of 2002/03 and the scenarios specified in Box 2.1.



2.50 Table 2.7 brings out the potential for a more efficient composition of public spending under reform. While there is not much difference in interest payments between the two scenarios (because of the high level of initial debt, the absence of primary fiscal surpluses even in the reform scenario and similar levels of nominal interest rates), the reform scenario permits a significantly higher level of “other spending” (defined as total spending minus subsidies and interest) by the end of the Tenth Plan period. While the increase in revenues (+2.4 percentage points of GDP), elimination of petroleum subsidy (0.4 percentage points) and reduction in food and fertilizer subsidies (0.9 percentage points) will act to reduce the general government revenue deficit by close to 4 percentage points of GDP, interest payments are projected to rise by about 3 percentage points – from 6.5% of GDP in the first year of the Tenth Plan to about 9.5% of GDP by the terminal year, 2006/07. Thus, the net reduction in the revenue deficit will only be about 1 percentage point of GDP; but the quality of spending will have vastly improved.

**Table 2.7: Fiscal Projections**  
(% of GDP)

	2003/04	2004/05	2005/06	2006/07	2003/04	2004/05	2005/06	2006/07
	<b>Base Case</b>				<b>Reform Case</b>			
Primary deficit	3.5	3.5	3.5	3.5	2.8	2.1	1.4	0.7
Interest payments	7.6	8.3	9.1	9.6	7.2	8.1	9.1	9.6
Fiscal deficit	11.1	11.8	12.6	13.1	10.0	10.2	10.5	10.3
Revenues	17.5	17.5	17.5	17.5	18.1	18.7	19.3	19.9
Total spending	28.6	29.3	30.1	30.6	28.1	28.9	29.8	30.2
Subsidies	1.8	1.8	1.8	1.8	1.5	1.2	0.9	0.5
Other spending	19.2	19.2	19.2	19.2	19.4	19.6	19.8	20.1
Interest/Revenue (%)	43.3	47.2	51.9	54.7	39.8	43.6	47.1	48.2

Source: World Bank Staff Estimates.

2.51 Three points emerge: (a) it is not going to be easy to eliminate revenue deficits by 2007/08. Further, the focus must be on raising revenues, cutting subsidies and controlling salaries, i.e., on the non-interest component of the revenue deficit, as there is little or no control over interest payments. In the same vein, it may be necessary to lay down intermediate targets by specific budgetary category in the medium-term fiscal frameworks required by the central and state-level Fiscal Responsibility Acts. (b) Even under a reform scenario, the government debt burden will continue to be heavy during the medium term. And (c), without reform, the debt burden and ratio of interest payments to revenues will increase quickly and fuel inflationary expectations and eventually, higher actual inflation. Private investment will be dampened if the private sector feels it is going to be taxed to service the debt, leading to anemic growth.

2.52 To conclude, a program of progressive and phased fiscal adjustment must be a cornerstone of GoI's attempts to spur poverty-reducing growth and avoid an unsustainable path for public debt. Even in a reform scenario, the general government fiscal deficit is likely to remain in the 10% range over the next few years, although with primary deficits more-or-less eliminated by the end of the Tenth Plan period, the deficit should subsequently decline as debt levels and interest payments are brought under control. The focus needs to be on tax reform and eliminating SEB losses; the re-allocation of food and fertilizer subsidies amounting to about 1% of GDP towards rural infrastructure and agricultural R&E (while maintaining 0.5% of GDP as a minimum food social safety net) will raise development spending without a negative fiscal effect.

2.53 Fortunately, India is not facing an imminent macroeconomic crisis of the type witnessed in Argentina or Russia, even though it is paying a heavy price in terms of growth and welfare for its current fiscal stance. On the positive side, India has the time to put in place an orderly fiscal adjustment over the

Tenth Plan period. At the same time, in the absence of an impending crisis, it is hard to develop the political momentum for reform. Indeed, in some key areas, such as the power sector, there are strong political and vested interests against reform. India has clearly recognized the need for fiscal adjustment in the Tenth Plan and in recent legislation. The challenge now is for GoI and the states to translate this commitment into an overall road map as well as specific policies for fiscal consolidation. The pay-off in terms of freeing up resources for priority public programs and improving the climate for private investment will be well worth the effort.



## II.2:DELIVERY OF PUBLIC SERVICES

### Introduction

2.54 Sustained growth is the most powerful driver of poverty reduction. But poverty reduction also requires investment in human development. Health and education are the most important assets of the poor, allowing them to both contribute to and benefit from growth through higher-paying employment. In addition, when incomes fall below minimum standards, the poor and vulnerable need access to effective safety nets. Delivery of social services requires increasing the level, but more importantly the quality of public expenditures in these areas. In turn, this requires improving the governance and productivity of India's civil service at the center, state and local levels. In many of India's poorest states, such as Bihar and Uttar Pradesh, the private sector delivers health and education services to a large share of the population, including the poor. Improving service delivery will therefore require an appropriate regulatory framework for private sector contributions in the health and education sectors.

2.55 This section reviews the major challenges facing the delivery of public services in India today. It starts by looking at the current size, structure, cost and contribution of the civil service, and suggests a number of ways to improve the performance of the civil service and the quality of public service delivery. Critically important are reforms to improve the transparency, accountability and independence of the civil service. A number of states are already implementing innovative reforms in these areas, often with the aid of IT technology. The challenge will be to find ways to broaden these initiatives and apply them across the country, including in some of the poorer states where the governance environment is weak. This section then turns to look more closely at the situation in the health and education sectors, as well as for social safety nets, focusing on the prospects for achieving the targets set by the Tenth Plan and the Millennium Development Goals. It stresses the importance of harnessing both the public and private sectors to achieving social outcomes, with careful monitoring of progress along the way. This section concludes with a few reflections on the decentralization agenda and the prospects for successful public sector reform in the future.

### Civil Service Reform

#### *Size and Structure of the Civil Service*

2.56 In terms of aggregate numbers, India's civil service is not particularly overstuffed in comparison with other countries. With central government civilian employment of around 3.4 million, estimated state employment of around six million, and another four million or so teachers and health workers working in government and grant-in-aid institutions, India's civil service employment is around 1.4 per 100 of population. Although international comparisons can be tricky, the average for Asia in the 1990s was around 2.6 employees per 100, and for the OECD countries it was 7.7 per 100.

2.57 However, while India's civil service is not unduly large by global standards, there is a pronounced imbalance in skills mix. Around 93% of the civil service is comprised of Class III and IV employees for both GoI and various state governments. Class III encompasses a number of front-line delivery workers, but also includes a large number of office staff (e.g., clerks, typists) whose functions are rapidly being made redundant by advances in information technology. Class IV employees function entirely in a support role (e.g., peons, sweepers, messengers, watchmen), and most could be let go without any discernable impact upon government functioning. This over abundance in support and logistical personnel often exists alongside chronic shortages of skilled staff in rural schools and health clinics.

2.58 Changes in the skills mix need to be accompanied by measures to reduce administrative fragmentation. Within GoI and in many states, the number of ministers, ministries and departments has proliferated far beyond any rational assignment of functions. The number of cabinet ministers for OECD countries has come down in recent years to an average of 14. GOI has 31 cabinet ministers and another 45 ministers of state. Most Indian states have between 35-40 cabinet departments, and some states such

as Uttar Pradesh can have over 70. Compounding the problem are relatively weak mechanisms for policy coordination in many states, since most departments report directly through their own minister. Nor does fragmentation end with administrative structures. Budget heads are not always closely aligned with departments. The civil service is divided into dozens of cadres, each with its own service and terms and conditions, whose controlling authorities are widely disbursed throughout the various departments. Rigid terms and conditions make it difficult to transfer staff between cadres where they can be better utilized. Institutional reforms are therefore needed to reduce the current administrative fragmentation and align the structure of the civil service more closely with modern-day functions.

### *Costs of the Civil Service*

2.59 The Fifth Pay Commission has been called “the single largest adverse shock to India’s strained public finances in the last decade” and an act of “fiscal profligacy” without parallel (Godbole 1997, Acharya 2001). As a result, the compensation paid by GoI to civil servants (here defined as salaries and dearness allowance) rose by around 40% between 1996/97 and 1997/98. Over the decade of the 1990s, GoI’s wage bill has risen by an average nominal

**Table 2.8: Ratio of Civil Service Salary and Dearness Allowance to GDP for GoI and Selected States**

(in %)

	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
	Actual	Actual	Actual	Actual	Actual	Actual
GoI	1.3	1.2	1.6	1.5	1.5	1.4
Andhra Pradesh	4.8	4.3	5.0	4.7	5.4	5.5
Karnataka	n.a	n.a	4.9	4.5	4.8	4.4
Orissa	7.0	8.3	7.6	9.1	9.2	8.6
Rajasthan	n.a	6.8	7.0	8.6	8.2	7.9
Uttar Pradesh	5.6	5.4	6.2	6.1	5.9	6.0

Notes: GoI data on salaries is based on salaries for sanctioned strength of central government employees

Sources: Various Budget Documents, Central Statistical Organisation

rate of 14.3% per annum, substantially higher than the average increase in the consumer price index (9.5% per annum) over this period. As Table 2.8 indicates, the situation in the states is even more dire.

In this sample of states, which includes a mixture of the richer southern states and poorer northern ones, the wage bill increased on average by nearly 1% of state GDP between 1996/97 and 1998/99. The example of Orissa is extreme but not atypical. During the 1990s, Orissa’s salary and pension obligations increased 4.7 times, while revenues increased approximately threefold. By 1999/00, over 180% of Orissa’s own source revenues were going to cover salary and pension expenses.

**Table 2.9: Ratio of Average Wages in the Public and Private Sector for Selected Categories of Employment**

Occupation*	1993/94	1999/00
Professional, technicians and related workers	1.52	1.72
Engineers	1.07	1.34
Engineering technicians	1.3	1.27
Physicians and surgeons	1.65	2.0
Nurses	2.0	2.0
Teachers	1.75	2.02
Administrative, executive and managerial workers	1.26	1.42
Clerical and related workers	1.6	1.74
Stenographers, typists, etc.	1.69	2.14
General clerks (receptionist, office attendants, etc.)	1.54	1.72
Service workers	2.25	2.45
Sweepers, cleaners, building caretakers	1.79	1.93
All	1.92	2.33

Notes:\* Based on National Classification of Occupations (ILO, 1968)

Source: Preliminary results based on 50th and 55th NSS rounds, from forthcoming “Wage Differentials Between the Public and Private Sectors in India”

2.60 Table 2.9 uses National Sample Survey Data to demonstrate that wages for

selected categories of staff are consistently higher than they could expect to make in the private sector, with premiums ranging from 27% for engineering technicians to 145% for low-end service workers. For teachers, the premium is around 100%.<sup>47</sup> This provides further evidence that, even prior to the recent salary increases, the vast majority of Indian civil servants were already well-compensated compared to other employees – a finding that helps explain the low attrition rates throughout the public sector even for highly-skilled positions.

2.61 Recent experience would suggest it may be wise to hold off on the practice of holding periodic pay commissions, which has provided impetus for significant wage increases. Instead, GoI and state governments could opt for limited annual wage increases, or even pursue a freeze for 2-3 years, followed by a limited relaxation for skilled positions. Alternatively, as recommended by the Fifth Pay Commission, the process of constituting commissions every ten years could be abandoned in favor of a permanent pay commission, which could continuously analyze and make recommendations regarding appropriate compensation in consultation with the states. Whatever system is adopted, greater emphasis needs to be given to local market comparators (particularly those involving the private sector) in determining salary levels. Efforts to rationalize the number of cadres and review the classification of posts would also help to improve managerial flexibility and consistency between various categories of employees.

2.62 The costs of the civil service are raised further by burgeoning pension liabilities. At the center, pension spending for civil servants increased dramatically during the 1990s, with average yearly growth surpassing 20%, and has now reached 1% of GDP. The situation is even more difficult at the state level. For example, in Uttar Pradesh, the ratio of pension spending to state GDP increased from 0.4% to 1.2% during the 1990s. Pension expenditures at the central and state levels are likely to keep on growing at a fast pace, especially at the state level where employment more than doubled over the past 30 years. Preliminary estimates conducted in 2001 using the World Bank PROST actuarial model suggest that the present value of central and state pension liabilities could amount to 25% of GDP.

2.63 In light of rising pension liabilities, GoI announced in February 2003 a plan to establish a fully-funded defined contribution (DC) scheme for new civil servants, where individuals will be able to choose among a limited number of pre-qualified private asset managers and one public asset manager. The system will be centrally administered to reduce costs. A new specialized pension regulatory agency will be created to supervise the new scheme.<sup>48</sup> The shift to a fully-funded DC scheme will force the payment of pension liabilities as they accrue, creating a more transparent and financially viable scheme. Critical design issues of the scheme are still to be defined, including the contribution rate, criteria for selecting private asset managers, and the structure of the public asset manager to minimize governance problems. The implementation plan will also have to be carefully devised to minimize risks, and a strong and effective regulatory agency will have to be established. Since this reform will apply to new civil servants, primarily younger workers, it will only contain pension costs over the longer term. Indeed, in the short to medium term, fiscal outlays may rise, as GoI has to meet the combined costs of the old and new schemes. Better measurement of the pension liabilities of current civil servants would likely point to sustainability issues and the need for further reforms, including changes in eligibility criteria, and a possible shift of younger civil servants (on a voluntary or mandatory basis) to the new DC plan.

2.64 The proposed DC scheme for civil servants constitutes the first attempt to address the problems besetting the pension system in India. The reform faces the dual challenges of establishing a sound a well-regulated funded pension system for new federal civil servants and, more importantly, motivation further and deeper reforms within the rest of India's pension system. The new scheme will hopefully serve as a

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<sup>47</sup> International comparisons of average primary teacher salaries to per capita GDP indicate a ration of around 5 to 1 in India compared to 1.7 in a sample of 39 Asian countries between 1970 and 1990. See Nelson (1994), pp 111-127.

<sup>48</sup> However its regulatory authorities will not encompass existing pension plans – the Employee Provident Fund (EPF), the Employee Pension Scheme (EPS) and occupational plans – that will remain unsupervised despite performance concerns.

model for the states to reform their own pension plans. Some states (e.g., Tamil Nadu) are already contemplating similar changes for new entrants. Once implemented at the central level, GoI also intends to expand the new scheme to the unorganized private sector which remains uncovered by formal pension plans. While a laudable goal, it is likely that coverage of the unorganized sector will expand only gradually based on other international experiences.<sup>49</sup> This raises some question as to the viability of the new scheme unless it is able to attract a wider group of workers, including private sector employees to participating in the EPF and EPS. At a minimum, the reform could allow new workers in the private sector to join in the new scheme and allow others to opt out from the EPF and EPS.<sup>50</sup> The success of this reform could well set a benchmark for deeper changes in the EPF and EPS over the medium term.

### *The Return on Civil Service Expenditures*

2.65 While the odd success story may be found, as a general rule the recent wage gains were not compensated by any commensurate increase in the overall quantity or quality of government services. In fact, the mandate of India's public service has been shrinking during this period, as governments seek to withdraw from direct involvement in economic production and focus more on playing a regulatory and facilitative role for private sector growth.

2.66 To the extent that qualitative improvements have been implemented, they have often relied heavily upon the application of information technology to streamline and re-engineer business processes, such as the Bhoomi program for registering property records in Karnataka or the e-Seva "one stop shops" for over 40 government services in Andhra Pradesh. Even when information technology has made many functions redundant, civil servants and powerful unions have often extracted pledges of no job losses as the price of allowing the innovations to go forward, thereby limiting the economy and efficiency gains to be reaped. One south Indian state, for example, computerized part of its stamps and registration function. The result was faster client service and a reduction in turn around times by nearly half. By some estimates, as many as 48% of the department's staff of approximately 3,200 were made redundant by this decision, yet they are retained on the state payroll at an estimated cost of over US\$3 million per year.

2.67 Overall experience varies, but on average both GoI and the states have successfully resisted pressure towards new recruitment during much of the 1990s and beyond. However, even the best performers are yet to embark upon a significant program of staff reduction. As a result, many line departments find themselves in an increasingly precarious position, with a growing proportion of their non-plan resources being taken up by salaries, over which they have very limited control. For example, in the Andhra Pradesh Department of Stamps and Registration, only about 16% of non-plan resources went to non-wage funding from 1995/96 to 1999/00. Other critical departments in Andhra Pradesh, such as those looking after primary education, spent 93% of their non-capital budget on salaries during this period – to the detriment of spending on training and learning materials, maintenance, scholarships etc. Furthermore, because it is difficult to shed labor or adjust personnel inputs, the burden of any shocks that occur during the year fall disproportionately on non-wage expenditures, making rational planning all but impossible.

2.68 Another fundamental problem haunting India's civil service is the failure to use staff that it has productively. In Uttar Pradesh, for example, the Public Works Department (PWD) has a total strength of 77,000, including roughly 9,000 technical and 12,000 administrative staff, as well as 56,000 gang laborers. With 51 laborers for every 100 km of road, PWD has one of the highest manual staffing ratios in India. Furthermore, market manual wage rates are about one third of PWD rates. As a result, the cost of keeping this gang labor force is substantial – in 1998/99, the actual expenditure on maintenance was

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<sup>49</sup> Inadequate coverage of the formal pension schemes also threatens to increase poverty among the elderly as informal arrangements become more strained. This raises the need to better target social assistance for the elderly poor.

<sup>50</sup> There are also concerns about poor investment practices of occupational pension schemes (in particular, self-lending to the sponsoring enterprises and related parties). Asset management under occupational pension plans could now be transferred to asset managers under the new scheme.

Rs. 2.8 billion, while establishment costs were Rs. 3.4 billion. As will be discussed below in the sections on health and education, rates of absenteeism among front-line workers are often appallingly high, with few being sanctioned or dismissed from service in spite of chronic violations.

2.69 The burden of weak administration falls particularly heavily on the poor, who suffer in terms of skewed government spending, limited access to services, and employee indifference. One assessment of spending for health and nutrition in North India, for example, revealed that out of every Rs.100 of expenditure, the poorest 20% of households received about Rs.10, whereas the richest 20% received Rs.41.<sup>51</sup> In rural areas, only 4% of the poorest households had access to electricity and 25% had access to drinking water, whereas comparable figures for the richest were 28% and 66% respectively. Innovative survey research by the Public Affairs Center in Delhi and Bangalore reveal that the average slum dweller needed to make six trips to a government agency to resolve a particular problem, whereas the number of trips among general households was four.<sup>52</sup> The rate of success was over four times higher for general households, averaging 27%, as opposed to only about 6% for slum dwellers.

### ***Improving Public Service Delivery***

2.70 There are many reasons for the poor quality of public service delivery in India. Internally, administrative structures and responsibilities are highly fragmented, while human resource management places more weight on seniority than merit. It will obviously take time to reform these long-standing structures and systems. However, experience throughout India shows that civil servants do respond to external pressure for delivery of better services. Three key elements for success are: (a) improved public access to information; (b) strengthened accountability; and (d) independence from political interference. Recent experiments in these areas, and prospects for further reforms, are discussed below.

2.71 **Access to information.** In order to demand better public services, citizens need to be better informed about service standards, norms and procedures, as well as have ready access to forms and other such material. Opening up access to information, short circuits the rent-seeking opportunities provided by secrecy. Citizens' charters are one vehicle to empower the public in their dealings with service providers. It is important, however, that such charters be developed in consultation with major stakeholders and widely disseminated. One model charter is that developed by the Greater Mumbai Municipal Corporation (BMC) in June 1999, with assistance from an NGO, Praja.

2.72 NGOs can also play a vital role in collecting raw data, transforming it into usable information, creating data banks that other organizations can access, and disseminating relevant information to a wider audience through report cards, surveys and public hearings. In Bangalore, for example, the Public Affairs Committee (PAC) conducted a user survey of maternity wards that led to a major restructuring of the service by the Bangalore City Corporation. Other NGOs have concentrated on public interest litigation to prod governments into taking action to improve the performance in laggard services.

2.73 Several states are actively using information technology to improve access to information. Tamil Nadu has placed all major Government Orders of public interest on its website. AP's portal contains extensive information about government departments, schemes and policies; allows citizens to contact government officials directly, from the Chief Minister's office on down; and provides (initially) for limited on-line transaction processing as well. Computerization is also being used to reengineer business processes and speed-up decision making.

2.74 Finally, GoI and a number of states are promoting greater transparency by adopting Right to Information (RTI) legislation. Maharashtra's RTI initiative (2002), for example, provides for access to Cabinet-level documents (with certain narrow exceptions), the creation of a public records commission to improve record keeping and cataloguing, an independent appeals process to the office of the Lok Ayukta, penalties for non-compliance, and the creation of a high-level council to monitor implementation. These

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<sup>51</sup> See World Bank (2002a), p. 110.

<sup>52</sup> See Paul and Sekhar (1999) and Sekhar and Balakrishnan (1999).



initiatives will be followed closely, to see whether they can help counter well-entrenched practices and interests within the civil service to limit public access to information.

**2.75 Accountability.** The vast majority of staff within GoI and the state governments are promoted on the basis of seniority cum merit, which in practice means they will be promoted as a matter of course regardless of their performance as long as no adverse remarks are entered against them. Performance evaluation is weak, and poorly linked to the system of rewards and promotions. Even more problematic is the failure to punish or weed out corrupt or incompetent officers. The process of sanctioning malfeasance or mal-administration is fraught with multiple review and appeals stages, resulting in years of delay and only a minority of cases where criminal or administrative sanctions are imposed.<sup>53</sup> As a result, the average Indian civil servant has little to motivate him or her to better performance beyond their innate professional ethic, and faces only a minute risk of punishment for unlawful or inappropriate behavior.

**2.76** The Indian administrative structure was designed during colonial times to perform two functions: facilitate the collection of revenue and preserve law and order. Government reporting relationships are inwardly focused and strongly hierarchical in nature, with the pivotal role being played by the district collector and magistrate. At the sub-district level, all lines of authority flowed upwards to the DC/DM, who in turn reported to his superiors in the state capital. While a host of developmental functions have been added since independence, these basic reporting relationships have survived largely unchanged. Recently, a number of reforms have attempted to enhance “external” accountability and customer orientation. Some, such as Madhya Pradesh, have sought to empower local communities by allowing them to recruit their own teachers through its Education Guarantee Scheme. Others, such as Janmabhoomi in Andhra Pradesh, have sought to regularly bring bureaucrats in contact with local villagers to listen to their concerns.

**2.77** Independent audits by the Comptroller and Auditor General (CAG) are one of the primary institutional mechanisms for accountability of the executive. However, the CAG mainly focuses on financial irregularities. While some performance appraisals are carried out, they rarely indicate how management can be strengthened. Discussion of CAG reports by the Public Account Committees (PAC) of parliament and state assemblies are not open to the public and often come with a long delay, which reduces the prospects for effective follow up. Clearly, audit procedures should be improved. But there should also be wider use of other accountability mechanisms. The recent experience of the Lok Ayukta (Ombudsman) in Karnataka is one example which seems to be generating good results and may hold valuable lessons for other states (Box 2.2). The success of vigilance and ombudsman functions is critically dependent upon their having sufficient independence, budget and staff resources to investigate and prosecute corruption effectively. In addition, a comprehensive anti-corruption strategy should include: (a) a radical overhaul and simplification of the procedures for imposing major and minor penalties; (b) expanded “whistleblower” protection; and (c) publication of property and tax returns of senior officials. Each state should be asked to pass the Corrupt Public Servants (Forfeiture of Property) Act, which has already been drafted by the Law Commission.

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<sup>53</sup> In this regard, the comparison of Uttar Pradesh (UP) with Hong Kong’s Independent Commission Against Corruption (or ICAC), arguably the most effective anti-corruption agency in Asia, is instructive. The average Hong Kong citizen is 39 times more likely to institute a complaint; the ICAC is over 240 times more likely to investigate a case during the year in which the complaint is made; and a Hong Kong civil servant is 24 times more likely to be charged with a crime than his or her counterpart in UP. Furthermore, disciplinary cases in UP can wind through the courts for as long as 20 years, and a large majority ultimately end in acquittal. (Source: World Bank staff calculations based on annual reports for the UP Vigilance Department, the UP Lok Ayukta’s Office, and the Hong Kong ICAC, 1997-99.)

### Box 2.2: Karnataka's Lok Ayukta

The Karnataka Lok Ayukta is probably the strongest of all Lok Ayukta offices in the country. As in Madhya Pradesh, Karnataka has placed the Vigilance Department under the full control of the independent Lok Ayukta, to strengthen his capacity for autonomous action. In addition, the Karnataka Lok Ayukta Act vests the Lok Ayukta with wide statutory powers ranging from investigating corruption to addressing citizen grievances against any public servant, including the Chief Minister. He also has the right to initiate prosecution directly. Karnataka's Lok Ayukta is appointed for a fixed five-year term by the Chief Minister in consultation with the Speaker of the House, the Leader of the Opposition, and the Chief Justice. Once appointed, he can only be removed for "proven misbehavior" or "incapacity" by the Governor after a two-thirds majority vote in both chambers of the legislature.

The current Lok Ayukta in Karnataka has been very active in investigating corruption in health and education facilities around the state, visiting districts to hear complaints on a regular basis, unearthing large financial scams in Karnataka's city municipal corporations, and raiding regional transport and stamps and registration offices to catch people red-handed. The growing activism of the Lok Ayukta has forced many departments to furnish effective redress to citizens to avoid further investigation and adverse media attention. The growing credibility of the Lok Ayukta as an effective channel for grievance redressal is reflected in the dramatic increase in complaints in just one year from 303 in January 2002 to 1,026 in December 2002.

**2.78 Political independence.** This topic is a sensitive one, for the right to transfer civil servants is clearly vested within the political leadership under Article 310 of the Indian Constitution, which maintains that civil servants serve at the "pleasure" of the ruling authorities. Yet few would disagree that this power is often abused by both civil servants and politicians -- the former in seeking prime postings, and the latter for a variety of legitimate and occasionally illegitimate reasons. The net result in states such as Uttar Pradesh has been a reduction of average tenure for key senior civil service positions to less than a year. Chronic political instability in states such as UP and Manipur has led to the frequent collapse of government, which has in turn led to a new round of transfers as the next group of political leaders has sought to reward supporters and put their "own" staff into place. Compounding this problem has been the relative absence of effective transition mechanisms. Since most reforms in large public organizations require several years to produce results, it is impossible for even the most capable and well-intentioned manager to implement lasting improvements under such circumstances.

**2.79** A variety of approaches have been tried to curb the problem of excess transfers. Karnataka, for example, has created a new system of cadre management authorities to approve transfers for the first time in India and posted the number of transfers on a public website. This system has succeeded in reducing transfers below the 5% norm in most departments. The success of these initiatives should be followed closely and extended to other states as appropriate.

### Health, Education and Social Safety Nets

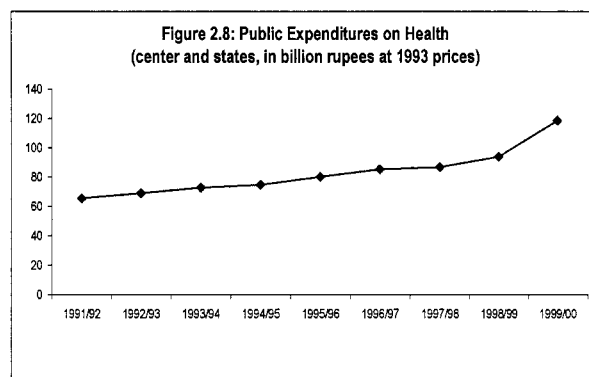
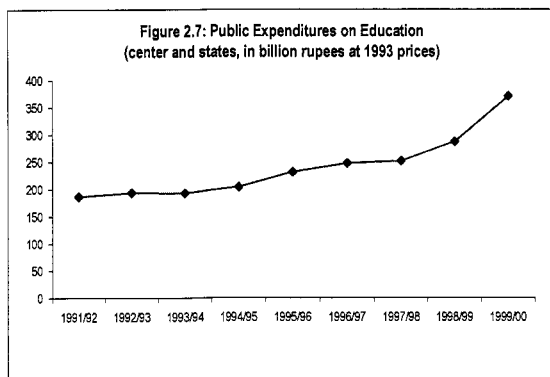
**2.80** India has made substantial progress towards achieving better social indicators over the past two decades. Official estimates of poverty, literacy, and net enrollment rates have been improving dramatically since the 1980s. However, the rates of improvement have not been sufficient to achieve the targets set in the Tenth Plan or even the less ambitious Millennium Development Goals. Indeed, progress in health indicators has been slowing down precipitously. Infant mortality rates of 115 per thousand in the 1980s fell to 79 in 1992 (a fall of over 30%) but only to 68 in 2001 (a further fall of less than 15%). Furthermore, mortality of children under five appears to have seen no improvement over the 1990s and might, if anything, have worsened (from 94 in 1992 to 95 in 2001). Education indicators have continued to improve but, even here, there are still wide disparities across states, gender and caste in completion of primary education. For example, illiteracy rates for men and women ages 15 to 24 have declined from 27 and 46 to 20 and 35% respectively -- substantial progress both in levels and in the gender differential, but still with a way to go.

**2.81** Making progress on aggregate indicators of health and education in India requires improving the health and education status of the poor. Gaps in both mortality and educational status between the poor and non-poor are striking: the 1998-99 National Family Health Survey (NFHS) indicates differences in

child mortality between the poorest and richest deciles of wealth of 100% to 400% across states with enrollment rates varying by multiples as well.<sup>54</sup> For example, the range of under-two mortality rates from the poorest 5% to the richest 5% is from 19% to 4% in Tamil Nadu and from 12% to 6% in Maharashtra. Similarly, in education, the completion rates of the poorest 20% compared to the richest 20% are 17% versus 78% in Bihar and 44% versus 95% in Karnataka. Since for the relatively well-off mortality rates are quite low and enrollment rates near universal, improvements in the average rates needed to reach the Tenth Plan goals cannot be achieved without directly improving the health and education status of the poor.

2.82 Plausible rates of economic growth alone will be insufficient to reach the Tenth Plan goals. If real GDP were to grow at 6% per annum, India as a whole and the majority of states will not reduce infant mortality to half of the 1990 rate nor achieve full primary enrollment by 2015. Nor can the Plan goals be achieved by simply increasing public expenditures – without complementary measures to improve the effectiveness of public service delivery. This conclusion is corroborated by analyses of the National Family Health Survey that show that the presence of public health care facilities in a village has no effect on mortality, controlling for income, education, access to good roads and water supply.<sup>55</sup> While the effectiveness of public expenditure in education is better, higher spending is still not enough to achieve universal enrollment, let alone completion of lower primary education.

2.83 Public expenditures on health and education have increased over the past decade. However, because both health and education are labor intensive, the bulk of this increase has been due to sharp increases in wages of public service providers, following the Fifth Pay Commission recommendations in 1997. The impact of the Commission's recommendations on spending was somewhat higher in education and health than in other sectors. In some states the wage bill has topped 90% of the total costs. Figures 2.7 and 2.8 show the growth of real spending in these two sectors with noticeable increases in the years immediately following the pay decision. The increase in the wage bill following the Commission decision led to increases in pay rates and not to numbers of teachers, doctors or nurses. As Table 2.7 above showed, this led to a further widening of the gap in pay between public and private doctors and teachers (though not nurses) all three professions now receiving twice the private pay while in public service. This spending increase was not likely to, and indeed did not, lead to improved health or education outcomes.



Source: Abusaleh Shariff, Prabir K. Ghosh, Samir K. Mondal, "Indian Public Expenditures on Social Sector and Poverty Alleviation Programs during the 1990s", NCAER, Working Paper 163, March 2002

<sup>54</sup> These analyses are presented in World Bank (1998c) and World Bank (2002l).

<sup>55</sup> Ibid.

2.84 The essential weakness in the social sectors is in the implementation of good policies. The quality of services needs to improve. As one indication, recent estimates of absentee rates for teachers and medical providers are presented in Table 2.10. The problem, besides being high overall, is generally much worse in poorer states. In Bihar, for example, surprise visits to schools indicated that as many as 26% of the teachers were not present and for medical practitioners, the rates are more than twice as high. Since these people are on the payroll, it should not be surprising that public money does not translate directly into better outcomes. If vacancy rates (positions unfilled) are included, the bias against poor people is even more pronounced. These and other indicators of low quality are not lost on the public. Bypassing free public services to use the private sector is common, even among the poor. Data from the National Sample Survey of 1995 indicates that more than half of visits to medical providers by people in the poorest quintile in rural areas are to the private sector. Similarly, the use of private schools is increasing rapidly in general and to some extent among the poor. English medium schools, particularly, are seen as a means of upward mobility.

**Table 2.10: Absence Rates from Primary Facilities in Selected States, 2003**

(in %)

	Primary School Teachers	Primary Health Care Workers
Andhra Pradesh	31	n.a
Assam	31	58
Bihar	26	58
Gujarat	21	52
Haryana	19	35
Karnataka	23	43
Kerala	18	n.a
Orissa	14	35
Punjab	18	n.a
Rajasthan	23	39
Tamil Nadu	17	n.a
Uttar Pradesh	26	42
Uttaranchal	25	45
West Bengal	21	43

Notes: n.a. - not available

Source: World Development Report, 2004 "Making Services Work for Poor People"

2.85 The root cause of the implementation problem is that the government (both politicians and bureaucrats) is not accountable for social outcomes -- the health status of the people, learning by students -- and do not hold personnel providing the service accountable either. Incentives to public providers are not such that anyone feels responsible for better or worse outcomes. Components of the problem are: (a) there are systemic reasons why the interests of the poor are not reflected in policy decisions regarding health and education. Influential urban and wealthier constituencies, for example, don't consider reaching remote areas or handling disease problems that mostly affect the poor as high priorities. The building of facilities carries with it political benefits of being very visible and having opening ceremonies but basic public health activities such as hygiene, education or mosquito control are not as beneficial to politicians; (b) policy makers have insufficient means of influencing the incentives facing service providers. As in the general discussion of civil service reform mentioned above, the weakness of administration -- in this case illustrated by the lack of control over staff behavior -- hurts the poor and denies them basic services; (c) the influence of parents and patients on public providers (as in monitoring and sanctioning) is not effective enough to compensate; and (d) the intrinsic motivation of providers, while strong, is not sufficient to meet social objectives.

2.86 One way to make outcomes more of a motivating factor in service delivery is to generate and disseminate information regarding progress in services. Parents and patients should know what they are entitled to and have a place to lodge complaints when they are not received. Public officials should know whether the public is satisfied or not. Providers and policy makers should know (and be constantly learning) about what works. This requires outcomes to be more regularly measured and their determinants analyzed. One critical role of the central government, when states have the primary responsibility for the delivery of publicly-funded services, is to be an independent source for this

measurement. Initially, measurement of outcomes may just be for information and the sake of openness. Over time, such measures could be used to hold states accountable for improvements – perhaps to the extent of conditioning fiscal transfers on progress. The increase in expenditures shown in Figures 2.8 and 2.9 did not translate into better social indicators – primarily because the spending was simply an increase in payments for inputs rather than outcomes.

2.87 Centrally Sponsored Schemes could also be made more flexible, and in many cases, such as preventative health care, their functions and funding should be at least partially passed on to the states. What works in Kerala may not work in the north. Measures to ensure ownership, political independence and conscientious behavior of civil service staff may be unnecessary in states with a track record of good governance. It is in the experimentation that such flexibility allows, that solutions to the problem of implementation can be found. CSS should also be evaluated rigorously, based on survey data. Lessons learned will help all states improve their programs. Hence the benefits will spread wider than the state level, warranting central government involvement.

2.88 Creating institutions and establishing the measurement and evaluation procedures that will yield more effective policies and better social outcomes will take time. The solutions will also vary by sector. The following sections look at the key problems and strategies for dealing with them in the health and education sectors, and for social safety nets, as well as some proposals for improving policies in the short to medium term.

### ***Health Strategy and Policy Priorities***

2.89 There are two deep problems in the health sector: a lack of realism concerning the public sector's role in the health system, and a lack of prioritization of the public sector's possible contributions. There is a strong tendency in the public sector (and much of public discussion) to believe that provision in government facilities is the whole of the health sector. In fact, in terms of expenditures on health, it is only about 20% of the total. The share is even less in terms of number of visits to providers, since the public sector is more prominent in expensive hospital care than it is in primary care. There is also a strong tendency in the public sector to believe that the clientele of the public sector is predominantly poor. In fact, the usage of the public sector is much greater for the relatively well-off. Not only are most public inpatient services (over 65%) used by the richest two quintiles of the population (compared with 19% for the poorest two quintiles), but outpatient services as well (though to a lesser degree – 48% for the better off 40% of the population versus 31% for the poorest 40%).<sup>56</sup>

2.90 International comparisons with a select number of comparators support the observation that India's health system is dominated by the private sector (Table 2.11). India's public expenditure on health reflects its low income. International comparisons over a larger range of countries show public health expenditures to be highly correlated with income – shares of total income going to public health spending increases with income itself. More unusually, private spending on health care is high as a share of income even in comparison with such countries as Thailand and Malaysia that are significantly richer. This indicates a substantial demand and willingness to pay for health care that should be kept in mind as financing options are considered.

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<sup>56</sup> See Ajay Mahal et al (2001).

**Table 2.11: Health Spending in India and Comparator Countries**

	GDP per capita (US\$, 2001)	Total health spending as a % of GDP	Public health spending as a % of GDP	Private health spending as a % of GDP
India	460	4.9	0.9	4.0
Indonesia	690	2.7	0.6	2.1
Brazil	3070	8.3	3.4	4.9
China	890	5.3	1.9	3.4
Pakistan	420	4.1	0.9	3.2
Malaysia	3330	2.5	1.5	1.0
Thailand	1940	3.7	2.1	1.6
Mexico	5530	5.4	2.5	2.9
Russia	1750	5.3	3.8	1.5
South Africa	2820	8.8	3.7	5.1

Source: World Bank, World Development Indicators, 2003

2.91 Many factors, most outside the health sector, contribute to health status. Clean water, sanitation, and efforts to reduce indoor air pollution are all essential for a healthy environment (Box 2.3). Education (probably of women more than men) as well as income, particularly through nutritional status, also have a strong impact. Government programs to improve health outcomes need to reflect the priority for clean water, sanitation and clean air, as well as improvements in simple medical care. Improvements in both sanitation and simple medical care are essential to achieve substantial reductions in child mortality. Although the situation is improving, 64% of households still have no toilet facilities.

2.92 Most medical care is now given in the private sector and, for the poor, by very poorly or untrained practitioners. There is, however, no way to expand free publicly-supplied medical care to replace these practitioners. With limited funds, and more importantly with the difficulties of managing a dispersed network of primary health centers with personnel who do not want to live in rural areas, replacing a private market is a low return activity, and thus should be a low priority. Therefore, while there is room for expansion of health expenditures as India grows, it is important that the extra spending complement private expenditure rather than displace it. Improving the private market -- through training, public information and accreditation -- is a better option. Over time, public financing of private provision could be increased. Such an effort should be subject to evaluation to make sure it works.

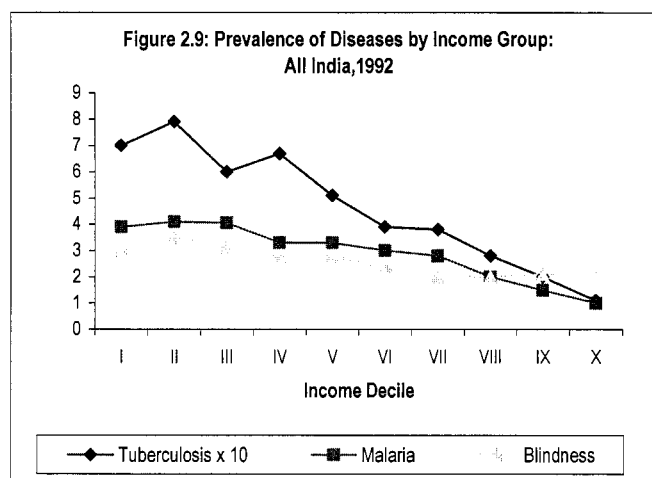
2.93 Attracting private investment into hospitals is also a way to expand services. This is a complex issue since its ultimate success will depend on the establishment of payment mechanisms, such as insurance, that will allow payment to private facilities. While reform proposals are being actively pursued, there is likely to be substantial learning about the difficulties of establishing payment mechanisms from social insurance funds and subsequent revision of policies. It may take considerable time to establish such mechanisms and will proceed faster in some states where financial accountability is easier to establish than in others. In the meantime, a clearer regulatory structure for the hospitals themselves would help. Even with the establishment of insurance or other payment systems, explicit subsidies for poor patients will be necessary. And before such systems take effect, ensuring better access to catastrophic medical care for the poor is a priority. This may, however, be related to better roads, communications and administrative procedures for admission than to increases in facilities themselves.

### Box 2.3: Building a Healthy Environment

**Water, sanitation and hygiene:** Adequate water and sanitation are central to improving health outcomes. Contaminated water can lead to water-borne illnesses such as viral hepatitis, typhoid, cholera, dysentery and many other diseases that cause diarrhea. Indians lose 22 million Disability-Adjusted Life Years (DALYs) annually to diarrheal diseases, making it the second-largest contributor to the country's disease burden (WHO 1999).<sup>57</sup> Diarrhea and other diseases caused by insufficient water quality are estimated to be responsible for approximately 1.5 million deaths per year among children in India (Parikh et al 1999). Inadequate quantities of water prevent sufficient personal hygiene, facilitating the spread of many diseases and infections. Although water quality is important, multi-country studies have shown that improved hygiene through hand washing and sanitation through latrine usage have a greater impact on health outcomes. Hygiene and sanitation improvements reduce diarrhea, parasitic infections, morbidity and mortality more than water quality (Esrey et al 1991, Hutley et al 1997). Although there has been significant effort in India to provide water supply, sanitation coverage has lagged behind. Greater access to sufficient quantities of clean water and the promotion of sanitation and hygiene would reduce the burden of water-borne diseases. However, infrastructure alone will not necessarily decrease child mortality in poor families, which tend to be most vulnerable to disease. Piped water leads to improved child health outcomes in India, but the gains tend to be lower for children with less educated mothers and less wealthy families (Jalan and Ravallion 2001). This points to the importance of combining education and poverty reduction strategies with infrastructure investment to protect the health of children in India.

**Indoor air pollution:** Although water pollution and inadequate sanitation plague many countries, indoor air pollution is a larger problem in India than in most parts of the world. Smoke emissions from the use of biomass fuel (wood, dung, and straw) are estimated to be responsible for about 500,000 premature deaths as well as about half a billion illnesses each year (World Bank 2002l). Young children, who spend much of their time at home, are particularly vulnerable to the health consequences of exposure to smoke from solid fuel use. A recent assessment concluded that the deaths of as many as 444,000 children under five years old may be attributable to solid fuel use (Smith 2000, Smith and Mehta 2000). Another study estimated that child mortality is about one-third lower in households using clean fuels than in comparable households using biomass (Hughes et al 2000). Converting to clean fuels would eliminate this health risk. However, for the majority of rural households, biomass will continue to be the main cooking fuel, largely due to its relatively low cost (World Bank 2003a). Therefore, there is a need to find and promote cleaner ways of using biomass. International experience has shown that highly successful programs typically include financial assistance for technical development, stove design, marketing and public awareness campaigns. The national government can contribute through program evaluation, provision of training and seminars, and information sharing among programs. The dissemination of information about health risks of biomass fuel and mitigation options can lead to a greater willingness to switch to safer fuel or at least modify behavior and cooking areas. Community-based interventions are needed to assure that solutions are cost-effective, sustainable, and tailored to local conditions.

2.94 Within the health sector, combating communicable diseases should continue to be the highest priority for public funds. This is due to: (a) clear, large externalities of control, including true public goods such as swamp drainage and large scale vector (pest) control; (b) benefits that are heavily skewed to the poor. The differential of incidence between rich and poor in communicable disease is multiples of that for non-communicable disease (Figure 2.9); and (c) relative to medical care, most of these activities are much easier to administer. Pulse polio campaigns, for example, only require professionals to be in rural areas periodically without forcing them to move their families.



Source: World Bank, 1998

2.95 The largest emerging problem in communicable disease control is the increase in infections of the Human Immuno-Deficiency Virus (HIV) and cases of Acquired Immuno-Deficiency Syndrome (AIDS). Estimates of the spread of the HIV infection, ranging from 4-8 million in 2002, are subject to much

<sup>57</sup> DALYs measure years of life in a population lost to premature death and years lived with a disease or disability, adjusted for its severity.

dispute. But there is no dispute that the infection is spreading rapidly. Some predictions are that as many as 20 to 25 million cases will occur as soon as 2010 (a more than doubling of current, approximate, estimates of prevalence). The HIV/AIDS crisis presents a unique challenge for leadership in India. There are many competing needs for the public health infrastructure, and it is important to ensure that HIV/AIDS programs neither undercut resources to deal with other killers like tuberculosis (TB), malaria, and diarrhea, nor get marginalized.

2.96 The main focus of HIV/AIDS policy should be on prevention. Treatment is expensive and has the possibility (as demonstrated in the US, Europe and Australia) of undermining prevention activities by making contracting the disease less of a catastrophe. Instead, treatment should only be used if it can complement prevention efforts as, for example, as an inducement for testing. Surveillance of the disease should not be limited to public ante-natal clinics and other standard locations. Much more attention is needed for accurate measurement of the incidence as well as research to understand the sexual (and drug use) behavior of people if effective prevention strategies are to be designed. Finally, while the political obstacles are severe, the epidemic can only begin to be controlled if there is a candid public discussion of sex. People must be able to know the extent of their risk and how to reduce this risk with safe sex. If this is not done, the country faces a genuine disaster.

### ***Education Strategy and Policy Priorities***

2.97 Progress in education has been much greater than in health. Enrollments have responded to higher expenditure, political support has been more reliable in many states, and there are several notable success stories within India. Nevertheless, there are large variations across states and the current rate of aggregate progress in education indicators is insufficient to attain the goals in the Tenth Plan. Of 200 million children in the age group of 6-14 years, 42 million do not attend schools. There are problems relating to high drop out rates, low levels of learning achievement, and low participation of girls. Coupled with these are various systemic issues like large-scale teacher vacancies, high teacher absenteeism, and inadequate teaching-learning materials.

2.98 India's overall spending on education is not much different than that of other countries at similar income levels (Table 2.12). Expenditure composition, however, is somewhat more skewed towards the secondary level and considerably more skewed towards higher education. Given the distinctive feature of India, in which a very sophisticated academic tradition coexists with mass poverty, it is

**Table 2.12: Education Spending in India and Comparator Countries**

Country	GDP per capita (US\$, 2001)	Public expenditure per student (as % of GDP per capita)		
		Primary	Secondary	Tertiary
India	460	7.2	23.1	92.5
Indonesia	690	3.2	8.7	12.2
Brazil	3070	12.5	12.6	72.8
China	890	6.1	12.1	85.8
Pakistan	420	n.a.	n.a.	n.a.
Malaysia	3330	11.2	19.9	86.1
Thailand	1940	12.5	12.8	38.2
Mexico	5530	11.7	13.8	45.2
Russian Federation	1750	n.a.	20.5	15.8
South Africa	2820	14	17.9	61.3

Source: World Development Indicators, 2003; UNESCO Institute for Statistics

perhaps not surprising that higher education is expensive in terms of GDP. This does not mean, however, that higher education is a high priority use of public money as opposed to private.

2.99 To accelerate progress in elementary education, the Government of India launched in 2000/01 the Sarva Siksha Abhiyan (SSA, or Education for All) program. It aims at providing eight years of schooling for children in the 6-14 age group by 2010. GoI has also enacted a Constitutional Amendment (93<sup>rd</sup>) that



makes free and compulsory education a fundamental right for children in the 6-14 years age group. Universalizing the completion of primary schooling, and then elementary schooling, across all Indian states will require both additional public resources for these levels of education and improvements in the effectiveness with which public resources are used. The central issues are:

- How to ensure that all children, particular poor children, become enrolled in primary school and are able and willing to complete an elementary education of reasonable quality?
- What can be done to improve community-school relationships and to make the education system, including the teachers, more accountable to the communities they are intended to serve?
- To what extent, and how, can the experiences of educationally stronger states be replicated in weaker performing states to improve completion rates and levels of learning achievement?

2.100 Education differs from health in that it is possible to rely on communities and parents to monitor and evaluate school performance to a much greater degree than is possible with health facilities. Parents are in the best position to monitor what goes on in schools. They may not know the best pedagogical techniques, but they do know whether or not the teacher comes to work. And even illiterate parents can tell if their children are learning anything. So, effective reform will almost certainly put more power into their hands. In urban settings where there is the possibility of choice of schools, increasing market power with vouchers (maybe for the poor, maybe for everyone with limits on topping up) might be experimented with. The essential feature is to allow money to follow the student. And to allow schools enough autonomy to be able to compete for it.

2.101 In rural areas, where little or no real choice is practical, increasing parent voice and influence on school operations is a good option. Making schools more accountable to the community is critical, possibly as far as giving parents the right to hire and fire teachers in the context of local school committees. The most promising developments in primary education have been in Madhya Pradesh, where communities have been allowed to hire informal, less qualified, teachers at much lower wages than possible in the civil service with much better performance in terms of attendance as well as educational outcomes. Other states, such as Rajasthan and Uttar Pradesh have also experimented with para-teachers who, although with lower qualifications and earning a lower salary, appear to provide better services.<sup>58</sup> States will differ in the degree and form in which they rely on parents and communities depending on their ability to monitor and ensure good performance from their teachers. While parents in the community schools in Madhya Pradesh can dismiss and hire teachers, other states might find that ordinary complaint procedures through panchayats can work as well. In all cases, however, the active participation of parents is likely to be a major factor in all successful education reforms for a long time to come.

2.102 There may also be more scope for competition in education than is ordinarily considered. Competition can be for concessions to establish a school in a village even if there will be only one. Further, competition can be enhanced by making it easier for children to reach the competition. In Kerala, for example, substantial subsidies are given for transportation. Parents can shop around for better schools and the revenue of the school depends on enrollments.

2.103 Schools need to be given enough autonomy to act on attracting teachers and students. Circumstances across India differ enormously and reaching the poorest and most remote children will require flexibility and experimentation. Once again, localities must be allowed the freedom to find their best solutions and higher levels of government can help by establishing more regular measurement of attendance, of learning outcomes and other information needed to evaluate progress. This helps individual districts adjust their strategies and allows other districts to learn.

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<sup>58</sup> For example, a recent evaluation of a remedial education program run by Pratham (an NGO) concluded: "Hiring remedial education teachers from the community appears to be 10 times more cost effective than hiring new teachers". See Duflo (2003).

2.104 Experience is building on making contracts with government contingent on better performance on tests. NGOs and possibly for-profit institutions can be given operating budgets contingent on independent measures of improvement in teaching. While over-reliance on test scores carries risks (such as “teaching to the test” and ignoring less quantifiable aspects of education) many parents would be happy if enough teaching was taking place that test scores improved. One way or another, schools should be more accountable for better outcomes. This can be done in many ways – contracts with local governments, contracts with state departments of education, giving parents a greater say in school governance or a greater choice between schools where attracting students is in the school’s interest. The common feature is separation between the funder of the school and the provider, with the latter beholden to the former.

2.105 Above primary education, there is substantial increased demand for upper primary and secondary education, partly as a result of the success in increasing primary enrollments. In many states, secondary schools are grant-in-aid institutions (private schools paid for by public funds) and there is concern over the quality of education in such facilities. In many states, there are also concerns about leakages in grant-in-aid expenditures. Again, more regular evaluation of outcomes can both improve oversight of such contracts as well as increase public accountability of the use of public funds.

### ***Providing Effective Social Safety Nets***

2.106 Anti-poverty programs, or social safety nets, suffer from the same lack of focus on outcomes. The nature of the poverty problem has changed dramatically since the establishment of the major anti-poverty programs such as the Public Distribution System (PDS) in the early post-independence era. Then, mass poverty – at rates of 60% or more – meant that universal programs were bound to help poor people. Now, with poverty rates below 30% and falling, there is greater need to avoid waste of public resources by making sure that program funds actually reach poor people. This, in turn, means more careful monitoring of programs to determine how much it costs to transfer a rupee to a poor person.

2.107 These costs vary widely among programs. One study compared five programs and found that it cost from 1.8 rupees for each rupee ultimately received by someone below the poverty line through the ICDS, a nutrition and pre-school education program, to over 6.3 rupees through the “two rupee per kilo” food distribution scheme of Andhra Pradesh.<sup>59</sup> The PDS cost over 5.3 rupees per rupee transferred. Included were both administrative costs associated with determining eligibility and implementation as well as “leakage” costs of benefits that reach people above the poverty line. Since many state programs are tied to PDS eligibility conditions, its inability to discriminate between poor and non-poor (there were fully 2.8 non-poor for each poor beneficiary) is a matter of great concern.

2.108 One general rule that has emerged from comparison of programs is that self-targeted programs, such as the Maharashtra Employment Guarantee Scheme (GES), do tend to reach the poorest better than those that rely on administrative discretion for eligibility. Self-targeted programs allow people to choose to participate but are designed to attract the neediest. For example, if wages in a GES are below prevailing wages, only the neediest will volunteer. These programs are cheaper both in terms of administration, since there is no eligibility to check as well as in leakage, since only the poor will volunteer.<sup>60</sup> The lesson, though, is not that one existing program is better or worse than another but that, once again, all programs should be continually re-examined in terms of their effectiveness. Regular monitoring, measurement of actual outcomes and re-focus of programs is essential.

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<sup>59</sup> Radhakrishna and Subbarao (1997).

<sup>60</sup> Ravallion and Datt (1995).

## **Towards the Future**

2.109 Many internal and external observers of Indian administration have argued that decentralization and local empowerment will ultimately be essential in improving the quality of service delivery at the village level. Faced with slow and uneven progress on decentralization, the 73<sup>rd</sup> and 74<sup>th</sup> Amendments to the Constitution, ratified in 1992, imposed on states the obligation to decentralize to lower levels. The Amendments created distinct rural and urban governments, mandated periodic elections and the establishment of an important accountability mechanism, the Gram Sabha (village assembly), but left other matters of implementation to the states. The most visible achievement of these reforms has been the high degree of political decentralization. With the election of over three million local politicians, one third of whom are women and around 20% from scheduled castes and tribals, India's decentralization has, at least nominally, opened the state to democratic participation. However, progress on fiscal and administrative aspects of decentralization has been much more modest and hesitant. Administrative evolution has often failed to take account of the limited capacity of local governments, the existence of economies of scale for delivering services, or the potential role of the private sector. And a serious overlap of responsibilities between state, district, block and village governments obscures lines of accountability to voters. For the most part, local governments still raise little revenues of their own (although the potential is much higher) and also deliver few services. Rather, they are usually treated by state and central bureaucracies as service agents for higher level governments.

2.110 India now needs to move from the decentralized patchwork it created towards an inter-governmental framework which leads to improved service delivery without increasing fiscal pressures. Good fiscal management would suggest reallocating public funds from central and state schemes into a well-designed fiscal framework for local governments, that would guarantee their autonomy and accountability, while helping them to match resource allocations with local preferences. It would also suggest creating incentives for local governments to collect a share of their revenues from local taxpayers (e.g., through land taxes). Flows of funds from the center and state governments should be dependent on good performance and resource mobilization at the local level. Performance should be monitored not only by the Local Audit Fund, but also by local journalists, civil society groups and panchayat leaders from neighboring districts. This would help strengthen accountability, and ensure greater participation and empowerment of local communities – one of the primary objectives of the decentralization process.

2.111 India's federal structure, common institutions and practices between states, and the ongoing program of decentralization make it a fertile laboratory for reform. A variety of changes are being implemented at the center, state and local levels, with varying degrees of success, which can be quickly scaled up and disseminated across the country. India is one of the leaders in the information technology revolution, and states such as Andhra Pradesh and Karnataka are making impressive gains in the application of IT solutions to a variety of public sector problems. For all of their weaknesses, cadres such as the Indian Administrative Service remain a tremendous reservoir of talent and capacity. Perhaps most important, a number of broader dynamics -- such as the rise of the Indian middle class and the growth of NGOs dedicated to issues of good governance -- are fostering increasing social demand for good governance. Thus, while the nature of the Indian public sector reform agenda has remained relatively fixed for a decade or more, India itself is changing in ways that make its realization more feasible.

### **PART III: POLICY AGENDA: IMPROVING THE INVESTMENT CLIMATE**

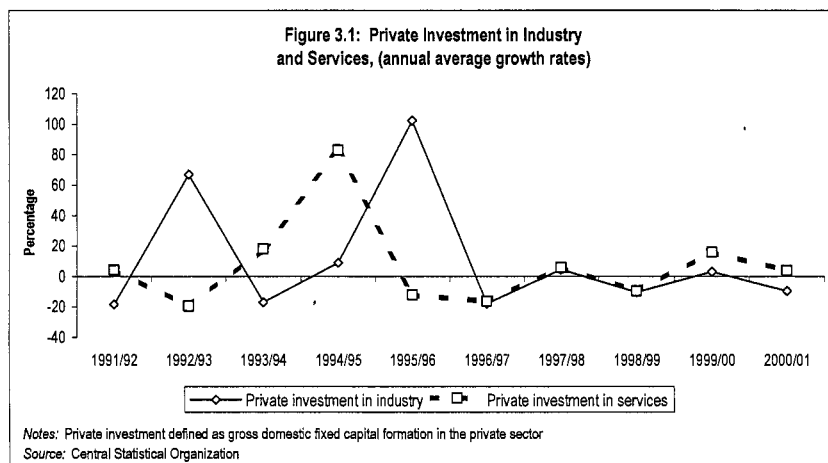
3.1 There is little doubt that India's economic performance has been aided by the structural reforms introduced over the past decade. However, it also seems clear that higher levels of private investment and productivity will be needed to raise the growth rate to 8% per annum, as targeted in the Tenth Plan. Compared to many other countries in Asia, India's private sector faces a relatively unfavorable investment climate. This constrains productivity and employment creation in industry and services, and reduces India's ability to compete in world markets. Agricultural performance is constrained by imbalances in public expenditure, which favor subsidies over productivity-enhancing investments, and remaining restrictions on trade and competition. Development of the non-farm sector will be essential to provide employment opportunities in rural areas, and support the agriculture sector.

3.2 Part III.1 reviews recent progress in improving the business climate for industry and services, and proposes an agenda of policy reforms to encourage more investment and higher productivity in the coming years. Part III.2 covers the same ground for agriculture and rural development.

### III.1: INDUSTRY AND SERVICES

#### Performance: Achievements and Challenges

3.3 A wide range of structural reforms stimulated industrial and services growth and investment in the early 1990s (Box 3.1). The industrial sector grew by 7.6% per annum, and manufacturing by 9.8% per annum, in real terms from 1992/93 to 1996/97 (Table 3.1). Private investment in industry grew by 20.1% per annum in real terms over the same period (Figure 3.1). However, the momentum slowed in the second half of the decade, with industrial growth averaging only 4.5% per annum, manufacturing growth averaging only 3.8% per annum during 1997/98 to 2001/02, and growth in private investment in industry actually falling by -3.4% per annum during 1997/98 to 2000/01. The manufacturing sector in India accounts for only 16.8% of GDP, compared to 35% in China and 25-35% in the South East Asian economies. In contrast, the services sector has recorded strong growth throughout the past decade. Domestic reforms to allow private sector participation and the introduction of more competition, coupled with more liberal FDI policies and access to global markets, have played a key role in raising the growth rate of services such as business services (primarily information technology), telecommunications, and hotels and restaurants. However, services such as retail trade, which could potentially be an engine of job creation and growth, have not been liberalized and have grown much less rapidly.



**Table 3.1: GDP, Industry and Services Growth Rates<sup>1/</sup>**

	1992/93-1996/97	1997/98-2001/02	2001/02	2002/03
GDP at factor cost	6.7	5.5	5.6	4.4
Industry	7.6	4.5	3.3	6.1
Mining and Quarrying	3.6	3.8	1.0	4.8
Manufacturing	9.8	3.8	3.4	6.1
Electricity, Gas & water etc	5.5	5.9	4.3	5.2
Construction	3.6	7.0	3.7	7.1
Services	7.5	8.1	6.8	7.1
Trade, hotels, Transport & communication	8.8	7.9	8.7	7.8
Trade, hotels & restaurant	9.1	7.1	8.8	n.a.
Transport, storage & communication	8.1	9.6	8.5	n.a.
Financing, insurance, real estate & business services	8.0	7.5	4.5	6.5
Community, social & personal services	5.1	9.1	5.6	6.4

Notes: <sup>1/</sup> Compound annual growth rate %

Source: Central Statistical Organization

3.4 Latest (provisional) estimates based on a redefinition of foreign direct investment (FDI), in accordance with international best practices,<sup>52</sup> indicate that FDI in India stood at about 1.3% of GDP in 2001/02, declining to 0.9% in 2002/03, compared with 4% in China and between 2% and 3% in many emerging market countries. Unlike in China and South East Asia, FDI in India has been oriented towards the domestic market and not towards exports. No significant increase in India's penetration of world markets in industrial products has been observed over the past decade, with the share of non-agricultural exports in world exports of the same commodities having increased only marginally from 0.5% in 1990/91 to 0.55% in 2000/01. Unlike its experience with trade in goods, India in a short span of time has achieved a prominent position in global trade in services, today accounting for 1.4% of global exports in services. However, this growth has taken place on the back of a narrow set of sub-sectors, primarily software exports, which grew at an annual average rate of 49% during the second half of the 1990s. In contrast, India's performance in service segments such as travel and transportation services, where the underlying growth is linked to trade in goods, has been mediocre.

3.5 The organized industry and services sectors today account for 27 million jobs, of which just seven million jobs are in manufacturing and some 17 million are in the services sector (some 70% of organized sector jobs are in public sector units). By comparison, the total labor force in India is around 406 million, with a little under one million workers moving out of agriculture every year. The organized services sector has generated some 760,000 new jobs over the past decade, while employment in organized manufacturing has remained almost unchanged, with only 350,000 new jobs having been created between 1993/94 and 1999/00. Growth in total manufacturing employment (organized and unorganized) in India has averaged only about 2% per annum during the period 1994-2000, with the unorganized sector accounting for the bulk of this growth.<sup>53</sup>

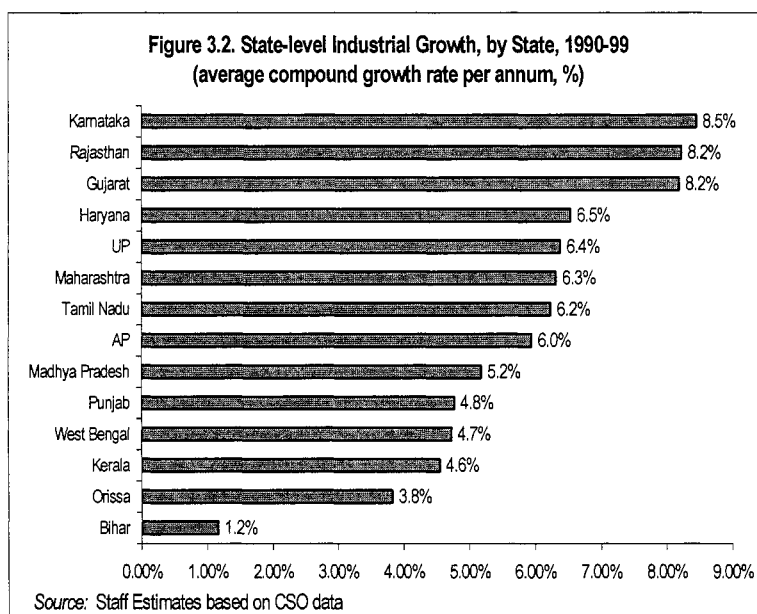
3.6 Over the past 12 months, industry has begun to show signs of recovery, fueled mainly by a better use of existing capacity rather than by new investments, and by the lower interest rates that have resulted in huge windfall gains for industry. Industrial growth for 2002/03 is estimated to be 6.1%, compared to 3.1% for the previous year. However, as emphasized in the Tenth Five-Year Plan, much higher industrial sector growth will be required to create the targeted 100 million or so new jobs over the next decade. This will need to be accompanied with an acceleration of growth in labor-intensive services such as retail trade. The Plan notes that sustained growth and employment will require a step up in domestic investment, particularly private investment, coupled with improved productivity.

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<sup>52</sup> In accordance with the new and expanded definition of FDI released by GoI on July 2, 2003, FDI is defined to include, besides *equity capital* (which comprises the equity capital of unincorporated entities, now also including the equity capital of foreign banks' branches in India, control premium and non-competition fees), *reinvested earnings* of incorporated and unincorporated entities and *other capital* (including short-term and long-term borrowing, trade and suppliers' credit of more than 180 days, and financial leasing).

<sup>53</sup> Based on the NSS figures as reported in the Report of the Task Force on Employment Opportunities, (GoI 2001a)

3.7 The investment climate varies considerably across the states. In general, there is a clear link between the investment climate and industrial performance (Figure 3.2). Indeed, states such as Karnataka and Gujarat, which were rated as the better investment climate states by the CII-World Bank study (2002), recorded high industrial growth rates (in excess of 8% during the 1990s). Karnataka is also by far the leader (among the Indian states) in the export of IT services and also receives the highest FDI. Kerala and West Bengal, which were ranked among the poorer investment climate states, recorded much lower industrial growth during the 1990s. The only real outlier was Uttar Pradesh, where, despite a rather poor investment climate, industry grew at 6.4% per annum during the 1990s. However, it may be noted that UP's industry grew from a very low base, and the growth during the latter part of 1990s may be attributed largely to central government (rather than state-level) reforms, the impact of which began to be felt with a lag, during the second half of the 1990s. Even the better investment climate states are still way behind the curve compared to India's South-East Asian and East Asian competitors.



3.8 International comparisons indicate that India has intrinsic advantages that should allow the country to emerge as a major hub for manufacturing and labor-intensive service industries. These advantages include relative macroeconomic stability (provided the fiscal issues noted above are addressed), a local market that is among the largest in the world, a large and relatively low-cost labor force, a critical mass of well-educated workers in the areas of engineering and science, and abundant raw materials. But over five decades of protectionism, state-ownership and selective interventions, have created deep distortions, stifling India's private sector development, competitiveness and growth. It is now widely accepted within India that the government would do far better by focusing on creating a conducive environment and level playing field for the private sector. More specifically, improving the performance of India's industrial and services sectors would require tackling simultaneously three key sets of issues to create a conducive investment climate: (a) removing product market distortions; (b) improving the efficiency of factor markets; and (c) alleviating infrastructure bottlenecks. The success with which India can achieve the ambitious targets set in the Tenth Plan will depend crucially on progress in these areas.

### **Investment Climate: Key Constraints and Policy Priorities**

#### ***Product Market Distortions***

3.9 Inadequate follow-through on the industrial policy reforms and slow progress with trade reforms that were initiated in the early 1990s has led to the persistence of product market distortions that continue to inhibit industrial and services sector performance. There is now broad agreement that further progress in these areas is needed. The key is to push ahead with implementing reforms as quickly as possible.

3.10 A key area where industrial policy reforms need to move faster relates to India's policy of **small scale industry (SSI) reservation**. At the start of the reform program of the 1990s, about 800 items were reserved for exclusive production in the SSI sector, which meant that investment in plant and machinery in any individual SSI unit could not exceed a specified monetary ceiling. Over the years, this list has been only slightly pruned, so that, as of June 30, 2003, a total of 674 items remained reserved exclusively for the SSI sector, although non-SSI firms can now obtain a license to produce products reserved for the SSI sector, provided they are exported. In the case of 610 of these reserved categories, total investment in plant and machinery for any single firm is capped at an upper limit of Rs.10 million (a little over US\$200,000), while for 64 reserved items, the investment cap has been raised to Rs.50 million (about US\$1 million). This policy of product reservation and investment ceilings has held back the SSI sector from achieving economies of scale and greater efficiency, by inhibiting small firms from investing beyond the stipulated limits, expanding their operations in the domestic market, and then moving into exports. Now is the time to eliminate this policy of SSI reservation, which would unleash the potential of India's small-scale players, encouraging small businesses to grow and compete on world markets.

3.11 **Trade policy.** Import licensing has been abolished. While rapid progress was made in tariff reduction until the mid-1990s, the process has slowed since then (Box 3.1), and high import tariffs remain a key constraint to better industrial performance and competitiveness, driving up the prices of manufactured products, suppressing demand and providing opportunities for inefficient firms to survive and for efficient firms to capture rents. Many tariffs, mostly on agricultural products and processed foods, but also on some industrial products (e.g., automobiles) are far above the new "peak" customs duty rate of 25% introduced in the 2003/04 budget. In March 2003, including the protective effect of the Special Additional Duty (SAD), the un-weighted average protective tariff was about 32.7%, overall, 30.7% for industrial goods and 46.8% for agricultural products including processed foods. This is far lower than pre-reform tariff levels during the 1980s, but still very high by world standards. In fact, comparing the un-weighted average Customs duty rates of 105 developing countries between 1996 and 2000, India's average tariff was the second highest (next to Morocco). Even without allowing for the SAD, India's current tariffs are much higher than average tariffs in other large developing countries: e.g., more than double China's and Brazil's, four times Indonesia's, and two and a half times the average of developing countries (Table 3.2). Reducing import tariffs is critical to improving industrial performance. The aim for India should be to reduce import tariffs on all imports to a single rate (say, 10%) over the next three to four years. This schedule would give domestic manufacturers the time to restructure and become competitive, and is comparable with the rate of tariff reduction in countries such as China and Brazil over the past decade (China's import duties are expected to average 9% by 2005).



### Box 3.1: Key Structural Reforms Since 1991

The structural reform program initiated in 1991 envisaged a decisive shift in industrial and trade policy, the policy towards private and foreign investment in industry and services, and financial sector policy. Over the years, major changes have been made in some of these areas, but slow progress with industrial and trade liberalization remain matters of serious concern.

**Industrial policy reforms.** Follow-through on liberalizing industrial policy has been slow and inadequate. Some measures have been taken since the early 1990s: central government industrial controls were mostly dismantled in the early 1990s; the earlier reservation of eighteen industries for the public sector, which prevented the private sector from investing in these areas, has been reduced to three (defense aircrafts and warships, atomic energy generation and railway transport); central government industrial licensing has been almost completely abolished except for a few hazardous and environmentally sensitive industries (although a pervasive regime of government inspection and clearances remains); the requirement that investments by large industrial houses be cleared separately under the Monopolies and Restrictive Trade Practices Act (MRTP) to discourage the concentration of economic power has been abolished and the MRTP Act has been replaced by a competition law which will attempt to regulate anti-competitive behavior. These reforms notwithstanding, three key areas that need immediate attention include removing small-scale industry reservation, reducing government interference/bureaucratic hassles related to the entry and operation of firms, and improving the bankruptcy framework to facilitate the exit of troubled firms.

**Trade policy reforms** have also been gradual. Import licensing for most capital and intermediate goods was abolished in 1991. However, import licensing for manufactured consumer goods and agricultural products (for most products, a *de facto* import ban) remained in place until it was removed in stages between 1997 and 2001, following pressures from the US, EU and other developed countries under the WTO dispute settlement mechanism. Un-weighted average tariffs declined sharply from 128% in 1990/91 to 34.4% in 1997/98. But the trend was reversed in 1998/99 when, on average, tariffs increased by about 5 percentage points, and remained above the 1997/98 levels until a new reduction program commenced in 2002/03. The increase during 1998/99-2001/02 was due to protective import taxes on top of customs duties, initially a “special duty”, then a “surcharge” (both now abolished), and finally the present Special Additional Duty (or SAD). Industrial tariffs were reduced again in the 2003/04 budget, but agricultural tariffs have been omitted from the reduction program and are now much higher than non-agricultural tariffs. India used the Uruguay round negotiations to support its program to reduce industrial tariffs during the 1990s, but about a third of its industrial tariffs remain unbound and most of the rest are bound at a high rate by international standards (40%). With a few exceptions, agricultural tariffs are bound very high and, in most cases, at prohibitive rates of 100%, 150% or 300%.

**Policies towards private sector participation and competition.** Over the past decade, India has made considerable advances in reducing the state’s role in key industry and service sectors, and opening these up to domestic and foreign competition. Public sector units in sectors such as aluminium, car/auto manufacturing, telecommunication and IT have been privatized. In sectors like telecommunications, banking, insurance, and health, which were previously under the exclusive control of public sector monopolies, private companies, both domestic and foreign, have been allowed to operate. Foreign direct investment (FDI) policies were substantially liberalized at an early stage of the reforms and the process was extended further at regular intervals. Limits on the share of foreign equity allowed have been liberalized by allowing 100% foreign ownership in a large number of industries and majority ownership in almost all the others. Procedures for obtaining permission were also greatly simplified by notifying lists of industries that are eligible for automatic approval up to the specified levels of foreign equity (100%, 74% and 51%) and requiring potential investors only to register with the Reserve Bank of India. In addition to liberalizing FDI, qualified institutional investors were allowed in 1993 to invest in Indian companies by purchasing shares in the stock market subject to a maximum percentage and this percentage has been progressively liberalized.

**Financial sector reform.** Reforms in banking have included dismantling the complex system of interest rate controls, introducing prudential norms and capital adequacy requirements in line with international standards, strengthening banking supervision, creating a more competitive environment in banking by more liberal licensing of private banks and expansion by foreign banks, strengthening the framework for bad debt recovery through the enactment of the Securitization, Reconstruction of Financial Assets and Enforcement of Security Interest Act (2002), and improving the bankruptcy framework through Amendments to the Companies Act (2002). A number of reforms have also been introduced to strengthen stock market regulation. Nevertheless, concerns remain about the integrity of the markets.

**Table 3.2: Un-weighted Average Customs Duty Rates in India and other Developing Countries**

	All goods	Agriculture	Manufacturing
India 2001/02 (CD only)	32.3	41.7	30.8
India 2002/03 (CD only)	29	40.6	27.4
India 2002/03 (CD+SAD: estimate)	35	47.1	33.3
India 2003/04 (CD+SAD: estimate)	32.7	46.8	30.7
Pakistan 2001/02	20.4	21.8	20.2
Pakistan 2002/03 (estimate)	18.2	13.9	18.3
Brazil 2000	14.1	12.9	14.3
China 2000	16.3	16.5	16.2
Indonesia 2000	8.4	6.3	8.9
Thailand 2000	16.6	39.9	14.6
South Korea 2000	12.7	47.9	6.6
105 developing countries (1996-2000)	13.4	17.4	12.7

Notes: CD=Customs Duty; SAD=Special Additional Duty. The India 2001/02 tariffs are Customs duties from the WTO TPR report, Jan 2002. They do not include the SAD. The India 2002/03 and 2003/04 averages are from Arun Goyal, *Easy Reference Customs Tariff 2003/4*, plus additional information supplied by the author. The protective effect of the SAD was estimated from the average Customs duty by assuming an average 16% additional duty rate. The 2001/02 average tariffs for Pakistan are from the January 2002 WTO TPR report on Pakistan. The 2002/03 average tariffs for Pakistan are estimated from the 2001/02 averages by assuming that all 30% tariffs were reduced to 25% following the cut in the general maximum rate from 30% to 25% in the 2002/03 budget. There are no other explicitly protective import taxes than Customs duties in Pakistan. The average tariffs for other developing countries were compiled by Francis Ng (DECRC-TR) from WTO, IDB CD ROM 2000 and Trade Policy Review, various issues, 1993-2001; World Bank.

Source: South Asian Trade Policies: An Overview - Zaidi Sattar and Garry Pursell, Draft Report, April 2003

3.12 Furthermore, various tariff exemptions that increase effective protection to value added, create other distortions, and complicate tax administration, should be eliminated, preferably by bringing down the general level of tariffs and reducing the demand for special treatment. A “Jumbo Exemption” notification was introduced in 1996 to consolidate and bring greater clarity to the previous impenetrable maze of exemption notifications, but since then the jumbo has grown and the total number exemptions now appears to be about double the number in 1996. In 2002/03 the Jumbo Exemption Customs notification listed 415 items for which some kind of exemption is allowed, each item corresponding to an HS code (two digit, four digit, or six digit) and many supplemented by one or more of 43 detailed product lists which contain over 1,100 detailed product descriptions. The vast majority of these exemptions are for intermediate material inputs or for machinery and equipment items including spare parts, and may involve one, two or all three of the basic customs duty, the additional (domestic VAT) duty, and the SAD. Other complications are created by exemptions and partial exemptions which give excise tax advantage to small Indian firms over larger Indian firms, and also help the small firms in competing with imports which pay the equivalent of the normal domestic excise taxes, mostly 16%. Although the benefit to small firms has been reduced by the introduction of VAT principles, the small firm exemption increases tax evasion opportunities and tax administration costs.

3.13 In addition, there is a need to recognize and deal with other forms of protection which are undermining other efforts to liberalize the trade regime. The most serious of these is Anti-Dumping (AD). Starting in 1993, anti-dumping has become a major activity in India with over 300 cases completed, nearly all of which have resulted in the imposition of specific duties on imports from particular firms and countries, which are added on top of normal import duties. The ad-valorem equivalents of the AD duties range from around 10% of normal international prices to over 100% of international prices, with the total

resulting import tariffs often prohibitive. The effects of AD go beyond the products actually subject to AD duties, since the threat of bringing AD actions can be used by domestic firms to prevent or limit competition from imports. India's AD activity (especially following recent anti-dumping duties imposed on imports from firms in Nepal and Bangladesh) is influencing the other South Asian countries to also embark on anti-dumping and among other things is complicating efforts to reduce barriers to regional trade.

3.14 As well as by anti-dumping, a number of other methods are also being used to provide extra protection. These include: (a) specific tariffs, used mostly to protect textile fabric and garment producers against low priced import competition, the ad valorem equivalents of which (based on export prices from China and Korea) can be prohibitively high, ranging from 50% to over 100%; (b) the use of government mandated import monopolies (State Trading Enterprises) to control imports of foodgrains and fertilizers; (c) the application of the MRP (Maximum Retail Price) rules to imported consumer goods which raises the effective CENVAT (i.e. excise tax) rate as a proportion of the cif prices of some imports, above the equivalent rate on domestically produced products; (d) the application of sanitary and phytosanitary (SPS) rules and technical regulations in ways which discriminate against imports; and (e) in February 2003, a new Customs Ordinance, one purpose of which is to give discretionary power to the Ministry of Finance to act quickly to increase customs duties without obtaining the parliamentary clearance that was previously required.

3.15 The government has been making strenuous efforts to streamline and simplify its export policies, especially the large number of schemes which are used to exempt, offset or refund import duties on imported inputs used by exporters.<sup>54</sup> However, many long-standing problems in the administration of these schemes have continued, including delays and high negotiation and transactions costs for exporters. The basic underlying reason for these difficulties is the still very high levels of tariffs and indirect taxes which mean that fast and complete rebates or exemptions are essential for profitable exporting, but which on the other hand create large potential economic rents from the misuse of the schemes, which in turn lead to large numbers of different schemes to meet different circumstances and to complex layers of control. The difficulty this creates for exporters is another major reason to substantially reduce the level of protective tariffs and to simplify their structure.

3.16 India has many well justified concerns about the policies of other countries which restrict its exports of goods and services where it has a clear comparative advantage, and it is one of the most active of the developing countries in combating these policies in various international fora, especially at the WTO. Of particular concern are agricultural protectionism in the EU, US and other developed countries, escalated tariff structures in developed countries, the multi-fiber arrangement which restricts textile and garments exports, developed country regional preferential policies such as NAFTA which have diverted imports from India and other excluded suppliers, the misuse of anti-dumping, sanitary and phytosanitary regulations, technical regulations as protective instruments, and the reluctance of developed countries to allow Indians and people from other developing countries to provide services by temporarily moving within their borders.

3.17 However, this negotiating stance in relation to developed country restrictions has been combined with defensive positions with respect to India's own commitments, as indicated, for example, by mostly prohibitively high agricultural tariff bindings, many unbound industrial tariffs, and conservative bindings under the GATS. Because of the size of its economy, and even more its potential future size, India has some bargaining leverage in offering to trade some of these restrictions for concessions by other countries (Mattoo and Subramanian 2003). But these potential future economic benefits should be weighed against the current and ongoing economic costs of not taking advantage of the opportunity offered by the WTO process to help tie in liberalizing reforms by making them more difficult to reverse under the pressure of

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<sup>54</sup> Current export policies are outlined in the Ministry of Commerce *Report of the High Level Committee for the Exim Policy, 2002-07*, (GoI, 2002a).

domestic protectionist forces. The WTO bargaining process can also help overcome domestic interests resisting trade liberalization by balancing increased import competition in the domestic market with better and more secure access to export markets. From this perspective, some of the recent directions of Indian trade policies, especially the routine use of anti-dumping, the use of SPS and technical regulations for protection purposes, and the subsidized exports of rice and wheat, are emulating developed country practices about which India rightly complains, and are likely to undermine its credibility in negotiating for multilateral rules to limit their future use.

**3.18 Domestic taxes.** The business environment in India has greatly benefited from the introduction of VAT principles and the gradual broadening and simplification of the previously extremely complex central government indirect (excise) tax system, now known as CENVAT. This has been under way since the mid-1980s and has continued with major improvements in recent years (especially as regards the textile sector), despite a recent move to a basic three-tier structure (8%, 16% and 24%) rather than a system with a single basic rate. But in sharp contrast to an overwhelming majority of developing countries (by 1998, 116 countries around the world had adopted VAT or a VAT-like tax), India has not yet introduced a VAT. It has been announced that sales taxes will be replaced by a VAT regime, originally expected to be introduced on April 1, 2003. But VAT implementation has been delayed. If fully and uniformly implemented across all states, the VAT should help eliminate distortions caused by the cascading effect of sales taxes applied at each stage of the value chain.

**3.19** In the meanwhile, however, the prevailing indirect tax regime in India creates significant distortions and transactions costs, and the indirect tax rates remain quite high relative to other developing countries (Table 3.2). A recent calculation (CII/McKinsey 2002) suggests that a lowering of domestic sales taxes in India would significantly reduce costs in the value chain, lower consumer prices, and result in rapid growth in domestic sales volumes, without having an adverse impact on government revenues (given the elasticity of demand for manufactured goods and also given that reduction in rates would encourage firms to move from the unorganized to the organized sector, thereby bringing them into the tax net). Another tax-related distortion worth mentioning relates to the granting of discretionary tax holidays by various states in India. While this problem has been reduced since the abolition of sales tax concessions post-1999, it does continue to create a fragmentation of manufacturing capacities, resulting in high costs.

**3.20** While **FDI policies** have been significantly liberalized, FDI is still allowed only in selected sectors (e.g., telecom, insurance, etc.) and is still subject to limits, particularly on full ownership by foreign players. For example, FDI is not currently permitted in pure retailing (global retailers can only participate in India's retail sector through wholesale trade or by operating retail outlets through local franchises). In apparel, which is another important sector from the viewpoint of job creation, FDI is limited to 24% of equity. In housing construction, restrictions on foreign ownership of land limit the entry of foreign builders and developers into the construction market, so that foreign players face higher risks when operating in India as they are unable to take land ownership as collateral for the capital they have invested. Phasing out these FDI limits would not only bring in the necessary capital into these sectors (as the local capital markets and the pockets of the Indian players are not deep enough to provide the necessary equity commitment) and generate growth and employment, but also, as shown by several studies, the entry of multinationals would likely lead to technology and skills transfers to domestic firms. If foreign firms introduce new products and processes, domestic firms would benefit from the accelerated diffusion of technology. Diffusion could also occur from labor turnover as domestic employees move from foreign firms (which typically focus more on job training programs) to domestic firms.

3.21 While the “License Raj” has been substantially reduced at the center, it still survives at the state level, along with a pervasive “Inspector Raj”.<sup>55</sup> Private investors require a large number of permissions (e.g., electricity and water supply connections, environmental clearance, etc.) from state governments to start a business and they also have to interact with the state bureaucracy in the course of day-to-day operations because of laws governing pollution, sanitation, workers welfare and safety, etc.<sup>56</sup> Starting a business in India requires 10 permits compared to 6 in China, and the median time is 90 days in India relative to 30 in China, according to the World Bank’s Doing Business Database (2002). Complaints of delays, corruption and harassment in these interactions are common. The World Bank’s World Business Environment Survey (2000) found that managers in India spend 16% of their time dealing with bureaucracy, compared to 9% in China, 11% in Latin America, and 12% in transitional Europe. The opportunity cost of managers’ time is considerable. The persistence of controls also opens the door to possibilities for corruption. The same survey found that the share of firms making irregular payments in India is about 90%, almost double that in Malaysia. To reduce the costs of investment related to delays and rent seeking, all procedures for entry of firms need to be simplified and expedited. This requires re-engineering the entire gamut of regulatory processes, especially at the state and local levels, on the basis of clear principles of transparency, absence of discretion, and accountability. Introducing “single window” clearances would help greatly.

#### **Factor Market Distortions**

3.22 Inefficiencies in factor markets, i.e., the markets for labor, capital and land, coupled with a weak bankruptcy framework, have further constrained the business environment. There is less agreement on the way forward in these areas, and strong political and vested interests against change.

3.23 **Labor market** restrictions on the hiring and firing of workers are identified as one of the greatest challenges of doing business in India according to the Global Competitiveness Report – India ranks 73<sup>rd</sup>

**Table 3.3 Indirect Tax Rates in Selected Developing Countries<sup>1/</sup>**  
(%)

	Standard rate	Significant other VAT rates <sup>2/</sup>
<b>Asia</b>		
China	17	
India	8, 16, 24	
Indonesia	10	5, 20, 35
Korea	10	2, 3.5
Pakistan	10	-
Philippines	10	-
Singapore	3	-
Sri Lanka	12.5	-
Thailand	10	-
<b>Africa</b>		
Kenya	16	12
Mauritius	10	-
South Africa	14	-
<b>Latin America</b>		
Chile	18	-
Mexico	15	10

Notes: <sup>1/</sup>With the exception of India, all of the countries in the table have introduced VAT (or a VAT-like) tax

<sup>2/</sup>Excludes the zero-rate on exports. While such multiple VAT rates are likely to complicate VAT administration, they are politically attractive by ostensibly serving—though not necessarily effectively—an equity objective. In fact, most OECD countries have multiple VAT rates. Still, the administrative price for addressing equity concerns through multiple VAT rates is likely higher in developing, than in developed countries.

Source: Tax Policies for Emerging Markets, Vito Tanzi and Howell Zee, IMF Working Paper No. 00/35, Washington DC, March 2000.

<sup>55</sup> It may be noted that the License Raj still exists in some traditional areas, notably tariff and other protection policies, and the rebate and tariff exemption schemes for exporters.

<sup>56</sup> The recent GoI report on “Reforming Investment Approval & Implementation Procedures” (2002) provides a good review of some of the existing procedural complexities with public and private investment.

out of 75 countries (China ranks 23<sup>rd</sup>). Employment in India's registered firms (those with more than 100 employees) is highly protected. Any registered firm wishing to retrench labor can only do so with the permission of the state government which is rarely granted. These provisions make labor rationalization very difficult, discourage the hiring of labor in the organized sector, and are especially onerous for labor-intensive sectors. They are obviously especially burdensome for exporters who have to compete with producers in other exporting countries. And they also explain the tendency of FDI to focus on the domestic market rather than use India as a base for exports. A World Bank-CII Survey (2002) found that the typical Indian firm reported having 17% more workers than it desired and that the labor laws and regulations were the main reason why it could not adjust to the preferred level. The government has recently announced its intention to raise the limit for seeking permission from 100 to 300 workers. However, to become effective, this requires enactment of legislative changes by Parliament (repealing Section 5B of the Industrial Disputes Act), and the political sensitivity of such changes are likely to make them very difficult to implement. While contract labor is not subject to these retrenchment laws, the flexibility to hire contract workers is limited by the Contract Labor Act which allows the use of contract labor only for activities of a temporary nature. Amendments to the Contract Labor Act, currently being considered by GoI, would allow the use of contract labor for all activities – not just for activities of a temporary nature.

3.24 Various expert committees appointed by GoI and the Reserve Bank of India (RBI) have emphasized that the lack of adequate, timely **financing** on competitive terms acts as the single most important constraint to SME growth and development.<sup>57</sup> Credit volume to small-scale units has declined since 1997, with the shrinkage of the non-bank financial sector.<sup>58</sup> Small players in India typically cannot access any financing for start-up from commercial sources. Even after they have reached a break-even point in their operations, profitable small businesses face shortages of working capital, investment funds and other types of financing, that undermine their ability to grow. Interest rate caps on small loans lead to a rationing of the supply of credit from formal financial institutions, so that even the better performing SMEs are often forced to resort to informal sources of finance, resulting in interest rates that are significantly above the prime lending rate (PLR). High interest costs of Indian small businesses affect their international competitiveness; the World Bank-CII Survey found that interest costs over sales were a quarter higher for Indian firms than firms in South East Asia.

3.25 In large part, the problem of SME financing may be attributed to market inefficiency. Transaction costs related to SME lending are high as most banks use the same lending technologies for small business financing as they do for large corporations, but they do not have the necessary credit information on SMEs to assess credit risk. Also, lenders' perception of the default risk associated with lending to small business is high, as these firms often lack collateral that would secure loans. Problems in using land as collateral (lack of updated land/property records and the uncertainty surrounding ownership), the non-recognition by lenders of other types of collateral, difficulty in collateral enforcement and loan recovery, and a bankruptcy framework that does not allow for the easy exit of troubled firms, further drive up the risk of default.

3.26 To improve the efficiency of financial markets for SMEs, GoI needs to remove interest rate caps on small loans; facilitate the establishment of well-functioning credit information bureaus/credit rating agencies for small borrowers; introduce legislative changes in mortgage registration to make the process more customer friendly; update land and property records for small loans; simplify the legal framework

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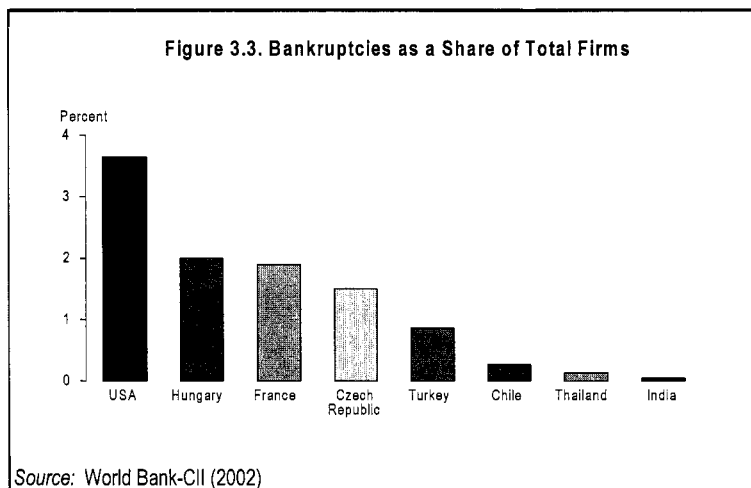
<sup>57</sup> See, for example, the *Report of the Abid Hussain Committee on Small Enterprises* (1997), the *Interim Report of the SP Gupta Study Group on Development of Small Enterprises* (2000), and the *Report of the SL Kapur High Level Credit Committee on SMEs* (1998).

<sup>58</sup> Public sector banks' lending to small scale firms has declined from 2.5% of GDP in 1997/98 to 2.2% in 2001/02, with total lending rising only 30% over the period. However, private banks' lending to the sector has grown 50% over the period, and foreign banks' lending has more than doubled (from a small base), perhaps reflecting their ability to evaluate borrowers and earn reasonable returns in the sector.

for collateral enforcement/loan recovery by introducing alternate, out of court, methods of dispute resolution between creditors and debtors (the recently enacted Law on Securitization, Reconstruction of Financial Assets and Enforcement of Security Interest, which allows for the out of court settlement of bad loans, should be extended to small loans); promote collateral substitutes, as well as the use of peer group security in providing and pricing loans to SMEs; and strengthen the bankruptcy framework to facilitate the easy exit of small firms, given their relatively high mortality rate. At the same time, banks should make efforts to introduce new technologies (e.g., credit scoring) for SME credit and also to train and motivate branch managers to provide loans to commercially viable SMEs.

3.27 Problems with the use and transfer of **land** also critically affect the performance of larger firms. Indeed, some 90% of land parcels in India are reportedly subject to disputes over ownership, which take decades to settle in court. Furthermore, obsolete tenancy and rent control laws keep a large part of urban real estate off the market. The freezing of rents at unrealistically low levels in Mumbai, for instance, has raised rents for new properties to phenomenal levels while keeping rents for old but desirable properties very low. Practices such as this hamper the growth of domestic retail trade and the construction sector by making it very difficult for new players to enter. A report on “India’s Growth Imperative” by the McKinsey Global Institute (2001) argues that land market distortions account for about 1.3% of lost growth per year. The central government has already abolished the Urban Land Ceiling Act which made changes in land use very difficult; however, only a few states have repealed their corresponding Urban Land Ceiling Acts, and this should be extended to all states.

3.28 Outdated **bankruptcy procedures** and ineffective laws have, in the past, led to inefficiencies in the system, making industrial restructuring almost impossible. Recent estimates show that it is entirely common for proceedings to take more than two years, and over 60% of liquidation cases before the High Courts have been in process for more than 10 years. Not surprisingly, when looking at the share of firms that go bankrupt, India has a much lower share (0.04%) than other emerging markets, such as Thailand (Figure 3.3).



3.29 The recently enacted Amendments to the Companies Act (in 2002) should help improve the bankruptcy framework. The Amendment stipulates the abolition of the Bureau of Industrial and Financial Restructuring (BIFR), and the creation of a new umbrella body -- the National Company Law Tribunal (NCLT) -- that will henceforth perform the tasks of restructuring, amalgamating and winding up companies (tasks hitherto performed by the high courts and district courts), and the revival/rehabilitation of sick companies (a task hitherto assigned to BIFR). Under the new framework, courts will no longer have any powers in respect of mergers and liquidation/winding up, and this should help expedite the process of restructuring/liquidating sick companies. However, repeal of the Sick Industries Companies Act is essential for this new bankruptcy framework to become effective. The effectiveness of the new framework will also depend to some extent on the pace of labor market reforms, since the successful winding up of companies may be hampered by problems in retrenching workers. The recently passed law on the enforcement of creditors’ rights should help the process of industrial restructuring, unlocking the resources tied up in non-performing enterprises for more productive use, but to help the restructuring of small firms, the law needs to be extended to cover the small scale sector.

### *Infrastructure Bottlenecks*

3.30 Severe shortfalls in capacity, poor quality and high costs of key infrastructure continue to constrain Indian businesses.<sup>59</sup> The most important and difficult area is power sector reform.

3.31 Access to reliable **power** at reasonable costs is a prime concern for most Indian businesses. Industry surveys have found that acute power shortfalls, unscheduled power cuts (i.e., unreliable supply), the erratic quality of power supply (low voltage coupled with fluctuations), delays and informal payments required to obtain new connections, and very high industrial energy costs, present major constraints to Indian industry, with serious implications for overall industry performance and competitiveness. India-wide, the shortfall in 2001/02 was estimated at 7.5% for energy and 13% for peak demand, with substantial variation across states in the availability and reliability of supply. Firms in Karnataka are reported to face, on average, daily power cuts of 2.4 hours, compared to 6.6 hours (mostly unscheduled cuts) faced by their counterparts in Haryana (TERI, 2000).

3.32 Unscheduled power cuts impose substantial costs on firms. Average industrial production losses per unit outage are reported at Rs.5 and Rs.22 for firms in Karnataka and Haryana, respectively (TERI, 2000).<sup>60</sup> Production losses due to outages are estimated at about 7.6% and 7.9% of the production costs for high tension (larger firms) and low tension (smaller firms) industries, respectively, in Haryana, and a higher proportion of 12.4% and 15.3% in the case of Karnataka. Some 40% of the industries surveyed in Andhra Pradesh report damage to equipment due to the poor quality of power and the damage is much more costly for industries with sensitive equipment, and where process and quality is heavily dependent on motor speed.

3.33 Not only does industry receive irregular and low quality power, but also, it is charged tariffs much above the cost of supply. Much of this is due to cross-subsidization of power tariffs by state governments and widespread power theft that is euphemistically referred to as “transmission and distribution losses”. In most states, political factors have dictated that agricultural consumers pay little or nothing for the power that they consume, and households, too, pay relatively little and, often connive with the electricity departments to draw much more power than what is billed. Industry ends up paying an average tariff of Rs.3.81/kWh (as against an average tariff of Rs.2.39/kWh for all categories) and an average cost of public power supply of Rs.3.50/kWh. Industrial tariffs for high tension industries in India are between 8-9 cents/kWh, among the highest in the world, as compared to 8 cents in Argentina, 7 cents in Bolivia, 6 cents in Brazil and Thailand, and 3-4 cents in China. Typical rates in Western Europe are in the range of 6-7 cents/kWh.

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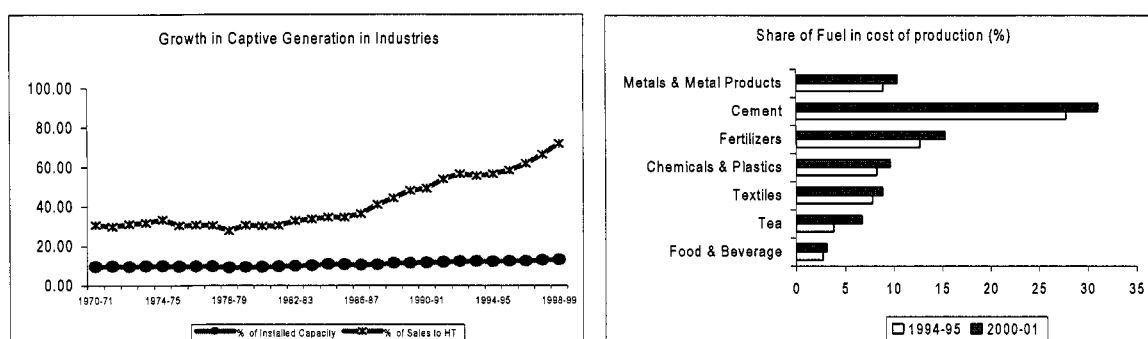
<sup>59</sup> This section focuses on infrastructure bottlenecks that are in most critical need of being addressed in order to improve the business environment. One sector that is not covered is telecommunications, mainly because considerable progress has been made with reforms and most business surveys report that Indian firms are reasonably satisfied with the country's telecommunications infrastructure. The challenge now is to improve rural telephone-density and further improve overall access rates to communication services.

<sup>60</sup> The wide difference between the two states is because the average production cost for industries is higher in Karnataka compared to Haryana, and firms in Haryana rely more heavily on self-generation.



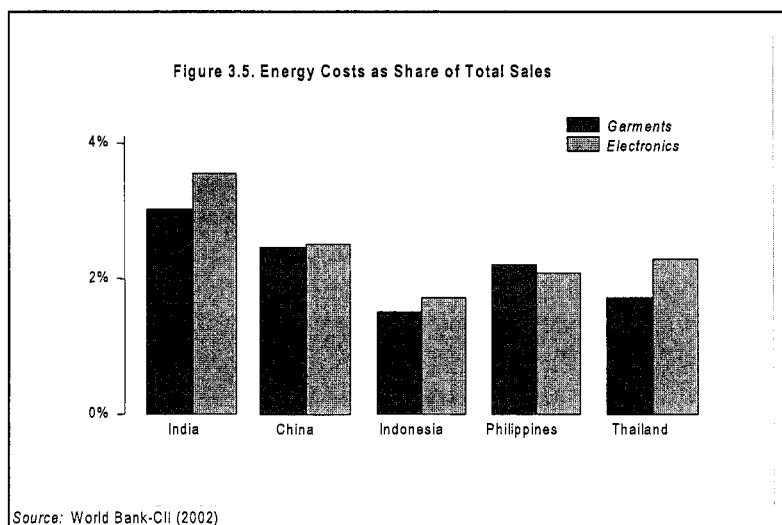
3.34 The paucity, unreliability and poor quality of power from the public grids has forced a greater proportion of Indian firms to operate their own (captive) generators, further increasing the cost of power faced by industry, and reducing firm-level competitiveness. The share of fuel costs in the overall production costs of Indian firms in all the major industrial sectors was higher in 2000/01 than in 1994/95 (Figure 3.4). Captive power generation capacity is at present estimated at about 22,000 MWs, accounting for one-fifth of the total capacity of the power utilities. Some 69% of the manufacturing firms surveyed across India by the World Bank-CII study had their own power generator, compared to 30% in China.<sup>61</sup> Comparing garments and electronics with East Asian countries, energy costs in Indian firms were found to be double those in Indonesia, the Philippines and Thailand (Figure 3.5). While large firms can bear such costs, small and medium sized firms suffer severely. They either have to go without power, or else, install their own generator: the typical Indian SME has its own generator, tying up one-sixth of its capital. This stunts the growth of the SME sector.

Figure 3.4: Cost of Power



Source: CMIE Energy, April 2002

Source: Taru, 2002



Source: World Bank-CII (2002)

3.35 Power sector reforms are now widely accepted as fundamental to improving business performance. An urgent priority is the need to rationalize power tariffs, depoliticize the tariff-setting process, and implement a phased reduction in cross subsidies that operate against industrial consumers. Several states have taken steps to depoliticize the tariff fixing process by establishing statutory regulatory

<sup>61</sup> It may be noted that, in states that have made more progress with power sector reforms (e.g., Maharashtra) a smaller proportion of firms (45%) had captive generators. In contrast, over 85% of firms surveyed in Delhi and Punjab, and over 97% of firms surveyed in West Bengal, reported having captive generators.

authorities, and others should follow suit. Also, states such as Andhra Pradesh and Karnataka have introduced price incentive schemes to encourage industry to shift to the grid; initial results for Andhra Pradesh are encouraging with about 22% increase in demand during 2003, in response to the price incentives. Time-of-day tariffs need to be introduced for industries with peak and off-peak rates. To minimize the impact of financial losses to the power utilities, cost recovery needs to be enhanced through tariffs charged to agriculture and residential consumers. Tariff rationalization should be accompanied by reforms to improve the reliability and quality of power supply through dedicated feeders for industries.

3.36 The above measures must be accompanied by steps to encourage greater private investment in the power sector, hitherto constrained by the poor credibility and financial viability of the sector. Key reform measures required include improvements in the financial and operational performance of the SEBs, and in distributional efficiency through commercialization and privatization. The strategy for privatizing distribution should consider focusing on privatizing the relatively commercially viable segments of the network and, in parallel, developing alternate strategies for improving services and targeting subsidies in rural areas. Targeting a broader range of potential investors and actively mitigating the perceived policy and regulatory risks will be key to the successful privatization of the distribution business. Trading by industries with self generation, along with other power suppliers, should be encouraged by providing open access to the transmission and distribution networks in a phased manner along with the elimination of cross subsidies during an agreed time frame.

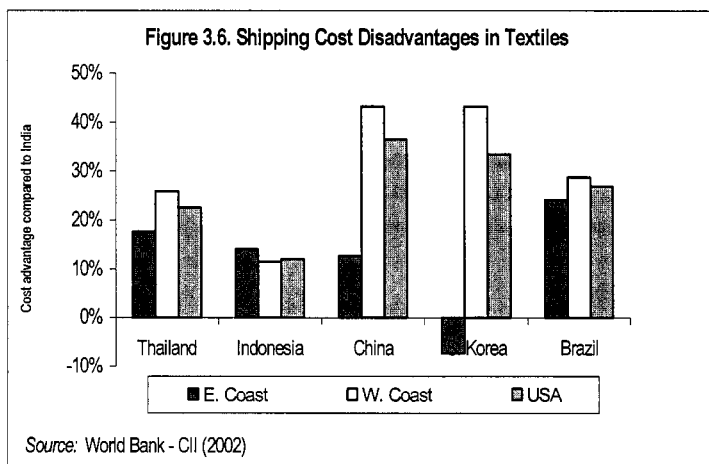
3.37 Since power sector reform is primarily the responsibility of the states, alleviating bottlenecks in this sector requires the full commitment of state governments. The central government can play a supportive role by introducing legislation to foster reforms to encourage private sector involvement. In this context, the newly passed Electricity Act 2003 should play a positive facilitating role, through for example, its provisions for moving to open access, the removal of entry barriers for new generation, delicensing of off-grid supply in rural areas, trading for distribution licenses, antitheft, and deepening of regulatory reforms. The new legislation effectively empowers Indian states to accelerate power sector reforms in the direction of greater competition, better governance and private sector investment. However many implementation details remain to be decided, and the Act's ultimate success will depend on action at the state level. As noted in Part II.1, the central government has also introduced a scheme for providing financial assistance to states willing to adopt a program of reforms in the power sector. More critical, however, are likely to be continuing GoI efforts to maintain a hard budget constraint for state-level utilities, including through rigorous policies on payments to central generation and transmission utilities.

3.38 Ensuring speedy, reliable, door-to-door **transport services** is also critical to improving industrial performance. India has one of the most extensive transport systems in the world. But the sector suffers from severe capacity and quality constraints. While notable progress has been made with the implementation of the National Highways Development Project, India currently has no interstate expressways linking the major economic centers, and only 3,000 kms of four-lane highways, compared to China, which has built 25,000 kms of four to six lane, access-controlled, expressways over the last 10 years. Poor riding quality and congestion result in truck and bus speeds on Indian highways that average 30-40 km per hour, about half the expected averages. GoI and some states are implementing major highway upgrading programs, with the 4-laning of 13,000 km national highways being the most notable. In addition, the Tenth Plan proposes a number of road upgrading projects totaling 10,000 km, and recognizes the need to start investing soon in a program of access controlled expressways to provide faster and safer transport in high-volume corridors. Meeting the Tenth Plan targets will require a significant increase in funding from the private sector, which has hitherto been limited. Although private financing of transport infrastructure has increased considerably in recent years, it can realistically be expected to fund only a small fraction of sector investment. In the short to medium term, much can be gained through greater efforts to strengthen the policy, regulatory and legal framework, so as to reduce uncertainties arising from political interference and weak contract enforcement, which have inhibited

private sector participation and investment in roads. Better cost recovery from users would also help; while India has made progress in road user charges with the introduction of a national fuel “cess” (tax) in 1999, resource mobilization through such charges remains low. Equally, reform efforts should focus on strengthening the road agencies/state public works departments, to improve the financial performance and accountability of these public sector agencies. And users and other stakeholders must be given a strong voice in overseeing the planning and implementation of transport infrastructure.

3.39 India’s high-density rail corridors, too, face severe capacity constraints, compounded by poor maintenance and rolling stock failure; average rail speed is only 24 km per hour. As in the roads sector, capacity expansion is an urgent priority for railways, and must be accompanied by efforts to improve efficiency in the use and maintenance of existing capacity. Indian Railways (IR) continues to be a patient who resists any bitter medicines despite plenty of prescriptions available. It has recently entered into operating deficits and depends on the central budget for its large investment program. Reforming this sector will require large-scale financial restructuring, involving the shedding (or even ring-fencing) of its non-core assets or businesses. Government policy also needs to address price distortions arising from the long practice of cross subsidization from freight to passenger services, which causes excessively high freight tariff and discourages the use of railways, preventing IR from serving the non-bulk high margin transport market. (The freight traffic of the Indian railways as a percentage of traffic units is a mere 5% in India compared to 79% in China, and Indian roads accounts for 60% of land transport freight and 80% of passenger traffic).

3.40 In the ports sector, total berth capacity is no longer a serious constraint, since the corporatization of major ports, and establishment of an independent tariff regulatory authority, has helped bring in the private sector to develop new ports. However, the efficiency of existing capacity, particularly in the older ports, needs improvement. In these ports, the low productivity of port equipment and labor causes delays in turnaround and increases handling costs for cargo and containers. The average turnaround time for vessels has improved, from 8.1 days in 1990/91 to 3.7 days in 2001/02 (and in some of the newer ports, such as the Jawaharlal Nehru Port Trust, the turnaround time is 1.04 days). But India still has to catch up with international standards, where the turnaround time is in hours, and this will require strong efforts to modernize equipment and improve labor productivity, together with measures to reform customs administration, which currently exacerbates the problem of delays and shipping costs. According to World Bank-CII (2002), the time taken to get goods cleared through customs is 50% longer in India than in Korea or Thailand, and triple what many OECD countries report. Costs associated with shipping a container of textiles to the United States are over 20% higher for India compared to Thailand, and 35% higher compared to China (Figure 3.6).



3.41 Promoting greater private sector participation in the provision and financing of infrastructure is a key concern for the GoI. In the long run, the government cannot attract and sustain private investment in infrastructure unless it addresses the policy problems that underlie investors’ concerns by raising prices to cost covering levels and establishing a sound legal and regulatory framework.

3.42 In the short run, however, and to facilitate the transition from publicly to privately funded infrastructure, various public-private partnerships (PPPs), involving subsidies, risk-bearing, and other

forms of financial support from government, may help attract private investment and close financing gaps, because such arrangements allow government to bear certain risks that the private sector feels it cannot mitigate through other means -- for example, risks related to the demand for services, or the cost of financing.<sup>62</sup> Frequently used instruments for government support to infrastructure projects include cash subsidies, in-kind grants, tax breaks, capital contributions and guarantees of risks, either those under the government's control, or those outside the government's control. In general, instruments such as cash subsidies and tax breaks are not desirable, particularly for countries facing fiscal constraints. Tax breaks, may improve the overall bottom line but not specifically target particular consumer groups, and they can cause serious distortions and create opportunities for graft. Where there are imperfections or gaps in the financial markets, capital contributions and the guarantee of risks not under the government's control may be the best instrument to use. If the principal concerns relate to political and regulatory risks, then some form of government guarantee offering compensation in the event of these risks occurring may be the most appropriate option.

3.43 It must be stressed that while PPPs may help attract some private financing for infrastructure, they can also risk simply postponing the day of reckoning, and impose serious costs on taxpayers (whether in terms of foregone taxes or revenues from public assets, increased expenditure, or contingent liabilities on the government's budget).<sup>63</sup> Given India's huge unmet investment needs in infrastructure, the most useful impact that a highly selective use of various public support arrangements could have is perhaps to help private sector innovators pilot transactions that have good underlying cash flows, but where the private sector cannot carry the full costs of the policy, regulatory and legal risks, and costs of public consultation, etc. (in other words, to help provide "icebreaking" services). Beyond that, the success with which private investment in infrastructure can be scaled up will depend less on clever financing and more on the framework underpinning private participation in infrastructure. In the long run, government cannot attract and sustain private investment in infrastructure unless the policy, regulatory and legal problems that underlie investors' concerns are addressed. Therefore, PPPs should be seen, at best, as temporary measures and should be entered into with caution.

### **Estimated Impact of a Better Investment Climate on Overall Economic Performance**

3.44 The potential gains to growth from removing key investment climate bottlenecks have been estimated to be in the range of 2% to 4% per annum. A study by McKinsey (2001) estimated that addressing the inefficiencies generated by the multiplicity of investment regulations, distortions in the land markets, and widespread government ownership of business, would free India's economy to grow as fast as China's, at 10% a year, and create some 75 million new jobs, sufficient not only to ward off the looming crisis in employment, but also to reabsorb the majority of workers displaced by productivity improvements. The World Bank-CII study (2002) estimated that, if each Indian state could attain the best practice in India in terms of investment climate, the economy should grow about 2 percentage points faster. The survey indicated that, if India could achieve Chinese or Thai levels in distinct investment climate areas where it lags behind those countries, its growth acceleration would be even more dramatic.

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<sup>62</sup> For a more detailed discussion on the available instruments for PPPs in the infrastructure sector, based on international experience, and the factors that government should take into consideration when selecting an appropriate instrument, see Basu, Harris and Von Klaudy (May 2003).

<sup>63</sup> For a discussion on the ways to measure costs associated with various types of government support and methods to value guarantees, see Irwin (2002) and Irwin, Klein, Perry and Thobani (1997).

## III.2: AGRICULTURE AND RURAL DEVELOPMENT

### Agriculture and the Rural Economy

3.45 The agricultural sector's contribution to GDP has declined from about 35% in 1980/81 to 23% in 2001/02. Despite this, about 75% of India's poor are currently in rural areas and a large proportion of the rural poor are dependent on agriculture for employment and as a major source of livelihood. Analysis of the NSS 55th round survey (1999/2000) shows that agricultural households<sup>64</sup> comprise about 54% of poor<sup>65</sup> households in rural areas. In some states, such as Rajasthan and Uttar Pradesh, agricultural households comprise over 70% of poor rural households. The majority of cultivators are also small landholders. The large number of poor agricultural households and their income vulnerability are major concerns among policy makers. These in turn have driven both agricultural policies (trade protection and private trade marketing controls) and public expenditures (investments and subsidies) in agriculture. Improving agriculture's performance, especially increasing foodgrain output to achieve self-sufficiency to meet its food security goals, has also been a major government priority.

3.46 According to the latest Census, about 235 million people (58% of the total labor force) were employed in the agricultural sector in India in 2001.<sup>66</sup> Of serious concern is the low productivity of workers engaged in agriculture compared to those employed in the non-agricultural sector in most states.<sup>67</sup> This results from the large numbers of workers tied to agriculture in almost all states, the slowing down of agricultural growth, the shrinking share of agricultural GDP and limited opportunities for employment in the rural non-farm sector. This in turn contributes to the high levels of poverty in rural areas at the state level.

3.47 In view of the high rates of poverty among agricultural households, the large concentration of labor tied to agriculture and the low productivity of these workers, GoI's National Agricultural Policy and the Tenth Plan place high priority on raising agricultural productivity as a means to achieve more rapid agricultural growth and to reduce rural poverty. At the same time, it has also heightened government attention towards promoting the more rapid growth of the rural non-farm sector. Promoting both agricultural and rural non-farm sector growth is vital, because they are closely linked due to the strong backward and forward linkages.<sup>68</sup> Promoting rural non-farm sector growth would require improved access to basic infrastructure (roads, markets, electricity, water) and services (market information, credit, education). In opening greater employment opportunities in the rural non-farm sectors, this could create demand for agricultural labor, contributing to higher agricultural wages and incomes.

3.48 Over the last two decades, agricultural growth rates have begun to follow a slowing trend, which will have dire consequences for rural areas and the rural poor in the longer term if appropriate actions are not taken to reverse it. The growth slowdown can be traced to the continuing decline in productivity-enhancing investment by the government, which is leading to the slowdown of total factor productivity growth in the agricultural sector. Although most GoI domestic trade restrictions were lifted in 2002, the possibility of their re-imposition at any time continues to reduce private sector incentives to participate or invest in the agriculture sector. In the future, therefore, improving agricultural performance would require

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<sup>64</sup>These include households involved in cultivation and agricultural wage labor.

<sup>65</sup> Based on the Planning Commission rural poverty line.

<sup>66</sup> These include 128 million cultivators and 107 million agricultural laborers. In rural areas, dependence on the agricultural sector is even greater. About 228 million workers, or nearly three-quarters of the rural population, were employed in the agricultural sector.

<sup>67</sup> Average labor productivity is measured by the sector GSDP divided by the number of workers employed in the sector. In major states, excluding Punjab and Kerala, agricultural labor productivity on average amounts to about one quarter of labor productivity in the non-agricultural sector.

<sup>68</sup> Forward linkages take the form of the agricultural sector supplying products for downstream processing or direct consumption, agricultural surplus providing investment funds to the non-farm economy, and consumption by agricultural household of goods and services from the non-farm sector. Backward linkages take the form of the non-farm sector stimulating growth in the agricultural sector by supplying inputs and investing in the agricultural sector (Lanjouw and Feder 2001, Haggblade et al. 2001).

progress in two key policy areas: (a) rebalancing government expenditures from subsidies towards more productivity-enhancing public investments, including irrigation, rural infrastructure such as roads, markets, and electrification, and research and extension; and (b) permanently removing restrictions on domestic trade (subject to their imposition only in emergency situations) to improve the investment climate for farmers and the private sector so as to effectively meet market opportunities, while supporting a regulatory framework to ensure fair competition.

**3.49 Agricultural performance.** Average annual agricultural GDP (including forestry and fishing) growth rates displayed a slight slowdown between the 1980s and 1990s (Table 3.4).<sup>69</sup> Notably, the sector displayed a relatively strong performance in the early 1990s which various studies attribute to a number of factors, including the economic reforms in the early 1990s which reduced the taxation of agriculture and thus contributed to improving the agricultural terms of trade, the impact of increased investments, particularly private investments, in the sector in the 1990s, increasing agricultural diversification into higher value products such as horticulture and livestock spurred by rising incomes and changing consumer preferences,<sup>70</sup> and rapidly rising government support prices and input subsidies during a period of good monsoons.

**Table 3.4: GDP, Agriculture Sector Growth Rates<sup>1/</sup>**

	1980/81 - 1989/90	1990/91 - 1999/00	1992/93 - 1996/97	1997/98 - 2001/02
GDP at factor cost	5.6	5.8	6.7	5.5
Agriculture, forestry & fishing	3.4	3.0	4.7	1.8
Agriculture	3.5	3.0	4.8	1.7
Forestry & logging	0.0	0.6	0.1	2.4
Fishing	5.9	5.2	7.7	2.9

Notes: <sup>1/</sup>Compound annual growth rate. %

Source: Central Statistical Organization, National Accounts Statistics.

**3.50** While the recent slowdown in agricultural GDP growth rates (1.8% per annum from 1997/98 to 2001/02) can be largely attributed to successive natural calamities that afflicted various parts of the country (extensive droughts in many states due to poor monsoons and flooding in some northern states), there is growing concern regarding whether sustaining past agricultural growth performance, let alone attaining a higher growth trajectory, could be achieved without addressing fundamental structural problems. Several recent studies find total factor productivity (TFP) in agriculture has been declining between the 1980s and 1990s (Kumar 2002, Sharma 2002). In the Indo-Gangetic Plains, traditionally the seat of the green revolution, Kumar finds that while TFP grew by 2% per year between 1981 and 1990, it became negative between 1990 and 1996. These and other studies attribute the deceleration in TFP growth to the slow down in productivity gains from the earlier adoption of high yielding varieties, the decline in public investments in the agricultural sector, and increasing natural resource degradation (Box 3.2).

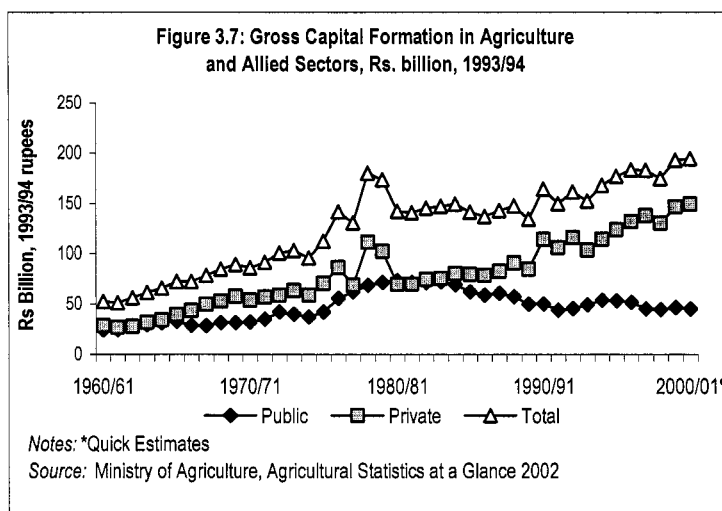
<sup>69</sup> The growth rates are sensitive to choice of data periods, in part due to agricultural production fluctuations.

<sup>70</sup> The decline in per capita net availability of cereals, between the early and late 1990s, has been flagged by many as an early sign of an impending food crisis. NSS surveys confirm the decline in per capita consumption. Recent studies find that this decline is not new in India (Hanchate and Dyson 2000 and Hanumantha Rao 2000). It likely indicates a substitution away from cereals to other foods as incomes rise. Deaton and Dreze (2002) find that the consumption of "superior foods" such as vegetables, milk, fruit, fish and meat rose quite sharply across all expenditure groups during this period.

### Box 3.2: Damaging the Land

As recently as 1999, the government estimated that nearly half of the country's 329 million hectares of soil could be categorized as degraded (GoI 1999). One study asserts that the majority of Indian soil has been harmed, concluding that only 36% of land area suffers no serious damage. They found that 5% faced low degradation (less than 15% yield loss), 11% was moderately degraded (15-33% yield loss), 43% was highly degraded (33-67% yield loss), and 5% was so damaged that the land became unusable. More importantly, about half of the land under use for agriculture, forestry and pasture can be categorized as degraded. A household-level and plot-level study in Uttar Pradesh showed serious damage: waterlogging and salinization led to significant declines in paddy and wheat yields over a ten-year period (Joshi and Jha 1991). This productivity loss leads to significant economic losses. A study from the mid-1990s estimated that agricultural output loss due to soil degradation amounts to about US\$1.9 billion per year (Brandon and Hommann 1995). One researcher estimated that waterlogging and salinization caused annual cereal production loss amounting to about 5% of agricultural GDP (Young 1993). Such economic losses represent short-run effects, but long-run impacts of soil degradation in India, such as permanent damage, should also be considered. Dregne and Chou (1992) found that human-induced water erosion led to irreversible soil productivity loss of 20% or more in certain sections of India.

**3.51 Public investments in agriculture.** Although total investments in the agricultural and allied sectors (fishing and forestry) have been increasing over time, since the mid-1980s these were largely driven by private sector investments, mainly in farm equipment, minor irrigation and land improvements (Figure 3.7). By contrast, public investment systematically declined since the mid-1980s;<sup>71</sup> its share of annual agricultural GCF decreasing from 44% in 1985/86 to 23% in 2000/01. This decline is a major cause for concern because of its potential negative impact on agricultural growth over the longer term. Gulati and Bathla (2002) estimate that a 10% decrease in public investments (including irrigation and power) leads to a 2.4% reduction per year in agricultural GDP growth. Because of complementarities, lower public investment would also worsen the environment for private investment in agriculture. Gulati and Bathla estimate the elasticity of private GCF in agriculture with respect to the cumulative financial public investment in irrigation and power to be 0.16 and 0.15 respectively.<sup>72</sup>



**3.52** Public investments in the agriculture sector over the last decade declined in large part due to the sector's growing subsidy requirements. These agriculture-related subsidies are major contributors to the rising fiscal deficit in the central and state governments. For example, GoI food subsidies reached Rs.242 billion (US\$5 billion) in 2002/03, which is equivalent to 1.0% of the national GDP. GoI fertilizer subsidies, while declining, amounted to Rs.110 billion (US\$2.3 billion) or 0.4% of national GDP in the same year. Foodgrain and input subsidies have distorted farmer cropping and investment decisions, which are not only inefficient from an economic perspective, but have also contributed to widespread soil and land degradation (soil nutrient imbalances, water logging, salinity, over-extraction of groundwater,

<sup>71</sup> According to the Indian System of National Accounts, the public capital formation statistics primarily comprise investments in major and medium irrigation schemes. Gulati and Bathla (2002) re-estimate public gross capital formation to include investments in power (Concept II) and power plus investments made in agriculture and allied activities as defined under budgetary heads of the government accounts (Concept III). Under both concepts, public capital investments declined.

<sup>72</sup> Gulati and Bathla (2002) also find that availability of institutional credit and terms of trade between agriculture and non-agriculture also has a positive and significant influence on private GCF.

etc). The bias towards subsidies also reduces resources for much-needed social investments and appropriate operations and maintenance of critical rural infrastructure. Indian policymakers have questioned why India should reduce its agricultural subsidies, in view of the large agricultural subsidies provided by developed countries such as the EU and US. These are issues that clearly need to be raised and addressed through its bilateral and multilateral negotiations (e.g., WTO). However, India's reduction of agricultural subsidies is no longer purely an issue of its fiscal costs and of using its fiscal resources more efficiently. The extent to which these subsidies are eroding the core foundation for sustained agricultural growth over the longer term, due to inadvertent natural resource degradation, is as or even more critical. The following sections elaborate further on key sectoral issues.

### **Foodgrain (Rice and Wheat) Policy**

3.53 GoI's foodgrain policy rests on two major pillars: (a) to ensure farmers a reasonable income through government procurement at a minimum support price (MSP) for rice and wheat; and (b) to ensure adequate availability of and improved access to foodgrains by consumers at reasonable prices through the distribution of subsidized foodgrains and price stabilization through buffer stocking operations. To achieve this, GoI created a public marketing system that parallels that of the private sector. The Targeted Public Distribution System (TPDS), introduced in June 1997, aims to ensure access by the poor and other vulnerable groups to essential food commodities. The program supplies rice, wheat, and sugar nationally, and other commodities such as edible oils and coarse grains in some states, at subsidized prices. The shift to the TPDS was a significant milestone in GoI's food security strategy, as it targeted a larger share of the foodgrain subsidy to the poor relative to the non-poor.<sup>73</sup> To support TPDS and price stabilization activities, trade restrictions on the private sector were enforced by GoI and state governments. The Essential Commodities Act, 1955 empowers the GoI and state governments to enforce controls on movement, storage, exports and imports, and access to trade credit. Controls were enforced or lifted depending on the severity of supply shortfalls and price rises, thus eliminating private sector incentives for spatial and temporal arbitrage. In 2002, the GoI finally lifted the licencing requirements and movement and storage restrictions on private dealers. However, the potential for their re-imposition continues to discourage private investments in the foodgrain sector. Recognizing this, the GoI is considering the amendment of the Essential Commodities Act to permanently remove these trade restrictions, with provisions for their enforcement only in emergency conditions. In 2003, restrictions on the use of risk management instruments, specifically futures contracts, were also removed.

3.54 Steady increases in the minimum support price (MSP) for rice and wheat encouraged increased production, necessitating greater government procurement. However, strong political pressure from states where the largest procurement have traditionally been made (i.e., Punjab, Haryana and Andhra Pradesh) stalled efforts by GoI to contain increases in the MSP. Combined with the reduction in foodgrain off-take with the shift to TPDS and the downward trend in world market prices, which limited export possibilities, continued government procurement led to growing buffer stocks, which rose to over 60 million metric tons in July 2002, compared to the norm of 18 million tons (Economic Survey 2002-03). Consequently the buffer stock component of the food subsidy rose from 12.5% in 1997/98 to about 41.6% in 2001/02. The overhang of burgeoning buffer stocks in turn exerted downward pressure on open market prices, and combined with high MSPs necessitated even greater government procurement. In an effort to reduce surplus stocks, the GoI instituted several measures, including increasing the monthly allocations under TPDS for all households, lowering the issue price for above poverty line families, increased use of foodgrains for welfare schemes and drought relief, open market sales at prices below FCI's economic costs and subsidized exports. In the context of high MSPs, these measures combined to raise the food subsidy bill further.

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<sup>73</sup> Its predecessor, the Public Distribution System, by contrast was a general entitlement scheme, which was widely criticized for its failure to serve the population below the poverty line. It was also criticized because it provided meager income and suffered from urban bias, leakage and diversion and deteriorating quality of grain supplied, and lack of transparent procurement and delivery systems.



3.55 Recent analysis of the impact of the shift to TPDS indicates increased participation of persons below the poverty line at the All India level and in most states (Deninger and Umali-Deninger, forthcoming). However, despite this improvement, many of the poorest are still un-served. The most frequently cited reasons that households cite for not purchasing foodgrains from the TPDS are: “the item was not available in the ration shop”, “not having a ration card”, and “unsatisfactory quality.”

3.56 Recognizing the crisis created by mounting buffer stocks and food subsidies, GoI established a high-level committee to develop proposals for a long-term foodgrain policy. The report of the committee was released in 2002. The committee’s proposals to remove the rice levy and all restrictions on foodgrain trade, and its activation only in emergency conditions, will improve incentives for the private sector. However, some of the other proposals raise concerns. The underlying principle of the proposed policy towards maintaining self-sufficiency that also ties farmers to low-value rice and wheat production will come at the cost of efficiency. The continued large public sector role envisioned in foodgrain markets will crowd out private sector participation. The proposal to set the Minimum Support Price (MSP) to cover the cash costs plus the returns to family labor, land and capital is a positive step. In the longer term, however, fostering competitive markets would serve as a better avenue for ensuring remunerative returns to farmers. In this scenario, the MSP should be reduced to cover the cash cost only, which complemented by others schemes (e.g., employment schemes, TPDS) would serve as a safety net for farmers. Otherwise this implies that the government will continue to determine farm prices rather than the market. Finally the proposed reversion back to an untargeted public distribution scheme is likely to bring back the earlier problems of the PDS of subsidies being captured by non-poor households and will likely result in an escalation of food subsidies. Effectively targeted safety nets, such as the TPDS, would help protect the poor from price and income shocks, while drastic supply shocks would be mitigated by a cost-effective and well-managed price stabilization mechanism.

3.57 There is broad based agreement in India that the existing foodgrain policy is not sustainable but there is limited agreement on the way forward. Significant political economy constraints, necessitating complex negotiations between the GoI and states which traditionally benefited from large-scale procurement (i.e., Punjab, Andhra Pradesh and Haryana), and the considerable inter-dependence among the various interventions (procurement, buffer stocking and the TPDS), have compounded the complexity of managing the reform process. Future progress will require difficult decisions that will necessitate strong government commitment.

### **Input Policies**

3.58 The government’s agricultural policy of the last three decades has relied on subsidizing key inputs to promote more rapid agricultural production growth and ensure food security for its population. This policy is recognized as a key factor in the rapid adoption of high-yield varieties of rice and wheat that were the cornerstones of the green revolution in India in the 1970s and 1980s. There is also broad recognition that the rapidly rising subsidy levels are fiscally unsustainable. Power and irrigation subsidies are a major cause of the fiscal crises in many states, and with deteriorating state finance, are crowding out productivity-enhancing public investments such as rural infrastructure, irrigation, and technology upgrading. Power and water subsidies, to the extent that they encourage inefficient water use are also leading to salinity, water logging, and declining groundwater tables in many areas. Fertilizer subsidies, that are largely concentrated on urea, have distorted input use. These issues are elaborated below.

#### ***Fertilizer Policy***

3.59 Fertilizer subsidies were introduced in the 1970s in response to the sharp rise in the prices of oil and feedstock of the fertilizer industry, and have remained since then. Domestic producers of urea are given a designated plant specific retention price, which is essentially derived on a cost-plus formula. The fertilizer subsidy given to the firm is the difference between the retention price and the farm gate price of fertilizer. Di-ammonium phosphate (DAP) production and muriate of potash (MOP), which is generally

imported, receive a flat-rate subsidy under a concession scheme. The fertilizer subsidy, which is now equivalent to 0.4% of GDP, is wholly borne by the central government.

3.60 Who are benefiting from the fertilizer subsidies: farmers or domestic fertilizer manufacturers? Gulati and Narayanan (2002) estimate the distribution of the subsidy based on the difference between farmgate prices of domestically produced fertilizer relative to imports. While the actual farmer share varies yearly due to the fluctuation in world prices, they find that the average subsidy share of farmers was about 67%, while that of industry was about 33% from 1981/82 to 1999/2000.

3.61 Concerned with the rising subsidy costs, GoI established a High Powered Fertilizer Pricing Policy Review Committee in 1997. Its report, completed in 1998, recommended: (a) deregulation of the fertilizer industry; (b) discontinuation of the unit-wise retention price; (c) new pricing methodology based on the long-run marginal cost; (d) abolition of allocations under the Essential Commodities Act; (e) new units to get a guaranteed price for 15 years; and (f) setting up of a Fertilizer Policy Planning Board. In 2001/02, the government announced its policy to rationalize fertilizer pricing and implement the recommendations of the Expenditure Reforms Commission (ERC) for a phased program of price increases (7% per year) and complete decontrol of urea by April 2006. Since then, GoI has implemented a number of reform actions (Table 3.5). Continued commitment to the proposed timetable would lead to a significant reduction in fertilizer subsidies over the next few years.

**Table 3.5: Recent Fertilizer Policy Reforms**

Budget Period	Reform Announcement	Reform Actions Taken
2001/02	First phase of decontrol to commence on April 1, 2001  Unit specific RPS will be replaced by a Group Concession Scheme. Current maximum retail price (MRP) arrangement will be continued and the concession for each group calibrated to enable units to sell urea at stipulated MRP.  Concession rate for urea units based on naptha/furnace oil/low sulfur heavy stock be linked to international prices of feedstock.	Proposal for replacement of the Retention Price Scheme by a Group Concession Scheme being prepared by the Ministry of Fertilizers  Implemented in 2001.
2002/03	Urea, DAP and MOP prices increased by 5% and reduce the subsidy on SSP by 50/mt. Prices of complex fertilizers will be suitably modified	Maximum retail prices of urea, DAP, MOP and complex fertilizers increased and rate of subsidy on SSP reduced by Rs 50/mt.
2003/04	Issue price of urea will be raised by Rs12 and DAP and MOP by Rs10 per bag  Implementation of Group Concession Scheme beginning April 1, 2003	[Urea price increase reversed in March 2003]

Source: Budget speeches and implementation of budget announcements from 2001-2003

### ***Water Resources and Irrigation***

3.62 The development of surface irrigation has been a major pillar of the government's agricultural strategy for increasing agricultural productivity and incomes, fostering agricultural growth and rural poverty reduction, and reducing volatile production fluctuations due to weather risks, thus improving food security. Public investments in surface irrigation accounted for a major share of expenditures in agriculture. Owing to increasing costs of expanding irrigation projects to more difficult areas, and higher costs of borrowing, capital expenditures at the national level have increased from about Rs.53.5 billion in 1985/86 to Rs.63.1 billion in 2001/02 (constant 1993/94 rupees) or approximately 24% of the total central

and state capital expenditures.<sup>74</sup> These investments contributed to an All India increase in net surface irrigated area from 15.7 million hectares in 1981/82 to 17.7 million hectares in 1998/99.

3.63 Water resources management is a state subject. A major challenge facing the water sector in all states is the increasing inter-sectoral competition—between agriculture, the largest consumer, and other sectors such as industry, drinking water and other users, for increasingly scarce water (surface and groundwater) resources. In some areas, drinking water supplies have reached crisis levels due to over-extraction of groundwater. In surface irrigation (major, medium and minor), the sector is suffering from a vicious circle resulting in the degeneration of existing infrastructure adversely affecting agricultural productivity, while contributing to the fiscal crisis in many states.

3.64 Who benefits from surface irrigation and its associated subsidies? In general, small and marginal farmers account for the major proportion using canal irrigation. The distribution of canal-irrigated land according to farm size, however, varies considerably by state. In 10 of the 15 major states examined, small and marginal farmers accounted for half of the total canal irrigated area (World Bank 2003). Household level analysis of the incidence of canal irrigation subsidies in Rajasthan, however, finds that its distribution is regressive, with a marginal farmer receiving about a tenth of the subsidies received by a large farmer (Sur and Umali-Deininger 2003).

3.65 GoI's national water policy (2002) aims to address the above constraints, by ensuring the long-term sustainable allocation and efficient use of the country's increasingly scarce water resources by promoting the adoption of a comprehensive and integrated approach to planning and management of water resources on a river basin basis. It puts priority on rebalancing expenditures from the creation of new assets to demand-driven investments in rehabilitation and maintenance of infrastructure through greater participation of users in managing systems. It promotes cost recovery of at least Operations and Maintenance (O&M) costs to ensure longer-term financial and fiscal sustainability of operations. And it seeks to reorient water agencies towards greater attention to clients and the delivery of good quality water services. Several states have begun to adopt these reform measures in varying degrees, including Andhra Pradesh, Karnataka, Maharashtra, Rajasthan, Tamil Nadu, and Uttar Pradesh. As water is under the purview of state governments, the challenge in the future is to encourage states to adopt the whole reform package.

3.66 As a start, GoI recently introduced an incentive program to encourage cost recovery of O&M costs under the Accelerated Benefits Program by providing central assistance for the completion of "last mile" projects. During the Tenth plan period, Rs.95 billion have been allocated. So far, Rajasthan, Madhya Pradesh, Orissa, Maharashtra and Uttar Pradesh have availed of these resources. In 2003, GoI established a task force to look into the feasibility of inter-linking rivers as a way of transferring water from surplus to deficit areas.

### ***Power Supply to Agriculture***

3.67 In 1997/98, about 57% of net irrigated area in India was irrigated using groundwater. The use of electric pumps for groundwater irrigation has been critical for expanding irrigated area, which in turn contributed to the growth in agricultural productivity and aggregate output. Its positive impact on agricultural productivity has been shown in various studies. Studies at the village level found that the use of electric pumps for irrigation increased aggregate output growth by 2 percentage points (World Bank 2002i). A study on the cost of un-served energy found an estimated loss in crop production of 3.1% of agricultural GSDP in the state of Haryana and 13.3% for Karnataka (Tata Energy Research Institute 2000).

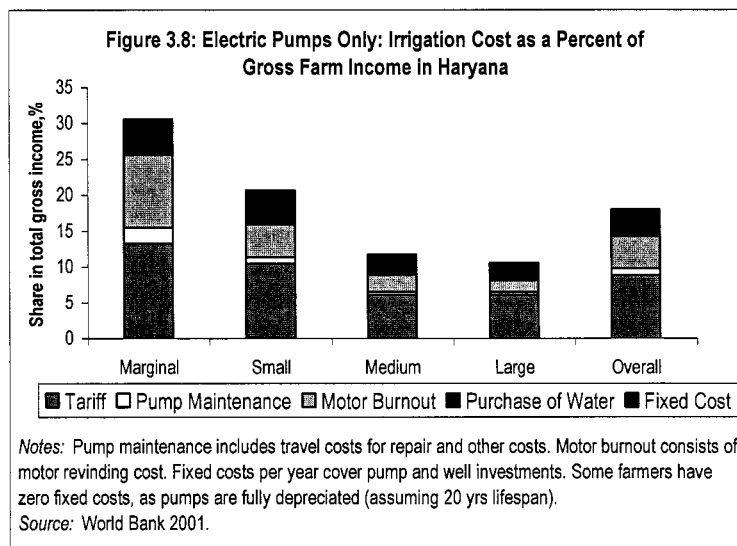
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<sup>74</sup> The public sector gross capital formation statistics from the national accounts and the capital expenditures based on the government budget differ considerably. The irrigation capital expenditure estimates, which primarily make up the agriculture gross capital formation, exceed the reported agriculture gross capital formation figure, due to differences in definition.

3.68 The large subsidy on the price of electricity to farmers, however, has led to the severe financial crises among the State Electricity Boards (SEB) and in turn the fiscal crises among state governments because of the need to cover for the huge SEB losses. As a large part of the power supply to agriculture is un-metered,<sup>75</sup> utilities engage in the practice of disguising theft and other commercial losses as consumption of power by agriculture, hiding inefficiencies and poor governance in the utility's operations. A metering study conducted in Haryana showed that the state utility overestimated the electricity consumption by agriculture by one third (World Bank 2001). State level studies of the incidence of the subsidies, however, have found them to be regressive, that they are benefiting larger farmers more. In Karnataka, Howes and Murgai (2002) found that a large farmer received almost 10 times the level of subsidies received by a marginal farmer.

3.69 At the same time, the financial crisis in the SEBs has had direct repercussions on the agricultural sector. It reduced the ability of SEBs to undertake required investments, to respond to rising local demand as well as to maintain smooth, reliable day-to-day operations. The result was the rapid deterioration in service provided to all electricity consumers, including the farm sector. These included power rationing, frequent power interruptions, and voltage fluctuations that led to pump burnouts, resulting in the unreliability in irrigation water supplies, ultimately also undermining farm productivity and farm profits. Consequently, farmer dissatisfaction has also grown, increasing their unwillingness to pay even the highly subsidized charges. These delays in paying electricity bills and the resistance to tariff increases, in turn, aggravate the financial crises in the SEBs.

3.70 Recent farm level studies in Haryana and Andhra Pradesh found that poor quality of supply impose additional costs on farmers (World Bank 2001). Motor burnouts that cost about Rs.1,000 to Rs.4,000 to repair each time impose undue burden especially among the small and marginal farmers. They account for about 10% of gross farm incomes for marginal farmers in Haryana and about 8% of gross farm income for marginal farmers in Andhra Pradesh (Figure 3.8). Notably, electricity tariffs account for a small but regressive share of gross farm incomes. The study simulated the impact of tariff increases with and without improvements in the quality of electricity supply. It found that improvements in quality of supply could more than compensate farmers for the increase in tariffs.



3.71 The present model of subsidy delivery mechanism to agriculture is inefficient and ineffective. A large proportion of farmers who are not using electricity for irrigation do not benefit from the subsidies. Those who are connected do not receive adequate electricity services because the utilities are unable to finance investments due to low cost recovery. India should move towards adopting a more transparent and targeted subsidy delivery mechanism for agriculture. For such an alternative model to work, it is indispensable that there is cost recovery of at least operating costs, universal metering of consumption, payment discipline, and improved delivery efficiency of electricity providers.

<sup>75</sup> Metered power supply was universal practice in India till the mid 1970s and 1980s. As SEBs faced increasing problems of pilferage, poor collection efficiency, and large numbers of corrupt meter readers, the shift was made to flat tariffs (Kishore, Sharma and Scott 2003)

## Product and Factor Markets

### *Trade Policies and Regulations*

3.72 While economic and trade reforms in the 1990s have improved the incentive framework for agriculture, higher growth is increasingly hampered by the over-regulation of domestic trading activities for major agricultural commodities. These have included small-scale reservation and controls on storage, transport, processing, credit, exports/imports, etc. under the umbrella of the Essential Commodities Act 1955 (Table 3.6). In addition, most states legislated Agricultural Product Market Acts, which not only restricts the development and operation of wholesale “regulated” markets for agricultural products to the state government, but also forces farmers within a defined area to sell only through these regulated markets. These regulations unnecessarily increase transaction costs and market risks and uncertainty and hurt the agricultural sector, because the resulting marketing margins put downward pressure on farm prices, increase the costs for consumers and reduce the competitiveness of, and potential demand by local consumers and exports.

**Table 3.6: GoI Major Domestic Policy and Trade Regulations, January 2003**

REGULATION	RICE	WHEAT	SUGAR	OILSEEDS/ EDIBLE OILS	COTTON	LIVESTOCK/ PRODUCTS
<b>Central Government</b>						
Movement controls	Lifted	Lifted	Lifted	Lifted	Lifted	
Storage controls	Lifted	Lifted	Lifted	Lifted	Lifted	
Zoning						
Small Scale Reservation						
Selective Credit Controls	Lifted	Lifted	Lifted	Lifted	Lifted	
Jute Packaging Rqt						
Minimum Price support						
Consumer Price Subsidy						
Export/Import						
Futures Banned						
<b>State Governments</b>						
Mill Commodity Levy						
Marketing controls						
Storage controls	Lifted	Lifted	Lifted	Lifted	Lifted	
Price support						
Consumer Price Subsidy						

Notes: Shaded cells-commodity regulation exists. Lifted-commodity regulation temporarily not enforced. These commodities account for about two-thirds of agricultural GDP.

Source: Staff estimates

3.73 While the licensing requirements and movement and storage restrictions for rice, wheat, coarse grains, edible oil, oilseeds, and sugar were lifted in 2002, the continuing uncertainty regarding their possible re-introduction discourage private sector investments, both local and foreign, in marketing and agro-processing and industry that could have expanded demand for primary agricultural products as well as generate additional employment in rural areas. Moreover, while GoI has lifted these regulations, some state governments continue to enforce some controls (e.g., cotton marketing controls in Maharashtra). A consensus has emerged, however, in the GoI and state governments on the reform of the state Agricultural Produce Markets Acts to permit greater private sector and cooperative involvement in wholesale market development as well as to remove the restrictions on farmer marketing options. A GoI taskforce is

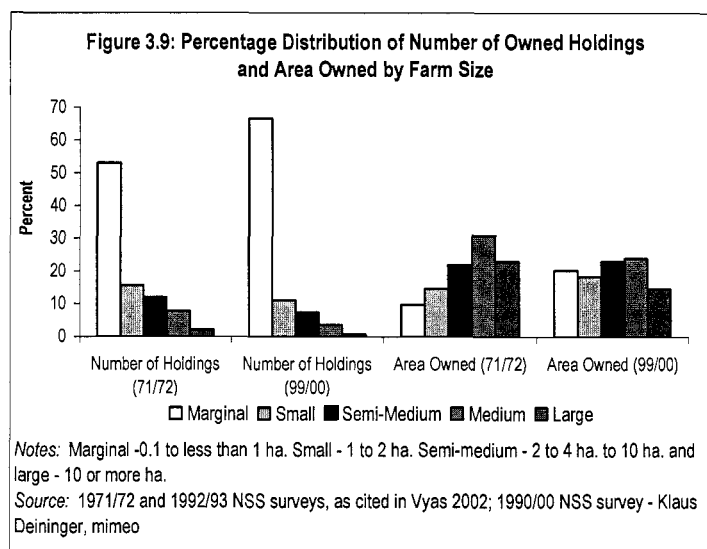
currently drafting a model Act. So far, only Karnataka has made minor amendments to allow NDDDB to set up a fruit and vegetable wholesale market and Punjab, Haryana, and Madhya Pradesh have allowed farmers under contract farming arrangements to by-pass the wholesale markets and sell directly to the private buyer/contractor.

3.74 The reduction in manufacturing protection and exchange rate devaluations, which started in 1991/92, substantially reduced the overall anti-agricultural bias of the system (Blarel, Pursell and Valdes 1999). After 1997, however, several major aspects of the external environment changed, which had important repercussions on India's agricultural trade policies. The quantitative restrictions on agricultural consumer goods imports were abolished in April 2001, at a time when world prices of some major commodities produced by India (e.g., foodgrains, edible oils and oilseeds, cotton, and rubber) declined substantially, reinforcing local pressures for increased protection. At the same time, Indian policymakers developed a more pessimistic view of the prospects for world agricultural trade liberalization, especially following the massive new subsidies introduced by the 2001 US Farm Bill. In response, GoI has raised agricultural tariffs, so that they are now above the average non-agricultural tariffs. In 2003/04 the unweighted average rate (including the SAD tax) is about 46.8% compared to about 30.7% for non-agricultural tariffs. But with few exceptions, India is no longer explicitly taxing or using licensing, export bans or quotas as it did in the past to restrict agricultural exports and depress domestic prices.

3.75 Even though Indian agriculture as a whole remains internationally competitive, there are dangers for its efficient development, given the present direction of increasing trade protection. Experience world-wide, especially in agriculture, shows that high protection will sooner or later create high cost production, as land, labor and capital move to produce products protected by high barriers to imports, at the expense of other products where pro-protection lobbies are less effective. Exporters and exports are typically major losers in this process, since they have to compete in world markets without protection. In this perspective, it would be in India's interests to reduce its WTO agricultural tariff bindings to much lower levels, as a way of providing an external constraint on domestic lobbies pressing for high protection. As one of the world's largest agricultural economies, India directly influences the world markets of many agricultural products. If it follows open, predictable, non-interventionist trade policies it can broaden these markets and reduce their instability, but if India intervenes excessively to protect its domestic market against instability in world markets, it is large enough to further increase international instability, which in turn reinforces protection and intervention in other countries.

### *Access to Land*

3.76 The agrarian structure in India has undergone significant structural transformation since the 1970s. The distribution of land ownership has become less skewed (Figure 3.9).<sup>76</sup> The trend towards landlessness also appears to have been arrested, with the percentage of landless between 1982/83 and 1999/00 remaining at around 11%. The two critical factors driving this process have been the government's land policies and demographic pressures (i.e., farm break-up through



<sup>76</sup> These figures do not account for land quality. The ceiling on land ownership varies across states and depends on the quality of the land (e.g., dryland, irrigated land with one or two crops).

inheritance) though the contribution of each of these is open to some debate.

3.77 Under the Constitution, state governments have the responsibility for land reform. All states completed the passing of land reform legislations in 1972. These legislations focused on: (a) the abolition of intermediaries between the state and the cultivator; (b) the imposition of land ownership ceilings and distribution of surplus lands to the landless; (c) tenancy reforms to provide security of tenure and regulate fair rent; and (d) consolidation of holdings to prevent their further fragmentation. The land ceiling, the redistribution of surplus land and the purchase of land by tenants contributed to the changing land ownership structure in India. However, it appeared to work more through encouraging land subdivision rather than the sale of surplus land to the poor. Government purchases of ceiling surplus land for redistribution to the landless have been very limited in virtually all states. Today, because of declining average farm sizes in all states, there is increased debate on the land ceiling legislation. Another area of increasing concern is ensuring legal recognition of property rights of women that have been neglected in earlier land legislations, for example, to redress gender inequalities in existing succession legislation for Hindu women as well as customary laws to provide inheritance of property from other religious communities (Saxena 2000b).<sup>77</sup>

3.78 Tenancy restrictions vary by state and range from a total ban to almost complete freedom of rental.<sup>78</sup> These laws, however, had unintended adverse impacts, including large-scale self-cultivation by landlords or the adoption of wage labor contracts. Appu (1997) estimated that tenancy legislations were associated with the eviction of more than 100 million tenants, which caused the rural poor to lose access to about 30% of total operated area. Furthermore, the legislation has driven tenancy underground in most states, thereby reducing the scope for greater land access through rental markets and the tenant's bargaining position and ability to enforce contract terms. These restrictions are also limiting the ability of the increasing number of marginal and small farmers to use their labor more productively, whether in farming by renting in land, or renting it out to take advantage of higher-paying non-farm opportunities.

3.79 There is a growing consensus, as reflected in a number of recent government policy statements (e.g., National Agricultural Policy 2002, Tenth Five-Year Plan, Karnataka Agricultural Policy 1995) about the need to revisit and re-formulate current tenancy legislations. In considering tenancy reform, it would be critical to draw lessons from experience in states that do not have any tenancy restrictions. More importantly, there are some states where the benefits from relaxing tenancy laws are likely to be higher than in others, due to the more advanced commercialization of agriculture (and significant amounts of informal leasing) and stronger political commitment to reform. These states could serve as starting point for pilots and could yield important insights for the policy debate and subsequently serve as a basis for broader implementation of tenancy reform initiatives in other states.

3.80 In 1997/98, the Department of Land Resources introduced a Centrally Sponsored Scheme to pilot computerization of land records in selected districts nationwide. Its objective was to promote greater efficiency through faster information retrieval, transparency and cost reduction. Some states, such as Karnataka and Maharashtra, have not only scaled-up the program statewide, but have also implemented the program in partnership with the private sector. These initiatives reportedly have contributed to more efficient and rapid service as well as reduced opportunities for corruption through increased transparency. Over the longer-term, the focus would need to shift towards a more holistic approach to improving land administration systems at the state level. To be successful, the land administration system would need to meet several other key standards of performance, including security, cost effectiveness, fairness, clarity, simplicity, and sustainability. States could draw on considerable international experience in this area.

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<sup>77</sup> For example, in Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Delhi and Uttar Pradesh, women can only hold limited tenancy rights on the land and on her death, the holding goes to the heirs of the last male landowner and not to her heirs.

<sup>78</sup> Tenancy is totally banned in Bihar, Gujarat, Karnataka, Kerala, Manipur, Orissa, Rajasthan, Jammu and Kashmir and Uttar Pradesh, while there is almost complete freedom of rental in Assam, Punjab and Haryana.

### *Access to Rural Credit*

3.81 India has a wide network of rural finance institutions (RFIs), but a large number of the rural poor remain under-served or completely left out of the formal financial system. There are over 30,000 commercial bank branches, over 14,000 regional rural banks (RRBs), and over 100,000 rural credit cooperatives (RCCs) in addition to several non-bank financial institutions. This translates to about 4,700 people served by each RFI outlet. However, the last available rural household survey (Reserve Bank of India 1991) found that only about one-sixth of rural households borrowed from formal RFIs. Non-institutional sources accounted for as high as 52-62% of household outstanding debt. The rural non-farm sector also faces constraints to accessing finance. A recent study covering some 20 million small-scale rural enterprises (in the unorganized sector) found that commercial banks reportedly meet merely 4% of the credit needs of this sector, and micro-finance sources provide another 3% of their credit needs. Various estimates suggest that India's rural poor rely almost entirely on informal sources (money lenders, traders, commission agents, etc.) to meet their consumption credit needs, at annual interest rates ranging from 36% to 120% per annum.

3.82 A key factor constraining improved access to rural credit relates to inefficiencies in the formal rural finance institutions (RFIs). Several task forces/committees set up by GoI have concluded that the weak financial health and poor performance of a large number of RFIs prevented them from performing their function of providing credit to rural areas.<sup>79</sup> Most RRBs report losses, despite major government efforts to recapitalize and reform them. Cooperative banks in general, and RCCs in particular, are also performing poorly. This is largely due to governance and management weaknesses, which in turn result from pervasive government control in response to an inappropriate legal framework and weak regulation. In addition, the existing legal/regulatory framework stifles innovation. Rural access to finance is further constrained by the inefficiency of rural financial markets, which is characterized by interest rate "caps" requiring banks to price small loans within a range of 2% above or below the prime lending rate. These caps have the perverse effect of rationing credit to small rural borrowers, as banks prefer not to lend at all than lend at these rates, and small rural borrowers are forced to borrow from the informal sector, where money lenders charge exorbitant rates.

3.83 Both the government and RFIs can play an important role in devising market-based solutions to help the rural poor access a larger range of financial services more easily, and on less costly terms. Future priorities for the government should include: (a) liberalizing interest rates by removing the existing interest rate "caps" for small loans; (b) improving credit information on rural households, by designating an agency that could take the lead in collecting and disseminating information on micro borrowers; (c) facilitating the scaling-up and sustainability of existing low-cost micro-finance models, such as the self-help group-bank linkage model as well as the Grameen bank replicators, that have been piloted in various parts of India, particularly in the South, so as to make finance accessible to the poor; and (d) removing legal and regulatory obstacles to the development of innovations that can help reduce the costs and risks associated with rural finance. The government should also aim to improve the performance of the regional rural banks (RRBs) and rural credit cooperatives (RCCs) through enhancing regulatory oversight and supervision based on internationally accepted prudential norms; reducing government control and ownership, which, in the case of RRBs, would require an amendment to the existing law, and in the case of RCCs, would require states to adopt the recently enacted Model Cooperatives law; strengthening corporate governance; improving management and staff skills, particularly in the area of credit decisions and risk assessment/management; and strengthening the legal framework to make it easier for RRBs and RCCs to recover small loans and to facilitate the use of land as collateral.

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<sup>79</sup> Report of the Task Force to Study the Cooperative Credit System and Suggest Measures for its Strengthening (Capoor et al 1999); The Joint Committee on Revitalization Support to Cooperative Credit Structure (Purkayastha et al 2001); Report of the Expert Committee on Rural Credit (Vyas et al 2001); Report of the Working Group to Suggest Amendments in the Regional Rural Banks Act (Rao et al June 2002).



## Enhancing the Productivity of Public Investments

3.84 Increased emphasis on productivity-enhancing investments, such as agricultural research and extension, irrigation and rural infrastructure is critical to enhancing agricultural productivity, rural non-farm sector growth and rural poverty reduction. Indeed, Fan, Hazell and Thorat (2000) estimate that a 10% increase in government expenditures on agricultural research and development, irrigation and rural roads contribute to a 2.6%, 0.4%, and 0.6% increase in total factor productivity and a 0.6%, 0.1% and 0.5% reduction in the rural poverty rate, respectively. For these sectors, however, future challenges lie not only on the need to increase investments, but also on the immediate need to improve the quality of public spending, particularly a greater focus on operations and maintenance, that also necessarily involves significant institutional reforms.

### *Agricultural Research and Extension*

3.85 India's public agricultural research and extension service is one of the largest in the world. Agricultural research is primarily under the purview of GoI. The public agricultural research system, overseen by the Indian Council of Agricultural Research alone includes 184 institutes, centers, directorates, and special projects and programs and 29 state agricultural universities with a research staff of over 30,000. The extension system is primarily under the purview of the state government, although ICAR also operates 261 Krishi Vigyan Kendras (farmer science centers) and 8 trainer training centers (ICAR 2002). The public agricultural and extension services have played a pivotal role in promoting agricultural productivity and output growth, especially during the green revolution in the 1970s and 1980s. However, over time, their efficiency and cost effectiveness are increasingly called to question.

3.86 **Agricultural research.** During the Ninth Plan (1997/98-2001/02), the budget outlay for the public agricultural research system amounted to Rs 67 billion or 0.8% of agricultural GDP. While there is room for increasing budgetary allocations further, there is also an urgent and immediate need to first improve the effectiveness of existing expenditures. Critical weaknesses of the ICAR system include crop (bias towards rice and wheat, inadequate priority to post-harvest and gender-related and environmental conservation issues) and regional (inadequate emphasis to the needs of rain-fed areas) imbalances in research priorities and resource allocations, multiplicity of agencies at times leading to duplication, inadequacy of collaborative multi-disciplinary research, weak interaction between researchers, extension workers, farmers and the private sector, excessive centralization of planning and monitoring, and lack of accountability for performance (Vaidyanathan 2002, ICAR 2002).

3.87 Private sector participation in agricultural research is increasing in India, especially with the advent of biotechnology and the adoption of recent key policies, including the Plant Variety Protection and Farmer's Rights Act (2002), National Seed Policy (2002) and National Seed Act (in draft) aimed at the protection of intellectual property rights. However, private sector participation tends to focus more on higher value crops in better-endowed areas. Public sector research would need to increasingly address the problems of poorer farmers in less-endowed regions (Hanumantha Rao 2003). Thus, what is needed is a more regionally differentiated research strategy. Greater consultation and coordination between the public and private sectors would also minimize duplication of research efforts.

3.88 **Agricultural extension.** The agricultural extension systems at the state level, which are based on the training and visit (T&V) system with its top-down, narrow crop-focused approach, has become outmoded and ineffective in meeting the changed needs of farmers. In many states, tight fiscal constraints have led to the breakdown of the state extension machinery (Hanumantha Rao 2003). At the same time there is increasing participation of the private sector in providing extension to farmers. Cooperatives, input suppliers, traders and private extension providers have also become an important source of information for farmers. In the future, improving the effectiveness of the public extension system would require reforms to make them more demand-driven and address the broad information and technical needs of farmers, taking advantage of major advances in communication technologies and innovative delivery mechanisms. There is also a need to build greater synergies between public and private extension efforts.

The Ministry of Agriculture formulated a new “Policy Framework for Agricultural Extension” in 2002 whose key priorities include the adoption of a farming systems approach through multi-agency (public and private) delivery systems, greater farmer participation (including women) in planning and implementation, increased use of innovative information technologies, and initiatives for increased financial sustainability and cost effectiveness. The future challenge lies in promoting the adoption and implementation of this policy at the state level.

### ***Rural Roads***

3.89 India’s rural road network faces two major problems. Firstly, about 40% of the rural villages are not yet connected by all-weather roads to market centers or main road networks. These unconnected villages are often cut off from the outside world for long periods during the monsoons. It is estimated that 20-30% of the agricultural, horticultural and forest produce get wasted due to lack of roads to carry the produce to markets and processing centers. Secondly, much of the rural road network is poorly maintained, thus heavily deteriorated. Due to poor maintenance of bridges and culverts, many existing rural roads become practically impassable during the rainy season.

3.90 Most government programs, however, suffer from the lack of a carefully designed policy and institutional framework to ensure the sustainability of these investments. For example, All India rural road maintenance requires about Rs.50 billion per annum, but only 20-30% is generally available. Politicization of investment decisions bias resource allocation towards investment, resulting in gross neglect of maintenance and diversion of maintenance funds to fresh construction. Consequently, this results in premature deterioration of the road assets and a huge backlog of maintenance. Moreover, the quality of construction and maintenance work is generally poor, resulting in overall low service life of the roads. The multiplicity of agencies involved in roads further increases the complexity of rural roads development and management.

3.91 The GoI gives priority to improving the connectivity of villages through several centrally sponsored programs. Rural roads generally received about 50% of funding from various government employment generation programs. GoI is committed to providing all-weather roads to the remaining unconnected villages, involving upgrading or constructing about 1.1 million km of rural roads at a cost of about Rs.1.1 trillion. In 2000, GoI launched a national program called “Pradhan Mantri Gram Sadak Yojna” (Prime Minister’s Rural Road Program), which aims to provide all-weather road access to all habitations with over 1,000 people by 2003 and those with population of over 500 by 2007.<sup>80</sup>

3.92 To ensure greater consistency, the Ministry of Rural Development (MoRD) should take leadership in the policy and institutional changes that are essential, as well as in financing, technology transfer, human resources development, and monitoring of rural road development in different states. The Pradhan Mantri Gram Sadak Yojana can be an important potential instrument for GoI to influence state-level rural road sector reform. If the program is properly structured and tied with policy reform commitment and outcomes, the program can provide a powerful incentive for change. Panchayat Raj bodies at district, block and village levels are expected to play an increasingly pivotal role in the construction and management of rural roads. Community participation offers significant potential for mobilizing the support of local communities in resource generation, land acquisition, and tailoring the rural road programs according to local needs.

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<sup>80</sup> The major source of funding of the program is the Central Road Fund with revenues from an earmarked tax on diesel and gasoline. The allocation to rural roads amounted to Rs. 25 billion in 2001.

### ***Rural Electrification***

3.93 India's rural electrification program has in the past focused on extending the grid supply to villages and remote areas, thereby resulting in coverage of 85%<sup>81</sup> of the villages and electrification of 13 million irrigation pumps. Access by rural households, however, remains low at 31% (All India household access rate 52%), and electricity-based economic activities in the electrified villages are minimal. About 77% of the rural poor and 31% of the urban poor remain unconnected. During the 1990s the rural electrification program slowed down, and the supply conditions in rural areas deteriorated. The policy of various states has been to subsidize electricity prices for agriculture and domestic use rather than improving access to the consumers. Often the rural areas face extensive power cuts (scheduled and unscheduled), much more than what urban areas experience.<sup>82</sup> About one tenth of the households reported adverse impact on their livelihood, and among the salaried/business category households this was reported by one-fourth of the respondents (Taru 2001). Provision of adequate and reliable grid supply is increasingly becoming untenable given the financial and operational difficulties plaguing the power utilities.

3.94 The Government of India plans to accelerate the electrification program and has set a target for coverage of all the remaining 62,000 un-electrified villages by 2007 and 100% household connections by 2012. The remaining 18,000 remote villages are to be electrified by 2012 through the use of non-conventional technologies. Funds have been made available under the Prime Minister's Gramadaya Yojna (PMGY). For strategic and implementation support, the Ministry of Power has recently set up a high-level commission for renewable energy.

3.95 To facilitate electricity service delivery for agriculture and rural development, a conducive policy environment will be required, including: (a) adequate incentives for the service provider, at the minimum the agriculture and residential tariffs should cover the operating costs; (b) early subsidy reform to bring subsidies to a fiscally sustainable levels and to enable more effective targeting of poorer farmers and rural consumers; (c) encouraging cost effective technical designs of rural networks and exploiting the scope for reducing the construction and operating cost of rural electrification; (d) improving affordability of connection charges through subsidized connection charges and financing of the capital subsidy for the service provider through innovative models of subsidy provision; and (e) a supportive regulatory regime for rural supply. Decentralized generation should be incorporated into the rural energy service company model to augment power supply, provide voltage support and reduce transmission losses. These steps to reform the policy environment for rural electricity supply needs to be put in place in parallel with reforms aimed at more conventional privatization of the commercially viable parts of the sector.

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<sup>81</sup> In India village electrification is defined as the existence of at least one electricity connection within the revenue boundary of a particular village. A village could just have a single connection to the house, or an agriculture pump and it would be considered as electrified by the utility and planning agencies.

<sup>82</sup> In Kerala one-fifth of consumers surveyed in 2000 reported power cuts, 98% of which were from the rural areas. In Haryana (2000), one third rural households reported frequent power cuts, and in Andhra Pradesh (2001) 40% of the rural households reported dissatisfaction.

## PART IV: DEVELOPMENT PROSPECTS AND RISKS

4.1 India's economic growth over the past two decades has been one of the world's highest among large countries. In an outcome few might have expected in the late 1970s, growth jumped from an entrenched 3.5% per annum to close to 6% over the 1980s and 1990s, substantially reducing poverty. Although progress in improving other indicators of living standards has been uneven, there has been real progress in some areas such as education. These are real achievements for India. Because around one third of the world's poor live in India, these are also achievements of global significance.

4.2 While India's economic and social performance has been remarkable when compared to its own past, it is far behind that of its main competitors in East Asia, in particular China. Poverty remains widespread, average incomes low, and social indicators poor. Moreover, a growing gulf has emerged between the richer and poorer states within the country. Accelerating development requires improving the delivery of health, water and sanitation, and education, and setting India on a higher growth trajectory.

4.3 Many of these goals are reflected in GoI's Tenth Five-Year Plan for 2002/03 to 2006/07, which targets an average growth rate of 8% per annum and rapid progress across a wide range of living standards indicators. If the trends of the past decade continue, however, the goals of the Tenth Plan (and the less ambitious Millennium Development Goals) cannot be achieved. Growth has fallen in recent years, to below 6% per annum between 1997/98 and 2001/02, and below 5% in 2002/03. Loose fiscal policies and a slowdown in the pace of structural reform have been likely contributors to this growth deceleration. Although a recovery may take place in 2003/04, India's current growth trajectory appears closer to 5%, than to the desired 8% per annum. And the rate of progress in improving social indicators is insufficient to meet GoI's goals. A comprehensive set of reforms, as discussed in this report and summarized in Box 4.1, could unleash faster growth and improve delivery of key services. The remainder of Part IV discusses the outlook for the Indian economy under baseline and reform scenarios, and highlights the main fiscal, political and external risks for the Indian economy.

### Outlook

4.4 **Growth.** The Tenth Plan period started with a further deceleration of growth in fiscal year 2002/03 to an estimated 4.4%, partly as a result of external shocks or influences. Agricultural output declined by 3% due to flooding in some areas and drought in others. Industrial and services output growth remained above 6%, despite depressed global demand. The degree to which global demand affects domestic output (with the exception of IT output and exports) remains limited, however, domestic demand and the policies that affect it are still largely responsible for India's output performance.

4.5 *Baseline scenario.* In the absence of major external or domestic shocks, and in spite of the expected recovery in 2003/04, the continuation of current policies will translate into a continued growth slowdown over the Tenth Plan period (Table 4.1). Without a major reform impetus, it is unlikely that GDP will average much more than 5% per annum between 2002/03 and 2006/07. Agricultural output is expected to recover from the 2002/03 slump, and subsequently return to the previous trend. Industrial sector growth is expected to remain at between 5% and 6% per annum, although the lagged effect of the contraction in agriculture on industrial output may dampen this recovery in 2003/04. Services, the fastest growing sector over the 1990s, can be expected to continue expanding rapidly throughout the period, albeit at rates slightly lower than those of the past five years, as large civil service wage increases are unlikely to be repeated, given the existing fiscal crisis. Although growth in IT-enabled services may expand rapidly, it is also unlikely that the IT sector will continue to expand at rates comparable to those of previous years. The speed of recovery in global demand will be important to continue fueling growth in services.

**Table 4.1: Macroeconomic Projections - Baseline and Reform Scenarios**

	Ninth Plan	Baseline Scenario	Reform Scenario
	1997/98-2001/02	2002/03-2006/07	2002/03-2006/07
Real GDP growth at factor cost (% per annum)	5.5	5.0	6.5
Agriculture, forestry and fishing	1.8	1.5	2.2
Industry	4.5	5.3	7.1
Services	8.1	6.4	8.0
Investment (% of GDP)	22.5	20.5	27.7
Public	6.6	6.4	7.3
of which: general government	3.1	3.0	3.7
Private	15.9	14.1	20.4
Consumption (% of GDP)	78.8	80.5	73.5
Public	12.5	12.0	12.4
Private	66.3	68.5	61.1
General Government (% of GDP)			
Fiscal deficit	9.3	11.8	10.3
Primary deficit	3.5	3.6	2.2

Source: 1997/98 to 2001/02 - CSO; 2002/03 to 2006/07 - Staff Projections

4.6 *Reform scenario.* A comprehensive reform program could improve the outlook for the Indian economy considerably by providing new impetus to growth and accelerating improvements in social indicators. Although it is unlikely that an average annual growth rate of 8% could be achieved, it would be possible to gradually set growth on a higher trajectory and reach 8% by the end of the Tenth Plan period. Because of the low initial growth rate in 2002/03, this would translate into an average growth rate of 6.5% per annum over the Tenth Plan period (Table 4.1).

4.7 The reforms underpinning the above reform scenario are comprehensive, and would be expected to have an impact across the board, during and beyond the Tenth Plan period. Reforms to reduce fiscal imbalances at the center and state levels would reduce crowding out and create space for increased private investment. Improvements in the composition of public expenditures, with a lower share spent on civil servants' wages, pensions, and interest, and on covering power sector losses, and a higher share spent on O&M and investments in key infrastructure, would further "crowd in" private investment. Improvements in the investment climate, through the removal of bottlenecks in product and factor markets and key infrastructure would increase the productivity of both public and private investment across the economy, including in India's poor rural areas. An increased contribution of FDI would contribute technology transfer and would increase output. More effective delivery of health, education and safety nets would help accelerate progress in social indicators, empowering India's citizens to both contribute and benefit from faster economic growth.

4.8 Accelerating growth and poverty reduction in India cannot be achieved without also accelerating growth in India's lagging states. If the trends of the past few years continue, i.e., if growth continues to be divergent across states in 2002-07 (with poorer states growing no faster than 5% per annum or only slightly better than in 1997-2002), then richer states would have to grow at near 10% per annum on average in 2002-07 to reach an all-India average of 6.5% per annum. This is a rather unlikely scenario. Thus implicit in the envisaged reform scenario is an acceleration of growth in India's lagging states, without which regional divergences will continue to worsen. For growth to accelerate in lagging states, an

important part of the reform agenda outlined and discussed in earlier parts of this report (reduction of fiscal imbalances and improvements in composition of public expenditures; improvement in the investment climate; and more effective delivery of health and education services and social-safety nets) must be implemented by state governments, in particular in poorer states. The role of the central government in both catalyzing and setting the pace for reforms at the state level is critical.

4.9 Of particular importance for poverty reduction and rural incomes are policies to increase productivity of agriculture, which has declined between the 1980s and 1990s. In the short run, the removal of subsidies to foodgrains could reduce agricultural output in the few states that benefit the most from these subsidies. However, these are also states where significant agricultural diversification can take place. More importantly, this reform would release resources for other expenditures, such as research and extension, rural electrification, and rural roads. Simultaneously, faster growth in industry and continued rapid growth in services can provide jobs for the labor force released from agriculture.

4.10 **Employment impact.** Relative to the baseline scenario, reforms can be expected to have a positive impact on employment. Even though the employment elasticity of GDP is less than one (reflecting increased productivity of labor) and has been declining in India since the 1970s, a higher aggregate growth rate of the economy can be expected to generate higher employment levels (GOI, Task Force on Employment Opportunities, 2001). The composition of growth also matters. Agriculture, which employs a large share of the labor force, can be expected to continue expanding output without increasing employment significantly, reflecting underemployment and improvements in labor productivity, and thus increasing agricultural wages. Over the 1990s, agricultural growth has had a zero elasticity of employment, even though it has a strong positive impact on poverty reduction (Table 4.2). The estimated elasticities of employment to GDP in services and manufacturing, on the other hand, are considerably higher. An acceleration of growth in these sectors will have a stronger impact on job creation.

**Table 4.2: Elasticity of Employment to GDP, 1993/94-1999/00, Selected Sectors**

	Estimated Elasticity
Agriculture	0.00
Manufacturing	0.26
Construction	1.00
Wholesale and retail trade	0.55
Transport, storage and construction	0.69
Finance, Real Estate, Insurance and Business Services	0.73

Source: GoI, Planning Commission, Report of the Task Force on Employment Opportunities, 2001

4.11 **Poverty impact.** The continuation of the current growth trajectory is unlikely to make a strong dent on poverty. In the absence of efforts to reform the agricultural sector, to improve productivity and improve development expenditures for rural growth, it is unlikely that agricultural growth rates will accelerate beyond the 3% per annum in subsequent years. This will have direct consequences on the pace of poverty reduction in India over the next five years. Given the strong correlation between agricultural performance and wages and poverty reduction in rural areas, an unbalanced growth pattern where agriculture continues lagging behind will do little to accelerate poverty reduction in India. Part of the rapid progress in reducing poverty in China is due to more rapid growth in agriculture, fueled by reforms in the sector. Poverty incidence can be projected to decline by less than 6 percentage points under the baseline scenario and nearly 10 percentage points under the reform scenario between 2002/03 and 2006/07.

4.12 **External sector.** Continuation of recent trends would translate into a modest growth of merchandise exports over the Tenth Plan period. Recovery in domestic demand, coupled with the government's further planned reduction in import tariffs, however, could lead to some acceleration in import growth. These trends could push the current balance into deficit again. This could be reinforced by a renewed rise in domestic interest rates as a result of competition between public and private borrowers, which could put further upward pressure on the rupee real effective exchange rate. Part of any

crowding out, therefore, could be reflected in the balance of payments. In the absence of any major policy slippage, however, any renewed current deficit is likely to be moderate. The Tenth Plan envisages a deficit equal to about 3-4% of GDP by 2006-07, albeit with rather faster growth of both exports and imports than might be likely on past trends.

4.13 Financing such a deficit would require a mixture of renewed equity inflows and new borrowings from both foreign commercial banks and the bond markets. India's attractiveness to both direct and portfolio equity investors is likely to require reinvigoration of the government's privatization program and fresh reforms to enhance domestic industrial prospects. Foreign lenders, in turn, are likely to look for action to tackle the imbalances in the domestic economy, especially the fiscal deficits of both the central government and the states. The current high level of reserves provides a cushion against both domestic and external shocks, although a change in sentiment about the rupee as a result of continued high fiscal deficits or nervousness about the health of parts of the domestic financial sector could lead to some erosion of reserves.

## **Risks**

4.14 **Fiscal.** India's large fiscal imbalances pose a serious threat to sustained growth and development over the medium term. In the short run, the risk of a speculative attack is reduced by a compliant financial system, a large pool of household savers, the limited convertibility of the current account, and a flexible exchange rate. Thus, in the absence of a rapid increase in interest rates and weakening growth performance, India is not vulnerable to the type of collapse suffered by Russia or Argentina in the short term. Over the medium term, however, there are consequences of leaving the current fiscal situation unchecked. While current policies have helped reduce external vulnerabilities, they have also kept economic growth below potential, as growing interest payments have crowded out public investment, and high real interest rates have constrained private investment. Slower growth, in turn, speeds up the deterioration in debt dynamics. Even though interest rates have declined over the past 18 months, public debt dynamics have continued to worsen. As interest rates can be expected to increase from the current historical lows, the growth-interest rate ratio which has prevented the current fiscal vulnerabilities from translating into a full-blown macroeconomic crisis could deteriorate. The persistence of current fiscal trends will, at best, further limit growth and job creation. If this negative cycle continues, a full-fledged fiscal crisis cannot be ruled out over the medium term.

4.15 It is politically easy to downplay this risk, hoping that higher growth and lower interest rates will eventually solve the fiscal problem. However, experience suggests it would be unwise to sit back and wait for such a virtuous circle to emerge. Instead, the central and state governments will have to be proactive in reducing the fiscal deficit, shifting expenditures into more productive areas, and removing structural impediments to higher private investment and productivity. The sooner the roadmap for these reforms is put in place, and concrete action taken to show commitment to follow through, the more manageable will be the adjustment path, and the quicker the pay-off in terms of higher growth and poverty reduction.

4.16 **Political.** Other risks could threaten India's development prospects. An important risk is that the comprehensive reforms needed to accelerate development will be delayed due to the primacy of political concerns, such as general or state elections. Another is the diversion of policy makers' attention (and public resources) to other issues, such as the tensions with neighboring countries. Political obstacles to the needed hardening of budget constraints between the center and the states, in particular those states which yield large political power, are risks that threatens to further deteriorate state level finances and discourage reforming states.

4.17 **External.** In the short run, expected developments in the external environment cannot be expected to be strong positive forces. The recovery of the global economy is expected to be slow. There remain weaknesses in demand in the world's largest markets Western Europe, Japan, and North America. This will slowdown growth in industry, albeit to a limited extent because India still is a relatively closed

economy, but in particular in services. A slow down in the inflow of remittances is also likely. At least part of the increased inflow of remittances observed in India is likely to have been a one-off episode, motivated by the events of September 11, 2001 in the US and resulting partly from a “flight to safety” event. The same trends can be observed in other countries, such as Pakistan and Bangladesh. This level of inflows can be expected to weaken, emphasizing India’s fiscal vulnerabilities.

## **Conclusion**

4.18 India can be rightly proud of its development record over the past two decades. It reflects the emergence of a much wider consensus about the importance of opening up the Indian economy to competition. The results in terms of more rapid growth and poverty reduction are impressive. But India has still fallen behind its main competitors in East Asia – and poverty remains a reality for many Indians, especially those living in the poorer states of the North and East. The government is right to set ambitious targets for growth and social development during the Tenth Plan. The key now is to implement the policy and institutional changes needed to achieve these goals. Sustained progress will no doubt be difficult, especially in the politically-charged areas of labor, power and agricultural reform. But it also promises high returns for poverty reduction in India.



### **Box 4.1: Summary of Priority Reforms**

#### **Fiscal Policy**

- Progressively reduce the primary deficit at the center and in states by completing tax reforms (eliminating exemptions, bringing services into the tax net, and implementing a uniform state VAT), reducing power sector losses, and phasing out petroleum subsidies.
- Reduce financial sector risks by implementing the new securitization law, linking returns on provident funds and small savings to market benchmarks, and establishing a clear framework for managing state government guarantees.
- Improve fiscal management by imposing greater fiscal discipline on state borrowing and transfers, breaking down artificial distinctions between plan and non-plan expenditures, and consolidating Centrally Sponsored Schemes.
- Improve the composition of public expenditures, by reducing the share spent on wages, pensions, interest payments, and agricultural subsidies, and increasing investment and O&M for priority social, infrastructure and agriculture programs.

#### **Delivery of Public Services**

- Reduce administrative fragmentation and reform civil service pay policy and pensions. Improve the performance of the civil service and quality of service delivery by improving public access to information, strengthening accountability, and reducing political interference.
- Refocus health, education and social safety net programs on outcomes. The central government can play an important role as an independent source for measuring progress towards agreed goals.
- Improve the private market for health care through training, public information and accreditation. Priorities for public funds are to provide clean water and sanitation, and to combat communicable diseases (including HIV/AIDS prevention).
- Support the SSA goals by providing increased public resources and improving resource use in elementary education. Schools should be more accountable to communities, with more local autonomy to find the best solutions.
- Develop a well-designed fiscal framework for local governments, that would guarantee their autonomy and accountability. Flows of funds from the center and states should be dependent on good local fiscal performance and resource mobilization.

#### **Investment Climate for Industry and Services**

- Speed up trade reform by reducing average import tariffs and phasing out tariff exemptions, specific tariffs and anti-dumping duties. Remove other product market distortions by eliminating preferential policies for small-scale players, implementing a full and uniform VAT, and phasing out remaining FDI restrictions.
- Reduce inefficiencies in factor markets by easing restrictions on hiring and firing of workers, improving SME access to credit, addressing problems in the use and transfer of land, and updating bankruptcy procedures.
- Ensure access to reliable power at reasonable costs by rationalizing power tariffs and improving the financial and operational performance of SEBs.
- Address capacity and quality constraints in the transport sector by improving public sector performance (for roads and rail), mobilizing private sector investment (including better cost recovery for roads), phasing out price distortions (for rail), and improving the efficiency of existing capacity (for ports).

#### **Agricultural Policy and Rural Development**

- Put in place a market-based foodgrain policy which protects the poor through targeted safety nets, while mitigating drastic supply shocks through a cost effective and well-managed price stabilization mechanism.
- Reduce input subsidies which are fiscally unsustainable and distorting input use. Savings should be used to fund more productive investments in agricultural research and extension, rural roads, and rural electrification.
- Reduce regulation of domestic trading activities for major agricultural commodities and eliminate remaining trade policy distortions, including subsidized exports of rice and wheat.
- Improve access to land by revisiting current legislation on land tenancy, and building on successful initiatives to improve land administration. Devise market-based solutions to improve rural access to a larger range of financial services, at lower cost.

## References

- Acharya, S. (2003). "Reform Agenda for Indian Agriculture," mimeo.
- Acharya, S. (2002a). "Macroeconomic Management in the Nineties". *Economic and Political Weekly*, April.
- Acharya, S., (2002b). "India's Medium-Term Growth Prospects". *Economic and Political Weekly*, July.
- Acharya, Shankar. (2001). "India's Macroeconomic Management in the Nineties." New Delhi, ICRIER.
- Acharya, S., Isher Ahluwalia, K.L. Krishna, and Ila Patnaik. (2002). Global Research Project: India Case Study, Indian Council for Research on International Economic Relations (ICRIER), New Delhi.
- Ahluwalia, Montek S. (2002a). "India's Vulnerability to External Crisis: An Assessment." In *Macroeconomics and Monetary Policy: Issues for a Reforming Economy. Essays in Honor of C. Rangarajan*, eds. Montek Ahluwalia, S.S. Tarapore and Y.V. Reddy, OUP (forthcoming).
- Ahluwalia, Montek S. (2002b). "Economic Reforms in India: A Decade of Gradualism", *Journal of Economic Perspectives*.
- Aiyar, Shekhar. (2001). "Growth Theory and Convergence Across Indian States: A Panel Study", in *India at the Crossroads: Sustaining Growth and Reducing Poverty*, eds., Callen, Reynolds and Towe IMF, Washington DC.
- Anant, T.C.A. and N.L. Mitra. (1998). "The Role of Law and Legal Institutions in Asian Economic Development: The Case of India," *Harvard Institute for International Development Discussion Paper* No. 662, November.
- Bajpai, Nirupam and Jeffrey Sachs. (1998). "Strengthening India's Strategy for Economic Growth," *Economic and Political Weekly*, July.
- Banerjee, A. V., P. J. Gertler, and M. Ghatak. (2002). "Empowerment and Efficiency: Tenancy Reform in West Bengal." *Journal of Political Economy*, 110(2): pp. 239–280.
- Banerjee, Abhijit and Lakshmi Iyer. (2002). "History, Institutions and Economic Performance: The Legacy of Colonial Land Tenure Systems in India," Paper delivered at World Bank research seminar, March, 2002. Processed.
- Bardhan, P. (2002). "Disjunctures in the Indian Reform Process: Some Reflections", Outline presented at Cornell University, April 19-20.
- Barro, Robert and Xavier Sala-I-Martin. (2002). *Economic Growth*. New York: Mc-Graw Hill Inc.
- Basu, Priya, Clive Harris and Stephan Von Klaudyu. (2003). "*Public Support for Private Infrastructure Projects: Issues and Challenges*", World Bank Policy Note, May.
- Bhalla, Surjit S. (2002). "Imagine There's No Country – Poverty, Inequality and Growth in the Era of Globalization," Institute for International Economics, Washington D.C.:
- Besley, T. and R. Burgess. (2000). "Land Reform, Poverty Reduction, and Growth: Evidence from India." *Quarterly Journal of Economics*, 115(2): pp. 389–430.
- Brandon, C., and K. Hommann.(1995). "The Cost of Inaction: Valuing the Economy-Wide Cost of Environmental Degradation in India"(draft), World Bank.
- Buiter, Willem and Urjit Patel. (1992). "Debt, Deficits and Inflation: An Application to the Public Finances of India." *Journal of Public Economics*. No. 47, pp. 171-205.
- Burgess, Robin and R. Pande. (2002). "Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment", Draft Version, October.

- Cashin, P., N. Olekalns and R. Sahay. (2001). "Tax Smoothing, Financial Repression and Fiscal Deficits in India." in *India at the Crossroads – Sustaining Growth and Reducing Poverty*, eds. Tim Callen, Patricia Reynolds and Christopher Towe, IMF, Washington D.C.
- Census of India. (1981,1991,2001). New Delhi, India: Office of the Registrar General.
- Center for Monitoring Indian Economy (CMIE), (2002). *Agriculture*, Mumbai.
- Center for Monitoring Indian Economy (CMIE). (2000). *Agriculture*, November
- Chang, Roberto and Andres Velasco. (1998). "The Asian Liquidity Crisis." *NBER Working Paper 6796*, November.
- Chaudhry, M.D. (1966). *Regional Income Accounting in an Underdeveloped Economy: A Case Study of India* (Calcutta: Firma K. L. Mukhopadhyay).
- Comptroller and Auditor General of India. (2000). *Report of the CAG on the Union Government for the Year Ended 1999*, New Delhi: CAG.
- Confederation of Indian Industry and McKinsey & Co. (2002) "Learning from China to Unlock India's Manufacturing Potential", New Delhi.
- Credit Rating and Information Services of India Limited. (2002). "Mounting State Government Guarantees – Fiscally Unsustainable". July.
- Datt, Gaurav and Martin Ravallion. (2002). "Is India's Economic Growth Leaving the Poor Behind?", *Journal of Economic Perspectives*, Vol. 16, No. 3.
- Datt, Gaurav and M. Ravallion. (1996). "How Important to India's Poor Is the Sectoral Composition of Growth?" *World Bank Economic Review* 10(1):1-25.
- Deaton, Angus. (2002). "Adjusted Indian Poverty Estimates for 1999-2000," Paper delivered at the India Workshop on Poverty Measurement, Monitoring and Evaluation, January 11-12, 2002.
- Deaton, A. and J. Dreze. (2002). "Poverty and Inequality in India, A Re-Examination," *Economic and Political Weekly*, September, pp. 3729-48.
- Deininger, K. and D. Umali-Deininger. "Targetted Public Distribution System: Is it Reaching the Poor," draft mimeo.
- Deshpande, R.S. (2003). "Land Issues in India," *Land Reform, Land Settlement and Cooperatives Journal*. Forthcoming.
- Drèze, Jean. (2001). "Starving the poor", *The Hindu*, February 26, 27, New Delhi.
- Dregne, H. E., and N. T. Chou. (1992). "Global Desertifications Dimensions and Costs." ed. H.E. Dregne *Degradation and restoration of arid lands*.
- Duflo, Esther. (2003). "Scaling up and Evaluation" draft paper prepared for the ABCDE conference in Bangalore
- Dutta, B. and B. Ramaswami. (2001). "Targeting and efficiency in the public distribution system: Case of Andhra Pradesh and Maharashtra", *Economic and Political Weekly*, May 5, pp. 1524-1532.
- Economic and Political Weekly. (2003). "Fertilizers: Revamping Pricing," Editorial, March 15.
- Expenditure Reform Commission. (2000). "Rationalizing Fertilizer Subsidies, Part I", mimeo.
- Esrey S., J. Potash, L. Roberts, and C. Shiff. (1991). "Effects of Improved Water Supply and Sanitation on Ascariasis, Diarrhea, Dracunculiasis, Hookworm Infection, Schistosomiasis, and Trachoma", *WHO Bulletin* 69 (5), pp. 609-621.

- Fan, S., P. Hazell, and S. Thorat. (2000). "Government Spending, Growth and Poverty in Rural India," *American Journal of Agricultural Economics*, Vol. 82, No. 4: pp.1038-1051.
- Federation of Indian Chambers of Commerce and Industry (FICCI). (2002). "Indian Agriculture Unbound: Making Indian Agriculture Globally Competitive", New Delhi.
- Ferro, M., D. Rosenblatt and N. Stern. (2002). "Policies for Pro-Poor Growth in India", draft paper presented at Cornell University, April 19-20.
- Global Competitiveness Report. (2002/03 and previous years). World Economic Forum, Oxford University Press: USA.
- Godbole, Madhav. (1997). "Pay Revision: High Cost of Total Surrender", *Economic and Political Weekly*, October.
- Government of India, Planning Commission (2003), *Tenth Five Year Plan 2001-02 to 2006-07*, New Delhi.
- Government of India, Ministry of Finance. (2003a). *Budget Speech 2003-04*, New Delhi: mimeo.
- Government of India, Ministry of Finance. (2003b). *Economic Survey, 2002-03*, New Delhi.
- Government of India, Ministry of Finance. (2003c). "Implementation of Budget Announcements" (*Budget Speech 2002-03*), New Delhi: mimeo
- Government of India, Planning Commission (2002), *Planning Commission Reports on Labour and Employment*, Economica India Info-Services, Academic Foundation, New Delhi.
- Government of India, Planning Commission. (2002a). Annual Report on the Working of SEBs and Electricity Departments.
- Government of India, Planning Commission. (2002b). "Report of the Steering Committee on Foreign Direct Investment", New Delhi, August.
- Government of India, Ministry of Commerce. (2002). Report on "Reforming Investment Approval & Implementation Procedures".
- Government of India, Ministry of Commerce. (2002a). *Report of the High Level Committee for EXIM Policy, 2002-07*, Directorate General of Foreign Trade, New Delhi.
- Government of India, Ministry of Consumer Affairs, Food and Public Distribution. (2002). *Report of the High Level Committee on Long-Term Grain Policy*, New Delhi: Department of Food and Public Distribution.
- Government of India, Prime Minister's Economic Advisory Council. (2002). "Report of the Prime Minister's Economic Advisory Council," mimeo.
- Government of India, Prime Minister's Economic Advisory Council. (2002). "Economic Reforms: A Medium-Term Perspective".
- Government of India. (2002a). *Economic Survey of India 2001-02*. New Delhi.
- Government of India. (2002b). *External Debt Status Report*. August. New Delhi.
- Government of India, Department of Food and Public Distribution. (2002). *Report of the High Level Committee on Long Term Grain Policy*, New Delhi: Department of Food and Public Distribution.
- Government of India, Ministry of Agriculture. (2002a), "Agricultural Statistics at a Glance 2002", New Delhi: Directorate of Economics and Statistics.
- Government of India, Ministry of Agriculture. (2002b). "Policy Framework for Agricultural Extension", New Delhi: Extension Division , Department of Agriculture and Cooperation.

- Government of India, Ministry of Finance. (2002). Report of the Working Group to Suggest Amendments in the Regional Rural Banks Act (Chaired by MVS Chalapathi Rao), June.
- Government of India, Ministry of Finance. (2002a). *Budget Speech 2002-03*, New Delhi: mimeo.
- Government of India, Ministry of Finance. (2002b). "Implementation of Budget Announcements" (*Budget Speech 2001-02*), New Delhi: mimeo.
- Government of India, Ministry of Finance. (2002c). *Economic Survey 2001-02*, New Delhi.
- Government of India, Planning Commission. (2001). Report of the Task Force on Employment.
- Government of India. (2001). Report of the Prime Minister's Economic Advisory Council.
- Government of India, Planning Commission. (2001). "Approach Paper to the Tenth Five Year Plan (2002-2007)", New Delhi.
- Government of India, Planning Commission. (2001a). *Report of the Task Force on Employment Opportunities*", New Delhi.
- Government of India, Ministry of Finance. (2001). *Report of the Joint Committee on Revitalization Support to Cooperative Credit Structure* (chaired by Balasaheb Vikhe Patil).
- Government of India, Ministry of Finance. (2001a). *Budget Speech 2001-02*, New Delhi: mimeo.
- Government of India, Ministry of Finance. (2001b). "Implementation of Budget Announcements" (*Budget Speech 2000-01*), New Delhi: mimeo.
- Government of India, Ministry of Finance. (2001c). *Economic Survey 2000-01*, New Delhi: Ministry of Finance.
- Government of India, Ministry of Rural Development. (2001). *Annual Report 2000-2001*, New Delhi: Ministry of Rural Development.
- Government of India, Ministry of Agriculture. (2000). "National Agricultural Policy", New Delhi: Department of Agriculture and Cooperation.
- Government of India, Ministry of Finance. (2000). *Report of the Task Force to study the Cooperative Credit System and Suggest Measures for its Strengthening* (chaired by Jagdish Capoor), submitted to GoI.
- Government of India, Planning Commission. (1999). *Report of the S.P. Gupta Committee on Small Scale Industry*
- Government of India, Ministry of Finance. (1999). *Economic Survey 1998-99*, New Delhi.
- Government of India, Ministry of Chemicals and Fertilizers. (1998). *Fertilizer Pricing Policy, Report of the High Powered Review Committee*, New Delhi.
- Government of India, Planning Commission. (1997). *Report of the Abid Hussain Committee on Small Scale Enterprises*.
- Government of India, Planning Commission.(2002). NK Singh Committee Report on FDI.
- Goswami, Omkar and David Dollar. (2002). "Competitiveness of Indian Manufacturing: Results from a Firm Level Survey", New Delhi: January.
- Govinda Rao, M. (2000). "Invisible Transfers in Indian Federalism", *Public Finance*, 52 (3-4), pp. 429-448.
- Govinda Rao, M., R.T. Shand, and K.P. Kalirajan. (1999). "Convergence of Incomes Across Indian States: A Divergent View", *Economic and Political Weekly*, Vol. 34 (March 27), pp. 769-78

- Gulati, A. and G. Pursell. (2003). "Indian Agriculture during the 1990s, Performance, Policy Environment and Incentives," World Bank working paper.
- Gulati, A. and S. Bathla. (2002). "*Capital Formation in India Agriculture: Trends, Composition and Implications for Growth*", Occasional Paper No. 24, National Bank for Agriculture and Rural Development, Mumbai.
- Gulati, A. and S. Narayanan. (2002). "Demystifying Fertilizer and Power Subsidies in India", in R. Kapila and U. Kapila (eds), *Indian Agriculture in the Changing Environment*, Volume 1, New Delhi: Academic Foundation, pp.175-208.
- Haggblade, Steven, Peter Hazell, and Thomas Reardon. (2001). "Strategies for Stimulating Equitable Growth of the Rural Non-farm Economy in Developing Countries," South Asia Rural Development Unit, draft mimeo.
- Hanchate, A. and T. Dyson, (2000). "Trends in the Composition of Food Consumption and Their Impact on Nutrition and Poverty in India," London School of Economics, mimeo.
- Hanson, J. and S. Kathuria (eds) (1999). *India: A Financial Sector for the Twenty-First Century*, Oxford University Press, New Delhi.
- Hanson, J. (2002). "Improving Indian Banks Performance", paper presented at the Goa Conference on Adapting India's Financial Sector to a Globalized World, November.
- Hanumantha Rao, C.H. (2003). "Reform Agenda for Agriculture," *Economic and Political Weekly*, February 15.
- Hanumantha Rao, C.H. (2002) "Agricultural Growth Sustainability and Poverty Alleviation", in R. Kapila and U. Kapila (eds), *Indian Agriculture in the Changing Environment*, Volume 1, New Delhi: Academic Foundation, pp.113-130.
- Hanumantha Rao, C.H. (2000). "Declining Demand for Foodgrains in Rural India: Causes and Implications," *Economic and Political Weekly*, January 22.
- Howes, Stephen, A. Lahiri and N Stern. (2003). "Introduction to States Forum Proceedings." Forthcoming.
- Howes, Stephen and Rinku Murgai. (2002). "Karnataka : Incidence of agricultural power subsidies : Estimate". *Economic and Political Weekly*, Vol.38, No.16, pp.1533-1535
- Hughes G., K. Lvovsky and M. Dunleavy. (2000). *Environmental Health in India: Priorities in Andhra Pradesh*, South Asia Environment Unit, World Bank, Washington DC.
- Hutley S., S. Morris, V. Pisana. (1997). "Prevention of Diarrhea in Young Children in Developing Countries", WHO Bulletin 75 (2), pp. 163-174.
- International Monetary Fund. (2002). *India: Selected Issues and Statistical Appendix*. IMF Country Report no. 02/193.
- Indian Council for Agricultural Research (ICAR). (2002), *ICAR Vision 2020*, New Delhi
- Indian Council of Agricultural Research (ICAR), (2001). *ICAR Now and Ahead*, New Delhi.
- Infrastructure Development Finance Company Ltd. (2002). *India Infrastructure Report*, Mumbai.
- Infrastructure Development Finance Company Ltd. (2001). *India Infrastructure Report*, Mumbai.
- Irwin, Timothy. (2002). "Deciding When to Offer Guarantees, Out-based Subsidies, or other Forms of Fiscal Support for Private Infrastructure Services". Mimeo, World Bank.

- Irwin, Timothy, Michael Klein, Guillermo E. Perry and Mateen Thobani. (1997). "Dealing with Public Risk in Private Infrastructure", World Bank.
- Jalan J. and M. Ravallion. (2001). "Does Piped Water Reduce Diarrhea for Children in Rural India?" Policy Research Working Paper 2664, World Bank.
- Jha, Shikha and P.V. Srinivasan, (2001). "Taking the PDS to the poor: Directions for further reform", *Economic and Political Weekly*, September 29, pp.3779-3786.
- Joshi, P. K., and D. Jha. (1991). Farm-Level Effects of Soil Degradation in Sharda Sahayak Irrigation Project. Working Papers on Future Growth in Indian Agriculture No. 1. New Delhi and Washington, D.C. Central Soil Salinity Research Institute, Indian Council of Agricultural Research, and International Food Policy Research Institute.
- Kalirajan, K.P. and R. T. Shand. (1997). "Sources of Output Growth in India Agriculture", *Indian Journal of Agricultural Economics*, Vol. 52, No. 4 pp. 693-706.
- Kapur, Devesh and Urjit R. Patel. (2003). "Large Foreign Currency Reserves: Insurance for Domestic Weakness and External Uncertainties?" *Economic and Political Weekly*, Vol. XXXVIII, No. 11, March 15.
- Kelkar, V.J. (2002). *Report of the Task Force on Direct-Indirect Taxes*, Akalank Publications, New Delhi, November.
- Kishore, A., A. Sharma and C. Scott. (2003). "Power Supply to Agriculture, Reassessing Options", *Water Policy Research Highlight No. 7*, IWMI-Tata Water Policy Program, Ahmedabad, India.
- Kochar, Anjini. (1997). "An Empirical Investigation of Rationing Constraints in Rural Credit Markets in India", *Journal of Development Economics*, Vol. 53, pp.339-371.
- Krueger, A. (ed.) (2002). *Economic Policy Reforms and the Indian Economy*, Oxford University Press, New Delhi.
- Kumar, P., (2002). "Economic Analysis of Total Factor Productivity of Crop Sector in the Indo-Gangetic Plain of India by District and Region", *Agricultural Economics Research Report* No. 2002-02, National Agricultural Technology Project Irrigated Agro-Ecosystem Research, New Delhi: Indian Agricultural Research Institute.
- Kumar, Praduman and Mark W. Rosegrant. (1994). "Productivity and Sources of Growth for Rice in India", *Economic and Political Weekly*, Vol. 29, No. 52, pp. A183-188.
- Kharas, Homi J., Brian Pinto, and Sergei Ulatov. (2001). "An Analysis of Russia's 1998 Meltdown: Fundamentals and Market Signals," *Brookings Papers on Economic Activity*, Issue 1.
- Lanjouw, P. (2000). "Poverty in Karnataka: Profiles and Emerging Issues", World Bank, mimeo.
- Lanjouw, P. and G. Feder. (2001). "Rural Non-Farm Activities and Rural Development, From Experience Towards Strategy," *Rural Strategy Background Paper* No. 4, Washington, D.C. Rural Development Department, World Bank.
- Lahiri, Ashok and R. Kannan. (2002). "India's Fiscal Deficits and Their Sustainability in Perspective." In *India – Fiscal Policies to Accelerate Economic Growth*. World Bank.
- Mahal, A., et al. (2001). "Who Benefits from Public Health Spending in India" World Bank, HNP Working Paper.
- Majumdar, Grace and J L Kapoor. (1980). "Behavior of inter-state income inequalities in India", *Journal of Income and Wealth*, Vol. 4 No.1 (January), pp.1-8.

- Mattoo, Aaditya and Arvind Subramanian. (2003). "India and the Multilateral Trading System Post-Doha: Defensive or Proactive?. Chapter 13 in Aaditya Mattoo and Robert Stern (eds. 2003), *"India and the WTO"*, Oxford University Press and the World Bank.
- McKinsey & CII. (2002). "Learning from China to Unlock India's Manufacturing Potential".
- McKinsey & Company. (2001). "India: The Growth Imperative, Understanding the Barriers to Rapid Growth and Employment Creation". New Delhi
- McKinsey Global Institute. (2001). "India: The Growth Imperative", Washington D.C.
- Mohan, Rakesh. (2003). "Transforming Indian Banking: In Search of a Better Tomorrow." *Reserve Bank of India Bulletin*.
- Mussa, Michael. (2002). "Argentina and the Fund: From Triumph to Tragedy," *Institute for International Economics*, Washington DC.
- Nair, K.R.G. (1985). "A Note on Inter-State Income Differentials in India 1970-71 to 1979-80", in *Regional Structure of Growth and Development in India*, Vol. 1, ed. By G.P. Misra (New Delhi: Ashish Publishing House).
- National Bank for Agriculture and Rural Development (NABARD). *Annual Report*, various years
- National Bank for Agriculture and Rural Development (NABARD). (2001). *Report of the Expert Committee on Rural Credit* (Chaired by VS Vyas), July.
- National Bank for Agriculture and Rural Development (NABARD). (2001). *Regional Rural Banks: Key Statistics*, 2001
- National Bank for Agriculture and Rural Development (NABARD). *Statistical Statements Relating to The Cooperative Movement in India*, various years.
- Nelson, Howard. (1994). "International Comparisons of Teachers Salaries and Conditions of Employment", in *Developments in School Finance*, National Center for Education Statistics, pp. 111-127.
- Parikh, K., J. Parikh, and T. L. Raghu Ram. (1999). "Air and Water Quality Management: New Initiatives Needed" in Kirit S. Parikh (ed.) *India Development Report 1999-2000*, Oxford University Press.
- Paul, Samuel and Sita Sekhar. (1999). "The Second Report Card on Bangalore's Public Services", Public Affairs Center, Bangalore, November.
- Perry, Guillermo and Luis Servén. (2002). "The Anatomy of a Multiple Crisis: Why was Argentina Special and What can we learn from it." World Bank, mimeo.
- Peters, D., A. Yazbeck, R. Sharma, G. Ramana, L. Pritchett and A. Wagstaff (2002). "Better Health Systems for India's Poor. World Bank, Washington D.C.
- Pinto, Brian and Farah Zahir. (2003). *India: Why Fiscal Adjustment Now?* Manuscript, World Bank.
- Radhakrishna, R. and K. Subbarao. (1997). "India's Public Distribution System: A National and International Perspective", World Bank Discussion Paper.
- Ravallion, Martin and Guarav Datt. (2002). "Growth and Poverty in India: What Have We Learnt from the NSS?" India Workshop on Poverty Measurement, Monitoring and Evaluation, January 11-12, 2002.
- Ravallion, Martin and Guarav Datt. (2001). "Why Has Economic Growth Been More Pro-Poor in Some States of India Than Others?" *International Monetary Fund Seminar Series*, Number 2001-59, July.



- Ravallion, Martin and Guarav Datt. (1998). "Farm Productivity and Rural Poverty in India," *Journal of Development Studies*, Number 34, April.
- Ravallion, Martin and Guarav Datt. (1997). "Why Have Some Indian States Done Better Than Others at Reducing Rural Poverty?" *Economica*, Number 65.
- Ravallion, Martin and Gaurav Datt. (1995). "Is Targeting through a Work Requirement Efficient? Some Evidence for Rural India" in D. van de Walle and K. Nead (eds) *Public Spending and the Poor: Theory and Evidence*, Baltimore, MD: Johns Hopkins University Press.
- Rawal, V. (2001). "Agrarian Reform and Land Markets: A Study of Land Transactions in Two Villages of West Bengal, 1977–1995." *Economic Development and Cultural Change* 49(3), pp. 611–29.
- Ray, T. (1999). "Share Tenancy as Strategic Delegation." *Journal of Development Economics* 58(1), pp. 45–60.
- Reserve Bank of India. (2003a). *Report on Currency and Finance 2001-02*, Mumbai.
- Reserve Bank of India. (2003b). "Accretion to Foreign Exchange Reserves in India": Sources, Arbitrage and Costs, January.
- Reserve Bank of India. (2003c). *Monthly Bulletin*, January, Mumbai.
- Reserve Bank of India. (2003d). *State Finances: A Study of Budgets of 2002-03*, February, Mumbai.
- Reserve Bank of India. (2003e). *Report of the Group to Assess the Fiscal Risk of State Government Guarantees*, July, Mumbai.
- Reserve Bank of India. (2002). *Annual Report 2001-02*, Mumbai.
- Reserve Bank of India. (2002a). *Annual Report 2001-02*, Chapter XI: Public Debt Management, Mumbai.
- Reserve Bank of India. (2002b). *Report on Trends and Progress of Banking in India 2001-02*, Mumbai.
- Reserve Bank of India. (2002c). *Report on Currency and Finance 2000-01*, Mumbai.
- Reserve Bank of India. (2001). *Annual Report*, Mumbai.
- Reserve Bank of India. (2001a). *Annual Report 2000-01*, Mumbai.
- Reserve Bank of India. (2001b). *Handbook of Statistics of Indian Economy 2001*, Mumbai.
- Reserve Bank of India. (2001c). *Reserve Bank of India Monthly Bulletin January 2002*, Mumbai.
- Reserve Bank of India. (1991). *All India Debt and Investment Survey*, Reserve Bank of India,
- Reserve Bank of India. *Report on Trend and Progress of Banking in India*, various years.
- Sachs, Jeffrey, Nirupam Bajpai, and Ananthi Ramiah. (2002). *Understanding Regional Economic Growth in India*, Working Paper No. 88, Center for International Development at Harvard University.
- Sachs, Jeffrey, Ashutosh Varshney, and Nirupam Bajpai. (1999). *India in the Era of Economic Reforms*, New Delhi, New York: Oxford University Press.
- Saxena, N.C. (2000a). "Tenancy Reforms vs Open Market Leasing—What Would Serve the Poor Better?", *Planning Commission Discussion Paper*, mimeo.
- Saxena, N.C. (2000b). "Theme Paper on Enhancement of Property Rights Including Land Rights of Women," *Planning Commission Discussion Paper*, mimeo.
- Shariff, A., P. Ghosh and S. Mondal. (2002). "Indian Public Expenditures on Social Sector and Poverty Alleviation Programmes during the 1990s", *ODI Working Paper* No. 163, May.

- Shekhar, S. and S. Balakrishnan. (1999). *"Voices from the Capital: A Report Card on Public Service in Delhi,"* Public Affairs Center, Bangalore.
- Singh, Nirvikar. (2002), *Information Technology and India's Economic Development*, paper presented at the Cornell University Conference on the Indian Economy, April.
- Shariff, Abusaleh and Ananta C. Mallick, (1999). "Dynamics of Food Intake and Nutrition by Expenditure Class in India", *Economic and Political Weekly*, July 3-9.
- Sharma, A. (2002). "The Agricultural Sector," in *Economic and Policy Reforms in India*, New Delhi: National Council of Applied Economic Research, pp. 185-213.
- Smith K.R. (2000). "National Burden of Disease in India from Indoor Air Pollution." PNAS 97, pp. 13286 – 13293.
- Smith K.R., and S. Mehta. (2000). "The Burden of Disease from Indoor Air Pollution in Developing Countries. Comparison of Estimates." Paper presented at the USAID/WHO Global Technical Consultation on the Health Impacts of Indoor Air Pollution and Household Energy in Developing Countries."
- Srinivasan, T.N. (2002). "China and India, Growth and Poverty, 1980-2000", June.
- Srinivasan, T.N. (2001). "India's Fiscal Situation: Is a Crisis Ahead?" *Working Paper* no. 92, Center for Research on Economic Development and Policy Reform, Stanford University.
- Stern, N.(2002). "Public Finance and Policy for Development: Challenges for India", NIPFP Silver Jubilee Lecture, January 10, 2002.
- Sundaram, K. and S. Tendulkar. (2002). "Recent Debates on Database for Measurement of Poverty in India: Some Fresh Evidence", paper presented at the Workshop on Poverty Measurement, Monitoring and Evaluation January 11-12, New Delhi
- Sundararajan, V. and S. Thakur. (1980). "Public investment, Crowding Out, and Growth: A Dynamic model Applied to India and Korea", IMF Staff Papers, 814-888.
- Taimin, B.K. (2001). "Food Security in the 21<sup>st</sup> Century, Perspective and Vision", New Delhi: Konark Publishers Pvt. Ltd.
- Tanzi, Vito and Howell Zee. (2002). *"Tax Policies for Emerging Markets"*. IMF Working Paper No. 00/35.
- TARU Leading Edge. (2001). *"Socio Economic Impact Assessment Study for Andhra Pradesh"*.
- TARU Leading Edge. (2000). *"Socio Economic Impact Assessment Study for Haryana"*.
- Tata Energy Research Institute. (2002). "Cost of Un-served Energy". New Delhi, June.
- Tata Energy Research Institute. (2000). "Cost of Un-served Energy", New Delhi: June.
- The Economist Intelligence Unit (2002), *India Country Profile 2002*, United Kingdom.
- Umali-Deininger, Dina L. and K.W. Deininger. (2001). "Towards Greater Food Security For India's Poor: Balancing Government Intervention And Private Competition", *Agricultural Economics* 25, pp. 321-335.
- Virmani, A. (2002). *A New Development Paradigm: Employment, Entitlement and Empowerment*, paper presented at the Conference on "The Politics and Economics of Liberalisation in India", April 11-13, 2002 at the RG Institute for Contemporary Studies, New Delhi.

- Vaidyanathan, A. (2002). "India's Agricultural Development Policy" in R. Kapila and U. Kapila (eds), *Indian Agriculture in the Changing Environment*, Volume 1, New Delhi: Academic Foundation, pp. 83-104.
- Venkatasubramanian, K. (2000). "Land Reforms Remain an Unfinished Business," *Planning Commission Discussion Paper*, mimeo.
- Vyas, V.S. (2002). "Changing Contours of Indian Agriculture," in R. Kapila and U. Kapila (eds), *Indian Agriculture in the Changing Environment*, Volume 1, New Delhi: Academic Foundation, pp. 41-74.
- Vyas, V.S. (2002). "Agriculture The Second Round of Reforms," in R. Kapila and U. Kapila (eds), *Indian Agriculture in the Changing Environment*, Volume 1, New Delhi: Academic Foundation, pp.143-174.
- Vyas, V.S. (2003). "Market Reforms in Indian Agriculture," draft mimeo.
- Williamson, J. and R. Zagher. (2002). "From Slow Growth to Slow Reform?", paper presented at Stanford University, June 3-4, 2002.
- World Bank. (2003). Doing Business Database.
- World Bank, (2003a). "Access of the Poor to Clean Household Fuels in India." (draft).
- World Bank. (2003b). "*Strategy for Sustained Reforms in the State Power Sector*", South Asia Energy and Infrastructure Unit, draft discussion paper.
- World Bank. (2003c). "*Global Development Finance*", World Bank, Washington D.C.
- World Bank. (2002a). "*Poverty in India: The Challenge of Uttar Pradesh*". Poverty Reduction and Economic Management Sector Unit, South Asia Region.
- World Bank. (2002b). *India: CAS Progress Report*, 2002
- World Bank. (2002c). *Report on the Transport Sector Strategy for India*, 2002
- World Bank. (2002d). *Report on the Financial Sector Strategy for India*, May 2002
- World Bank and CII. (2002e). "Improving India's Investment Climate", March.
- World Bank. (2002f). "India – Fiscal Policies to Accelerate Economic Growth", Poverty Reduction and Economic Management Unit, South Asia Region, *Green Cover Report 2473IN*.
- World Bank. (2002g). "Micro-finance in India: Issues, Constraints, and Potential for Sustainable Growth", *Report No. 22531-IN*, September.
- World Bank. (2002h). "Sustainability of Micro-finance Self Help Groups in India: Would Federating Help?" (Draft), September.
- World Bank. (2002i). "Improving Rural Access to Electricity Services in India", South Asia Energy and Infrastructure Unit, mimeo.
- World Bank. (2002j). "India: Power Sector Reforms and the Poor", South Asian Energy and Infrastructure Unit, World Bank, September.
- World Bank. (2002k). "Maharashtra: Reorienting Government to Facilitate Growth and Reduce Poverty", October.
- World Bank, (2002l). "India Household Energy, Indoor Air Pollution and Health.", Report 261/02.
- World Bank. (2002m). Concept Paper for *Review of ICT Developments in South Asian Countries and Lessons from the Indian IT Service Industry Experience*, SASFP, 6 September.

- World Bank. (2002n). "Challenges for India's Transport Sector, Final Report, February 25, 2002.
- World Bank. (2002o). "Development Policy Review: Rationale, Content and Process", PRMEP, June 17.
- World Bank. (2002p). "Power for India: A Strategy for Sustained Reform in the State Power Sectors", draft report, October 24.
- World Bank. (2002q). "Country Assistance Strategy Progress Report of the World Bank Group for India", November 4.
- World Bank. (2002r). "India: Agricultural Policy Framework for Growth and Sustained Rural Poverty Reduction: Recent Achievements and Challenges Ahead", draft concept note, November 13.
- World Bank. (2001). *"India : Power Supply to Agriculture (Vol I-IV)"*, Report No. 22171-IN, SASEI, Washington D.C.
- World Bank. (2001a) *"India Improving Household Food and Nutrition Security"*, Report No. 20300-IN, Washington, D.C.
- World Bank. (2001c). "India: The Challenges of Development", OED Country Assistance Evaluation.
- World Bank. (2001d). "India: Country Assistance Strategy", June.
- World Bank. (2000). *"India: Reducing Poverty, Accelerating Development"*, A World Bank Country Study, Oxford University Press, New Delhi.
- World Bank. (2000). Rural Development Report
- World Bank. (2000). *World Business Environment Survey*.
- World Bank. (1999). "India Foodgrain Marketing Policies: Reforming to Meet Food Security Needs", *Report No. 18329-IN*, Washington, D.C.
- World Bank. (1999a). "India: Towards Rural Development and Poverty Reduction", Washington, D.C.
- World Bank. (1999c). "Special (Infrastructure) Financing Facilities – Cross-Country Experience".
- World Bank. (1998a). Report on Rural Credit Cooperatives (Draft).
- World Bank. (1998b). India: Report on Rural Finance, (Draft).
- World Bank. (1998c). "Reducing Poverty in India: Options for more Effective Public Services". A World Bank Country Study.
- World Health Organization. (2002). *Polio News Eradication*, Global Polio Eradication Initiative, Newsletter n.17, December.
- World Health Organization. (1999). *World Health Report 1999: Making a Difference*.
- Young, A. (1993). Land Degradation in South Asia: Its severity, causes, and effects upon the people. Final report prepared for submission to the Economic and Social Council of the United Nations (ECOSOC). Rome: Food and Agriculture Organization of the United Nations, United Nations Development Program, and United Nations Environment Program.



## **STATISTICAL ANNEX**



**Table A1. Gross Domestic Expenditure and Product**  
(Shares based on current price data, percent)

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>A. Shares of gross domestic expenditure at market prices</b>									
1. Final consumption	78.3	76.3	75.3	76.7	75.8	77.7	78.6	77.7	77.9
a) Public Sector	11.4	10.7	10.8	10.7	11.3	12.3	13.0	13.1	12.8
b) Private	66.9	65.6	64.5	66.0	64.5	65.4	65.6	64.6	65.0
2. Gross capital formation	21.3	23.4	26.5	21.8	22.6	21.4	23.7	22.5	22.4
a) Gross fixed capital formation	21.4	21.9	24.4	22.8	21.7	21.5	21.8	21.8	21.7
i) Public sector	8.0	8.8	7.7	6.9	6.4	6.5	6.2	6.1	5.9
ii) Private sector	13.4	13.2	16.7	15.9	15.3	15.1	15.6	15.8	15.7
b) Change in inventories	-0.2	1.4	2.2	-1.0	0.9	-0.1	1.9	0.7	0.8
3. Total Absorption (1+2)	99.5	99.7	101.8	98.5	98.4	99.1	102.3	100.2	100.3
4. Resource balance	0.0	-0.3	-1.2	-1.2	-1.3	-1.7	-2.0	-0.8	-0.7
a) Exports of goods & services	10.0	10.0	11.0	10.6	10.9	11.2	11.8	13.8	13.3
b) Imports of goods & services	10.0	10.3	12.2	11.8	12.1	12.9	13.7	14.5	13.9
5. Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
6. Net income from abroad	-1.4	-1.3	-1.1	-1.0	-0.9	-0.9	-0.8	-0.8	-0.6
7. Gross national income (5+6)	98.6	98.7	98.9	99.0	99.1	99.1	99.2	99.2	99.4
8. Net current transfers from abroad	1.9	2.5	2.4	3.2	2.9	2.5	2.7	2.8	2.5
9. Gross national disposable income (7+8)	100.5	101.2	101.3	102.3	102.0	101.6	101.9	102.0	102.0
10. National savings (9-1)	22.2	24.9	26.0	25.6	26.2	23.9	23.3	24.2	24.1
a) Public Sector	0.6	1.7	2.0	1.7	1.3	-1.0	-1.0	-2.3	-2.5
b) Private Sector	21.6	23.2	23.9	23.9	24.9	24.9	24.4	26.5	26.6
<b>B. Shares of GDP by Industrial Origin</b>									
1. Agriculture	28.2	27.5	25.5	26.5	25.4	25.4	23.9	22.7	22.8
2. Industry	23.9	24.5	25.4	24.9	24.9	24.3	23.5	24.2	23.6
Construction	4.7	4.6	4.6	4.6	5.1	5.3	5.4	5.5	5.5
Gas, electricity, water	2.2	2.4	2.3	2.2	2.3	2.5	2.2	2.2	2.2
Mining and quarrying	2.3	2.2	2.1	2.0	2.2	2.0	2.1	2.2	2.0
Manufacturing	14.6	15.3	16.3	16.1	15.2	14.5	13.8	14.3	13.9
3. Services	38.9	38.5	39.4	39.5	41.0	42.0	43.6	44.2	44.8
4. Statistical discrepancy	-1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. Total value added at basic prices	90.9	90.5	90.3	90.9	91.3	91.8	91.0	91.1	91.2
6. Taxes less subsidies on products	9.1	9.5	9.7	9.1	8.7	8.2	9.0	8.9	8.8
7. GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Memo Item (Rs. billion)</b>									
Gross domestic product at market prices	8592	10128	11880	13682	15225	17409	19369	21043	22960

Source: Central Statistical Organization, National Accounts Statistics.



**Table A2. Gross Domestic Expenditure and Product**  
(Rs. billion at current prices)

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>A. GDP by Expenditure</b>									
1. Final consumption	6725	7728	8946	10494	11539	13534	15227	16353	17879
a) Public Sector	977	1086	1288	1457	1722	2140	2511	2759	2950
b) Private	5748	6642	7658	9037	9817	11394	12716	13594	14929
2. Gross capital formation	1826	2368	3152	2979	3437	3722	4583	4736	5151
a) Gross fixed capital formation	1843	2222	2894	3119	3304	3743	4219	4598	4973
i) Public sector	689	889	916	943	971	1123	1204	1277	1357
ii) Private sector	1154	1334	1978	2175	2333	2620	3015	3321	3616
b) Change in inventories	-17	145	258	-140	133	-21	364	138	178
3. Total Absorption (1+2)	8551	10096	12098	13472	14976	17257	19809	21089	23030
4. Resource balance	1	-31	-142	-162	-191	-295	-380	-159	-158
a) Exports of goods & services	861	1016	1307	1449	1652	1953	2277	2902	3045
b) Imports of goods & services	860	1047	1450	1610	1843	2247	2657	3061	3202
5. Gross domestic product	8592	10128	11880	13682	15225	17409	19369	21043	22960
6. Net income from abroad	-121	-131	-135	-131	-132	-150	-154	-174	-127
7. Gross national income (5+6)	8471	9997	11745	13551	15093	17260	19215	20869	22834
8. Net current transfers from abroad	165	254	285	439	440	432	531	585	578
9. Gross national disposable income (7+8)	8637	10251	12030	13990	15533	17692	19746	21454	23412
10. National savings (9-1)	1912	2523	3084	3497	3994	4158	4519	5101	5533
a) Public Sector	54	168	241	229	203	-172	-200	-480	-577
b) Private Sector	1857	2355	2843	3267	3792	4329	4720	5581	6110
<b>B. GDP by Industry of Origin</b>									
1. Agriculture	2420	2788	3031	3626	3870	4425	4620	4785	5226
2. Industry	2052	2485	3018	3411	3785	4235	4557	5099	5417
Construction	406	466	550	628	778	920	1053	1166	1256
Gas, electricity, water	190	238	277	300	353	436	423	466	500
Mining and quarrying	201	227	253	277	334	357	413	454	463
Manufacturing	1255	1554	1938	2207	2320	2522	2668	3014	3199
3. Services	3342	3897	4684	5398	6246	7320	8443	9293	10297
Transportation	511	611	707	836	975	1125	1243	1403	1545
Trade	994	1192	1463	1717	1945	2208	2460	2727	3025
Dwellings	484	529	590	655	728	855	1015	1204	1370
Banking	417	501	661	720	840	956	1191	1185	1302
Public administration	436	486	573	652	800	996	1167	1240	1331
Other	500	577	690	817	958	1180	1367	1535	1726
4. Statistical discrepancy	0	0	0	0	0	0	0	0	0
5. Total value added at basic prices	7813	9171	10733	12435	13901	15981	17619	19177	20940
6. Taxes less subsidies on products	779	957	1147	1247	1324	1429	1750	1866	2020
7. GDP at market prices	8592	10128	11880	13682	15225	17409	19369	21043	22960

Source: Central Statistical Organization, National Accounts Statistics.

**Table A3. National Income and Product at constant prices**  
(annual growth rates, in percent)

	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>A. GDP by Expenditure and Income</b>								
1. Final consumption	4.2	6.5	7.4	3.8	7.4	7.1	2.3	6.1
a) Public Sector	1.2	8.0	4.5	11.1	12.9	13.2	0.6	7.2
b) Private	4.6	6.2	7.9	2.6	6.4	6.0	2.6	5.9
2. Gross capital formation	12.8	19.3	1.6	2.2	8.6	8.6	9.4	3.0
Gross fixed capital formation	11.8	19.3	1.5	2.1	8.7	8.6	4.7	3.0
i) Public sector	18.0	-6.5	-5.9	-2.8	9.4	4.9	10.9	3.0
ii) Private sector	8.1	36.1	4.8	4.1	8.4	10.0	2.4	3.0
3. Total Absorption	6.0	9.4	6.0	3.4	7.7	7.5	4.0	5.3
4. Exports of goods & services	13.1	31.4	6.3	-2.3	13.9	18.0	23.4	6.0
5. Imports of goods & services	22.7	28.0	-2.5	13.2	20.8	7.0	6.5	3.5
6. Capacity to Import <sup>1</sup>	18.9	19.0	-2.7	12.8	17.2	5.5	17.8	3.8
7. Gross Domestic Income at market prices	8.0	6.4	6.3	6.3	6.4	5.5	3.0	5.1
8. Gross national income	7.4	7.8	7.7	4.5	5.9	7.2	3.9	5.8
9. Gross national disposable income	8.1	7.7	8.5	4.2	5.5	7.5	3.9	5.5
10. Gross national savings	21.8	11.4	11.6	5.6	0.5	8.5	8.7	4.0
<b>B. GDP by Industrial origin</b>								
1. Agriculture	5.0	-0.9	9.6	-2.4	6.2	0.3	-0.4	5.7
2. Industry	10.2	11.6	7.1	4.3	3.7	4.8	6.6	3.3
Construction	5.5	6.2	2.1	10.2	6.2	8.0	6.9	3.7
Gas, electricity, water	9.4	6.8	5.4	7.9	7.0	5.2	5.0	4.3
Mining and quarrying	9.3	5.9	0.5	9.8	2.8	3.3	2.4	1.0
Manufacturing	12.0	14.9	9.7	1.5	2.7	4.0	7.3	3.4
3. Services	7.1	10.5	7.2	9.8	8.4	10.1	5.6	6.8
4. Total value added at basic prices	7.3	7.3	7.8	4.8	6.5	6.1	4.4	5.6
5. GDP at market prices	7.5	7.6	7.4	4.5	6.0	7.1	3.9	5.5

Notes: <sup>1</sup>/ Exports deflated by import price index.

Source: Central Statistical Organization, National Accounts Statistics.

**Table A4. Gross Domestic Product by Expenditure, National Income and Savings**  
(Rs. billion at 1993-94 prices)

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>A. GDP by Expenditure and Income</b>									
1. Final consumption	6725	7004	7458	8012	8313	8924	9561	9780	10378
a) Public Sector	977	989	1069	1116	1240	1400	1584	1593	1709
b) Private	5748	6015	6389	6896	7073	7524	7977	8186	8669
2. Gross capital formation	1826	2061	2458	2496	2551	2772	3010	3294	3394
a) Gross fixed capital formation	1843	2061	2458	2495	2548	2769	3008	3148	3244
i) Public sector	689	813	759	715	695	760	798	885	911
ii) Private sector	1154	1248	1698	1780	1853	2009	2210	2264	2333
b) Change in inventories	141	378	252	189	343	140	493	304	150
3. Total Absorption (1+2)	8551	9065	9916	10509	10864	11696	12571	13074	13772
4. Resource balance	1	-82	-71	43	-163	-290	-144	149	210
a) Exports of goods & services	861	974	1280	1361	1329	1514	1786	2204	2336
b) Imports of goods & services	860	1055	1351	1318	1492	1803	1930	2054	2125
5. Gross domestic product	8592	9233	9939	10674	11152	11820	12664	13163	13881
6. Trading gains or losses	0	50	-61	-175	8	53	-132	-256	-315
7. Gross domestic income (5+6)	8592	9284	9878	10499	11161	11874	12532	12907	13566
8. Net income from abroad	-121	-132	-126	-107	-106	-120	-116	-124	-84
9. Gross national income (7+8)	8471	9101	9813	10567	11046	11700	12548	13039	13798
10. Net current transfers from abroad	165	232	238	339	322	293	345	362	345
11. Gross national disposable income (9+10)	8637	9333	10052	10906	11368	11994	12892	13401	14143
12. Gross national savings (11-1)	1912	2329	2594	2894	3056	3069	3332	3621	3765
<b>Memo Item:</b>									
Capacity to import	861	1024	1219	1185	1337	1567	1654	1948	2021
<b>B. GDP by Industrial origin</b>									
1. Agriculture	2420	2541	2519	2761	2694	2861	2870	2859	3021
2. Industry	2052	2261	2524	2702	2818	2923	3064	3266	3375
Construction	406	428	455	465	512	544	587	628	652
Gas, electricity, water	190	208	222	234	252	270	284	298	311
Mining and quarrying	201	220	233	234	257	264	273	279	282
Manufacturing	1255	1405	1614	1770	1797	1846	1920	2061	2131
3. Services	3342	3579	3953	4238	4654	5043	5551	5862	6259
Transportation	511	562	623	674	730	789	876	983	1066
Trade	994	1100	1259	1355	1458	1569	1682	1751	1906
Dwellings	484	499	527	550	580	613	659	719	761
Banking	417	452	501	550	648	705	800	790	816
Public administration	436	442	472	491	562	622	704	722	743
Other	500	525	571	617	676	744	829	897	966
4. Statistical discrepancy	0	0	0	0	0	0	0	0	0
5. Total value added at basic prices	7813	8380	8996	9701	10166	10827	11484	11987	12654
6. Taxes less subsidies on products	779	853	944	974	987	993	1179	1177	1227
7. GDP at market prices (5+6)	8592	9233	9939	10674	11152	11820	12664	13163	13881

Source: Central Statistical Organization, National Accounts Statistics.

**Table A5. Exchange Rates and Prices**

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>Exchange Rates (Rs. per US\$)</b>									
Nominal official average exchange rate	31.37	31.40	33.45	35.50	37.16	42.07	43.33	45.68	47.69
Real effective exchange rate (1985=100)	61.59	66.0	63.6	63.8	67.0	63.4	63.3	66.5	68.4
<b>Price Indices</b>									
Wholesale price index (1993-94=100)	100.0	112.5	121.6	127.2	132.8	140.7	145.3	155.7	161.3
Consumer Price Index (1993-94=100)	100.0	107.6	118.3	129.4	138.3	156.4	161.6	168.0	173.1
CPI (% change)	5.0	7.6	10.0	9.4	6.8	13.1	3.3	3.9	3.1
Manuf. Exp. Unit Value Index (1990=100)	106.7	110.5	117.0	111.3	103.5	99.6	99.4	97.3	95.9
<b>Implicit Deflators (1993=100)</b>									
Real gross domestic product	100.0	109.7	119.5	128.2	136.5	147.3	153.0	159.9	165.4
Exports of goods and services	100.0	95.9	97.9	93.9	80.4	77.5	78.4	75.9	76.7
Imports of goods and services	100.0	100.8	93.2	81.8	81.0	80.2	72.6	67.1	66.4
Terms of trade Index	100.0	95.1	105.0	114.8	99.4	96.6	108.0	113.1	115.6

Sources: IMF; Reserve Bank of India; GOI, Ministry of Industry; and World Bank.

**Table A6. Central Government Finances Summary**  
(Rs billion at current prices)

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03 B.E.	2002-03 R.E.	2003-04 B.E.
Revenue	660	741	755	911	1101	1263	1339	1495	1815	1926	2014	2451	2369	2539
Tax Revenue	501	540	534	675	819	937	957	1047	1283	1367	1337	1730	1642	1842
Customs <sup>a</sup>	223	238	222	268	358	429	402	407	484	475	403	452	455	494
Union Excise <sup>a</sup>	160	164	172	211	222	235	255	286	349	685	726	914	874	968
Income Tax <sup>a</sup>	16	18	14	35	43	47	36	58	91	318	320	425	373	441
Corporate Tax	79	89	101	138	165	186	200	245	307	357	366	486	447	515
Other	23	32	26	23	32	41	64	51	375	49	29	61	72	71
Non-Tax Revenue	160	201	220	236	282	326	382	448	532	559	678	721	728	698
Interest Receipts	109	125	151	158	184	221	253	301	339	328	355	414	406	392
Other	50	76	69	78	98	105	129	148	193	231	323	307	322	306
Expenditure <sup>b</sup>	999	1120	1307	1447	1618	1828	2080	2449	2880	3136	3461	3926	3858	4208
Non-Plan Expenditure	750	817	932	1037	1219	1368	1572	1888	2219	2429	2613	2968	2899	3178
Interest Payments	266	310	367	440	500	595	656	779	946	993	1075	1174	1160	1232
Defense	163	176	218	232	269	295	353	399	471	496	543	650	560	653
Subsidies	123	108	116	119	127	155	185	236	245	268	312	399	446	499
Other Non-Plan Expenditure	198	223	230	245	324	323	378	474	558	672	683	746	733	794
Plan Expenditure	310	367	437	474	464	535	591	668	762	827	1012	1135	1141	1210
Less: Recovery of Loans	60	64	62	63	65	75	83	106	101	120	164	177	183	180
Gross Fiscal Deficit	339	379	552	536	517	565	741	954	1064	1210	1446	1475	1488	1668
Financed by:														
Disinvestment of PSEs	30	20	0	51	4	4	9	59	17	21	36	120	34	132
Domestic borrowing (net)	254	306	502	450	510	531	721	876	1035	1113	1354	1348	1590	1501
External borrowing (net)	54	53	51	36	3	30	11	19	12	75	56	8	-135	36
Memo:														
GDPmp	6531	7484	8592	10128	11880	13682	15225	17409	19369	21043	22960	25571	24655	27435
Fiscal Deficit / GDP	5.2	5.1	6.4	5.3	4.3	4.1	4.9	5.5	5.5	5.7	6.3	5.8	6.0	6.1
Revenue / GDP	10.1	9.9	8.8	9.0	9.3	9.2	8.8	8.6	9.4	9.2	8.8	9.6	9.6	9.3
Expenditure / GDP	15.3	15.0	15.2	14.3	13.6	13.4	13.7	14.1	14.9	14.9	15.1	15.4	15.6	15.3

Notes: BE = Budget estimates; RE = Revised estimates.

a. Till 1999-00 net of state's share, after that gross receipts.

b. Net of loan recoveries and loans on small savings.

Sources: Ministry of Finance, Union budget documents and World Bank Staff Estimates..

**Table A7. Budgetary Classification of Central Government Finances**

(Rs. billion at current prices)

	1985- 86	1986- 87	1987- 88	1988- 89	1989- 90	1990- 91	1991- 92	1992- 93	1993- 94	1994- 95	1995- 96	1996- 97	1997- 98	1998- 99	1999- 00	2000- 01	2001- 02	2002- 03 B.E.	2002- 03 R.E.	2003- 04 B.E.
Revenue receipts	280	331	370	436	500	550	660	741	755	911	1101	1263	1339	1495	1815	1926	2014	2451	2369	2539
Tax revenue	211	243	280	338	383	430	501	540	534	675	819	937	957	1047	1283	1367	1337	1730	1642	1842
Non-tax revenue	69	88	90	98	116	120	160	201	220	236	282	326	382	448	532	559	678	721	728	698
of which: Interest from states	19	28	32	38	44	52	65	78	96	112	130	152	178	212	254	270	296	279	301	308
Revenue expenditure (A+B+C+D)	339	409	462	541	642	735	823	927	1082	1221	1399	1589	1803	2165	2491	2778	3016	3405	3416	3662
A. Developmental	86	103	114	140	184	196	198	209	244	301	356	400	460	585	607	726	823	974	1073	1124
1. Social services	13	17	19	22	25	28	31	34	41	47	66	84	106	131	156	156	185	193	179	203
2. Economic services	74	86	95	118	159	168	168	174	203	254	290	315	354	454	451	570	638	781	894	921
B. Non-developmental	176	220	245	288	335	391	450	522	613	708	817	943	1101	1303	1580	1654	1746	1926	1876	1995
Defense services	70	92	89	96	102	109	114	121	150	164	188	210	262	299	352	372	381	436	411	443
Interest payments	75	92	112	143	178	215	266	310	367	440	500	595	656	779	946	993	1075	1174	1160	1232
C. Grants-in-aid and contributions	72	79	93	102	109	134	160	181	211	205	218	238	232	264	290	384	432	487	450	524
of which: Grants to states	67	74	91	100	86	132	157	178	208	200	213	232	297	251	290	368	415	468	430	501
D. Revenue expenditure of UTs	6	7	9	11	13	14	15	16	14	7	8	9	10	12	14	14	16	17	18	20
Net current balance	-59	-78	-91	-105	-142	-186	-163	-186	-327	-310	-297	-327	-464	-670	-676	-852	-1002	-954	-1047	-1123
Capital expenditure (A+B+C+D)	131	160	151	165	180	191	176	193	225	226	219	239	277	285	388	357	444	521	441	545
A. Developmental	59	76	57	60	71	69	58	74	56	74	50	47	73	76	108	93	84	172	135	188
1. Social services	2	4	3	4	3	2	2	3	3	7	5	7	6	10	11	8	-34	11	10	11
2. Economic services	57	72	54	57	68	67	56	71	52	67	45	40	67	67	97	85	118	161	125	177
B. Non-developmental	16	15	33	41	45	50	52	59	74	73	88	93	100	109	129	136	178	232	165	232
of which: Defense services	10	13	31	38	42	46	49	55	69	68	80	85	91	100	119	124	162	214	149	210
C. Capital expenditure of UTs	1	2	3	2	2	3	3	4	3	2	2	2	2	3	4	5	3	3	3	3
D. Loans and advances (net)	54	68	58	62	62	69	62	57	93	77	78	97	101	96	148	123	179	115	138	123
to States & UTs	26	22	28	25	22	28	39	44	51	46	48	69	76	75	117	88	105	118	135	107
to Others	28	46	30	37	40	41	23	12	42	31	30	28	25	21	31	35	74	-3	3	16
Gross fiscal deficit (World Bank Defn.)	190	238	242	270	322	376	339	379	552	536	517	565	741	954	1064	1209	1446	1475	1488	1668
Financed by instruments																				
Disinvestment of equity in PSEs	0	0	0	0	0	0	30	20	0	51	4	4	9	59	17	21	36	120	34	132
Market loans	49	55	59	84	74	80	75	37	289	203	331	200	325	690	703	729	877	959	1000	1072
Small savings	44	34	39	58	86	91	66	57	91	166	128	153	245	330	90	83	88	80	0	0
Provident funds	4	8	9	10	11	12	13	16	18	20	23	23	44	57	66	49	42	100	85	75
External loans	14	20	29	25	26	32	54	53	51	36	3	30	11	19	12	75	56	8	-135	36
Other (includes T-bills)	78	121	107	93	125	161	100	196	104	61	29	155	107	-201	177	251	347	209	505	354

Notes: BE = Budget estimates; RE = Revised estimates.

**Table A8. Budgetary Classification of State Government Finances**  
(Rs. billion at current prices)

	1985- 86	1986- 87	1987- 88	1988- 89	1989- 90	1990- 91	1991- 92	1992- 93	1993- 94	1994- 95	1995- 96	1996- 97	1997- 98	1998- 99	1999- 00	2000- 01	2001- 02 B.E.	2001- 02 R.E.	2002- 03 B.E.
Revenue receipts	334	382	440	504	565	665	805	911	1056	1223	1368	1528	1703	1764	2072	2380	2831	2709	3034
Tax revenue	218	251	290	331	391	446	526	604	688	806	929	1061	1216	1284	1457	1687	2015	1885	2116
Direct taxes	15	17	20	24	30	34	40	42	50	70	81	84	94	100	115	132	165	162	186
Indirect taxes	131	150	173	200	230	270	318	356	415	487	558	627	718	790	911	1048	1247	1169	1305
State share in central taxes	73	84	97	107	131	142	168	206	224	249	290	350	404	394	441	507	603	554	625
Non-tax revenue	116	131	150	173	174	219	279	306	367	417	439	467	487	480	605	692	816	824	918
of which: Grants from center	63	70	83	97	85	126	152	178	212	200	210	232	242	239	306	378	486	507	541
Revenue expenditure [A+B+C]	328	381	452	522	602	718	866	962	1094	1285	1450	1689	1866	2201	2611	2915	3327	3314	3552
A. Developmental (1+2)	231	269	318	362	408	489	589	635	708	790	893	1062	1138	1319	1515	1685	1840	1861	1911
1. Social services	134	152	177	206	240	280	315	346	390	450	536	603	683	820	963	1045	1185	1174	1207
2. Economic services	97	117	141	157	168	209	274	289	319	340	357	458	455	498	552	640	654	687	704
B. Non-developmental	93	107	128	154	188	221	267	315	374	482	542	609	699	847	1051	1181	1430	1400	1575
of which: Interest payments	34	44	53	63	76	92	115	139	165	201	230	269	316	376	463	532	671	664	747
To center	17	27	31	37	44	52	65	78	95	112	131	152	175	209	254	274	311	297	310
To others	17	17	21	26	32	40	50	60	70	90	99	117	140	167	209	258	360	367	436
C. Other expenditure <sup>a</sup>	4	4	5	6	6	8	10	12	12	13	15	19	30	35	45	50	57	53	66
Net current balance	7	1	-12	-18	-37	-53	-61	-51	-38	-62	-82	-161	-163	-436	-539	-536	-496	-605	-518
Capital expenditure [A+B+C]	85	94	101	99	118	135	132	158	168	208	232	213	279	311	377	360	480	461	546
A. Developmental (1+2)	57	61	64	69	77	90	99	103	121	171	178	168	218	223	244	302	388	365	415
1. Social services	10	10	11	11	12	13	16	17	18	23	26	30	34	42	43	58	85	82	94
2. Economic services	46	51	54	57	66	77	82	87	102	148	152	139	184	181	201	245	303	283	322
B. Non-developmental	1	2	2	2	2	3	2	3	4	4	7	7	10	8	11	9	15	18	22
C. Loans and advances (net)	27	32	35	28	38	43	32	51	43	33	47	38	51	80	122	48	77	77	109
Gross fiscal deficit	78	93	113	117	154	188	193	209	206	270	314	374	442	748	916	895	977	1066	1064
Financed by instrument:																			
Market loans	14	14	18	22	26	26	33	39	42	41	64	65	79	122	142	130	122	175	137
Loans from center (net)	58	48	58	67	79	100	94	89	95	148	148	175	237	311	124	84	168	148	187
Small savings & Provident funds	10	10	16	20	23	31	29	36	43	48	49	54	62	120	179	131	132	118	115
Other	-3	21	20	7	26	32	37	45	25	33	53	80	64	195	471	551	554	624	624

Note: BE = Budget estimates; RE = Revised estimates.

<sup>a</sup> Other expenditure include compensation and assignments to local bodies and panchayat raj institutions and reserve with the finance department

Sources: Reserve Bank of India, RBI bulletins on state finances, World Bank Staff Estimates.

**Table A9. Budgetary Classification of General Government (Center and States) Finances**

(Rs. billion at current prices)

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02 <sup>a/</sup>
Revenue receipts	535	617	695	805	937	1039	1252	1396	1501	1821	2132	2408	2653	2806	3320	3670	3901
Tax revenue	432	495	569	668	776	879	1030	1144	1221	1480	1751	1999	2205	2328	2743	3066	3201
Non tax revenue	103	122	126	137	162	160	221	252	280	341	381	410	448	478	576	604	699
Revenue expenditure [A+B+C]	583	689	790	926	1114	1269	1467	1632	1872	2194	2505	2896	3197	3906	4557	5052	5619
A. Developmental	317	372	432	503	592	685	787	843	952	1091	1249	1461	1598	1903	2122	2411	2684
1. Social services	146	169	196	228	265	307	346	380	431	497	602	688	789	951	1118	1201	1359
2. Economic services	171	204	236	275	327	377	442	463	521	594	646	774	809	953	1003	1210	1325
B. Non-developmental	250	300	341	404	480	561	652	759	891	1078	1229	1400	1622	1938	2377	2565	2850
C. Other revenue expenditure	16	17	17	19	42	24	28	30	29	24	28	35	-22	64	59	75	85
Net current balance	-48	-72	-95	-121	-177	-230	-215	-236	-371	-372	-373	-488	-544	-1100	-1237	-1382	-1718
Capital expenditure [A+B+C+D]	189	233	225	238	275	297	269	306	342	388	403	383	479	520	649	629	800
A. Developmental (1+2)	115	136	121	129	148	159	157	177	176	245	229	215	292	299	352	396	449
1. Social services	12	14	14	15	15	15	19	19	22	30	32	36	40	52	54	66	49
2. Economic services	103	122	107	114	133	144	138	158	154	215	197	179	251	247	297	330	401
B. Non-Developmental	17	17	36	43	48	52	55	62	78	77	95	100	109	117	140	145	196
C. Loans and advances (net)	55	77	65	65	77	83	54	64	85	64	77	66	76	101	153	83	151
D. Capital disbursements of UTs	1	2	3	2	2	3	3	4	3	2	2	2	2	3	4	5	3
Gross fiscal deficit	237	305	320	359	452	527	484	542	713	760	776	870	1024	1621	1886	2010	2518
Financed by Instrument:																	
Disinvestment of equities in PSEs.	0	0	0	0	0	0	30	20	0	51	4	4	9	59	17	21	36
Market Loans	70	80	85	111	106	115	122	87	343	254	450	344	513	959	1008	1132	1318
Small Savings and Provident Funds	58	52	64	88	120	134	108	109	152	234	199	230	351	507	334	263	248
External Loans	14	20	29	25	26	32	54	53	51	36	3	30	11	19	12	75	56
Others (including t-bills)	95	153	142	135	199	246	169	273	167	186	120	263	140	76	515	519	860

Notes: BE= Budget Estimates; RE= Revised Estimates

<sup>a/</sup> Actuals for center and revised estimates for states.

Sources: Union Budget Documents; RBI bulletin on state finances; World Bank Staff Estimates.



Table A10. Transfers between Center and States

	1985- 86	1986- 87	1987- 88	1988- 89	1989- 90	1990- 91	1991- 92	1992- 93	1993- 94	1994- 95	1995- 96	1996- 97	1997- 98	1998- 99	1999- 00	2000- 01	2001- 02	2002- 03	2003- 04
(Rs. Billion)																		B.E.	R.E.
States' share in central taxes	75	85	96	107	132	145	172	205	222	248	293	351	435	391	435	517	528	612	561
Grants to States	67	74	91	100	86	132	157	178	208	200	213	232	297	251	290	368	415	468	430
Loans to States	92	75	87	99	109	136	123	121	140	188	193	231	294	385	193	173	206	252	249
of which: on small savings	29	28	31	42	57	70	55	43	50	97	100	107	151	230	0	0	0	0	0
Loan Repayments by States	27	29	36	33	34	47	38	46	52	45	48	65	71	95	98	117	140	155	149
Interest Payments by States	19	28	32	38	44	52	65	78	96	112	130	152	178	212	254	270	296	279	301
Gross Transfers (Center to States)	234	233	274	306	328	413	452	505	571	637	699	813	1027	1027	918	1058	1149	1333	1240
NET TRANSFER (Center to States)	188	177	207	235	250	315	349	381	423	480	521	596	777	720	565	672	713	899	790
Gross Transfers (Center to states without small savings)	205	205	243	264	271	343	397	462	521	540	599	706	876	797	918	1058	1149	1333	1240
Net Transfers (Center to states without small savings)	159	149	176	193	193	244	294	338	373	383	421	490	627	489	565	672	713	899	790
(% of GDP)																			
States' share in central taxes	2.7	2.7	2.7	2.5	2.7	2.6	2.6	2.7	2.6	2.5	2.5	2.6	2.9	2.2	2.2	2.5	2.3	2.4	2.3
Income Tax	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.9	0.8	0.9	1.0	0.9	0.8	0.9	..	..	..	..
VDIS	..	..	..	..	..	..	..	..	..	..	..	..	0.5	..	..	..	..	..	..
Estate Duty	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..	..	..	..
Union Excise Duties	2.0	2.0	2.0	1.9	1.9	1.8	1.9	1.9	1.7	1.6	1.5	1.6	1.5	1.4	1.4	..	..	..	..
Grants to States	2.4	2.4	2.6	2.4	1.8	2.3	2.4	2.4	2.4	2.0	1.8	1.7	2.0	1.4	1.5	1.7	1.8	1.8	1.7
Loans to States	3.3	2.4	2.5	2.4	2.2	2.4	1.9	1.6	1.6	1.9	1.6	1.7	1.9	2.2	1.0	0.8	0.9	1.0	0.9
of which: on small savings	1.0	0.9	0.9	1.0	1.2	1.2	0.8	0.6	0.6	1.0	0.8	0.8	1.0	1.3	0.0	0.0	0.0	0.0	0.0
Loan Repayments by States	1.0	0.9	1.0	0.8	0.7	0.8	0.6	0.6	0.6	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Interest Payments by States	0.7	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.3	1.3	1.3	1.1	1.2
Gross Transfers (Center to States)	8.4	7.5	7.7	7.3	6.7	7.3	6.9	6.7	6.6	6.3	5.9	5.9	6.7	5.9	4.7	5.0	5.0	5.2	5.0
NET TRANSFER (Center to States)	6.8	5.7	5.8	5.6	5.1	5.5	5.3	5.1	4.9	4.7	4.4	4.4	5.1	4.1	2.9	3.2	3.1	3.5	3.2
Gross Transfers (Center to states without small savings)	7.4	6.6	6.9	6.3	5.6	6.0	6.1	6.2	6.1	5.3	5.0	5.2	5.8	4.6	4.7	5.0	5.0	5.2	5.0
Net Transfers (Center to states without small savings)	5.7	4.8	5.0	4.6	4.0	4.3	4.5	4.5	4.3	3.8	3.5	3.6	4.1	2.8	2.9	3.2	3.1	3.5	3.2
GDPmp (Rs. Billion)	2780	3112	3543	4216	4862	5687	6531	7484	8592	10128	11880	13682	15225	17409	19369	21043	22960	25571	24655

Note: BE = Budget estimates; RE = Revised estimates.

Sources: Union budget documents; RBI bulletins on state finances; Finance Accounts; World Bank Staff Estimates.

**Table 11: Outstanding Debt (Center and States)**  
(Rs. billion at current prices)

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>Outstanding Liabilities of Central Government</b>												
Internal Debt	1540	1728	1991	2457	2665	3079	3445	3890	4597	7143	8037	9091
Of which:												
Market Loans	705	780	817	1106	1309	1640	1841	2166	2854	3559	4288	5171
91 T-bills	70	88	206	326	323	438	565	16	15	15	19	19
182/364 T-bills	11	40	88	84	82	19	82	162	102	160	163	195
Small Savings, Deposits and Provident Funds	618	697	770	879	1064	1214	1390	1678	2065	664	1048	1488
Other Accounts	453	518	598	725	858	920	1001	1241	1268	1344	1440	1579
Reserve Funds and Deposits	219	235	238	246	290	337	379	421	416	475	585	586
Total Domestic Liabilities	2830	3177	3597	4306	4877	5550	6214	7230	8346	9626	11108	12741
External Liabilities (at historical exchange rates)	315	369	423	473	509	512	542	553	573	584	659	679
External Liabilities (at current exchange rates)	929	1259	1631	1688	1792	1792	1754	1812	1928	2004	2019	2077
<b>Outstanding Liabilities of State Government</b>												
Internal Debt	192	230	263	303	352	432	516	594	771	986	1220	1459
Market Loans	156	189	224	261	301	360	425	498	603	729	855	1013
Compensation and Other Bonds	0	0	0	0	0	0	0	0	0	0	0	0
WMA from RBI	7	9	7	7	-12	0	6	-13	29	55	41	41
Loans from Banks and Other Institutions	29	32	32	35	63	72	84	108	139	201	324	456
Loans and Advances from Central Government	741	835	924	1019	1167	1315	1491	1727	2038	2162	2244	2376
Special Securities Issued to NSSF	..	..	..	..	..	..	..	..	..	264	592	926
Total Provident Funds	170	199	235	278	326	375	429	491	611	789	928	1060
State Provident Funds	140	164	193	230	268	310	356	408	508	656	772	887
Insurance and Pension Fund Trust and Endowments	30	35	41	48	58	65	73	83	102	133	157	173
Total Liabilities	1103	1263	1422	1601	1845	2122	2435	2812	3420	4201	4979	5882
<b>Outstanding Liabilities of General Government</b>												
Domestic Liabilities	3192	3606	4094	4888	5555	6357	7159	8314	9727	11665	13843	16246
External Liabilities (at current exchange rates)	929	1259	1631	1688	1792	1792	1754	1812	1928	2004	2019	2077
Total Liabilities (with ext. debt at current exchange rates)	4121	4864	5726	6575	7347	8149	8913	10127	11655	13669	15862	18323
Domestic Liabilities (% of GDP)	56.1	55.2	54.7	56.9	54.8	53.5	52.3	54.6	55.9	60.2	65.8	70.8
External Liabilities (% of GDP) at current exchange rates	16.3	19.3	21.8	19.6	17.7	15.1	12.8	11.9	11.1	10.3	9.6	9.0
Total Liabilities (% of GDP)	72.5	74.5	76.5	76.5	72.5	68.6	65.1	66.5	66.9	70.6	75.4	79.8

Sources: Central Budget, Reserve Bank of India, and World Bank Staff Estimates.

Table A12. Banking Survey and Interest Rates

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>I. Banking Survey</b>									
<b>A) Billions of rupees- end year stock</b>									
Net foreign assets	423	650	647	889	1109	1373	1663	1966	2603
Domestic credit	4375	5083	5929	6533	7434	8692	9942	11415	12819
Claims on public sector	2141	2344	2739	2952	3343	3877	4397	4986	5689
Claims on private sector	2110	2611	3057	3455	3945	4621	5319	6256	6974
Claims on non-bank fin. Institutions	124	128	133	126	147	193	226	174	156
Total assets (= total liabilities)	4798	5733	6576	7422	8543	10065	11605	13381	15422
Liquid liabilities	4798	5733	6577	7422	8543	10065	11605	13381	15422
o/w Money + Quasimoney	4106	5025	5657	6578	7746	9122	10345	12077	13821
Money market instruments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Long term foreign liabilities	0.0	0.0	0.0	0.0	0.0	13.7	12.9	13.5	0.0
All other net	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>B) Shares of GDP (%)</b>									
Net foreign assets	4.9	6.4	5.4	6.5	7.3	7.9	8.6	9.3	11.3
Domestic credit	50.9	50.2	49.9	47.7	48.8	49.9	51.3	54.2	55.8
to public sector	24.9	23.1	23.1	21.6	22.0	22.3	22.7	23.7	24.8
to private sector	24.6	25.8	25.7	25.3	25.9	26.5	27.5	29.7	30.4
Liquid liabilities	55.8	56.6	55.4	54.2	56.1	57.8	59.9	63.6	67.2
Long term foreign liabilities	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
<b>C) Real annual growth rates (%)</b>									
Net foreign assets		43.0	-9.5	25.5	16.8	9.5	17.2	13.7	28.5
Domestic credit		8.0	6.1	0.7	6.5	3.4	10.7	10.5	9.0
to public sector		1.8	6.3	-1.5	6.0	2.5	9.8	9.1	10.7
to private sector		15.0	6.5	3.3	6.9	3.6	11.4	13.2	8.2
Liquid liabilities		11.1	4.3	3.1	7.7	4.1	11.6	11.0	11.8
Long term foreign liabilities		..	..	..	..	..	-9.3	0.8	..
<b>II. Interest rates (%)</b>									
Money market rate (Call money rates)	6.99	9.4	17.7	7.8	8.7	7.8	8.9	9.2	7.3
Yield on GOI Securities (1 to 5 years)	11.86-12.86	9.75-11.76	6.00-14.28	5.21-16.21	5.50-17.69	4.45-17.73	3.18-14.30	4.94-16.66	..
Deposit rate (1 to 3 Years)	10	11.0	12.0	11.0-12.0	10.5-11.0	9.0-11.0	8.5-9.5	8.5-9.0	8.0-8.5
Lending rate (Minimum Lending Rate)	14	15.0	16.5	14.5-15.0	14	12.0-13.0	12.0-12.5	11.0-12.0	11.0-12.0
Real deposit rate *	5.0	3.4	2.0	1.6-2.6	3.7-4.2	-4.1 - -2.1	5.2-6.2	4.6-5.1	4.9-5.4
Real lending rate *	9.0	7.4	6.5	5.1-5.6	14.0	-1.0 - -0.1	8.7-9.2	7.1-8.1	7.9-8.9

Notes: \* Nominal rates less Inflation

Sources: IFS and Reserve Bank of India.

**Table A13. Balance of Payments**  
(US\$ Millions)

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>Current Account</b>									
Exports of goods & services	27947	32990	39657	41607	45109	47484	53251	63764	65201
Exports of goods	22683	26855	32311	34133	35680	34298	37542	44894	44915
Exports of services	5264	6135	7346	7474	9429	13186	15709	18870	20286
Imports of goods & services	31468	41437	51213	55696	59297	58565	67028	75656	73705
Imports of goods, f.o.b.	26739	35904	43670	48948	51187	47544	55383	59264	57618
Imports of services	4729	5533	7543	6748	8110	11021	11645	16392	16087
Net trade in goods & services	-3521	-8447	-11556	-14089	-14188	-11081	-13777	-11892	-8504
Income receipts	395	886	1429	1073	1561	1935	1931	2366	2749
Income payments	3665	4317	4634	4380	5082	5479	5490	6187	5403
Net income from abroad	-3270	-3431	-3205	-3307	-3521	-3544	-3559	-3821	-2654
Private current transfer receipts	5287	8112	8539	12435	11875	10341	12290	12873	12192
Private current transfer payments	22	19	33	68	45	61	34	75	67
Net private current transfers	5265	8093	8506	12367	11830	10280	12256	12798	12125
Current Account Balance	-1526	-3785	-6255	-5029	-5879	-4345	-5080	-2915	967
<b>Capital &amp; Financial Account</b>									
Net official capital grants	368	416	345	410	379	307	382	336	384
Net total private investment inflows	4235	4807	4805	6153	5390	2412	5191	5102	5925
Net direct investment inflows	668	983	2057	2841	3562	2473	2165	2342	3905
Net portfolio investment inflows	3567	3824	2748	3312	1828	-61	3026	2760	2020
External Assistance, net	1901	1526	883	1109	907	820	901	427	1204
Commercial Borrowings, net	607	1030	1275	2848	3999	4362	313	4011	-1147
Rupee Debt Service	-1053	-983	-952	-727	-767	-802	-711	-617	-519
NRI Deposits, net	1205	172	1103	3350	1125	960	1540	2317	2754
Other Capital	2800	2604	-2425	-1321	-643	508	3866	-2805	2189
Reserves, net change (negative sign indicates increase)	-8724	-4644	2936	-5818	-3893	-3829	-6142	-5830	-11757
<b>Other Series</b>									
Foreign Exchange reserves (end of period, incl. gold)	19254	25186	21687	26423	29367	32490	38036	42281	54106
Reserves (as months of imports of goods and services)	7.3	7.3	5.1	5.7	5.9	6.7	6.8	6.7	8.8
GDP (billions of US\$)	273.9	322.6	355.2	385.4	409.7	413.8	447.0	460.6	481.4

Source: Reserve Bank of India.



**Table A14. Exports and Imports**  
(US\$ million)

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>A. EXPORTS</b>									
<b>A1. Exports (fob, US\$)</b>									
Total Primary Commodities	4916	5214	7257	8035	7687	6928	6524	7126	7065
Oil Meals	741	573	702	985	924	462	378	448	474
Marine Products	814	1126	1011	1129	1207	1038	1183	1396	1218
Ores and Minerals	888	988	1175	1172	1061	893	916	1155	1214
Other Primary commodities	2473	2527	4369	4749	4495	4535	4048	4127	4159
Manufactures	16657	20404	23747	24613	26547	25792	29714	34391	33241
Gems and Jewellery	3996	4500	5275	4753	5346	5929	7502	7384	7306
Readymade Garments	2586	3282	3676	3753	3876	4365	4765	5578	5004
Other Manufactures	10075	12622	14797	16107	17325	15497	17447	21429	20930
Total	22683	26855	32311	34133	35680	34298	37542	44894	44915
<b>A2 Exports (constant prices- 1993-94)</b>									
Total Primary Commodities	4916	4907	7868	7694	6676	7904	7171	7877	8546
Oil Meals	741	579	687	770	685	633	490	453	493
Marine Products	814	935	922	1033	1030	994	1141	1231	1288
Ores and Minerals	888	1136	1386	1181	1043	910	1070	1104	1094
Other Primary commodities	2473	2258	4874	4711	3918	5367	4469	5090	5671
Manufactures	16657	20388	23207	27003	23891	21907	23988	38427	41061
Gems and Jewellery	3996	4339	5283	5622	5700	6452	7898	8857	8116
Readymade Garments	2586	2978	3285	4562	5711	6415	7090	8146	8637
Other Manufactures	10075	13071	14639	16819	12481	9040	9000	21424	24308
Total	22683	25769	33739	36290	34007	35638	40711	49681	52391
<b>B. IMPORTS</b>									
<b>B.1 Imports (cif, US\$)</b>									
Food	327	1144	970	1214	1483	2524	2417	1443	2044
Consumer Goods	3032	4249	5819	5115	5143	4307	4618	3722	4209
POL and Other Energy	5754	5928	7526	10036	8164	6399	12611	15650	14000
Intermediate Goods	7951	9696	12031	12845	16898	19094	21059	20780	21519
Pearls, Precious and Semi-Precious	2635	1630	2106	2925	3342	3760	5436	4808	4622
Stones									
Organic and Inorganic Chemicals	1371	2137	2566	2661	2956	2684	2866	2444	2771
Other intermediate goods	3946	5929	7359	7260	10600	12650	12757	13528	14126
Capital Goods	6243	7638	10330	9922	9796	10064	8966	8941	9315
Total	23306	28654	36675	39132	41485	42389	49671	50536	51087
<b>B.2 Imports (constant prices, 1993-94)</b>									
Food	327	858	641	1002	1276	2085	1768	2078	1542
Consumer Goods	3032	3603	4606	3812	4171	3551	4133	3215	4202
POL and Other Energy	5754	5775	6832	7614	7793	8504	9533	9207	9978
Intermediate Goods	7951	4212	12073	13196	18108	22794	24873	25326	24709
Pearls, Precious and Semi-Precious	2635	1493	1550	2337	2875	3656	5518	4161	4600
Stones									
Organic and Inorganic Chemicals	1371	1898	2319	2784	2881	5986	7480	5419	2773
Other intermediate goods	3946	821	8204	8075	12352	13152	11875	15745	17337
Capital Goods	6243	14413	12286	10584	8438	8635	9559	9598	11091
Total	23306	28861	36438	36208	39786	45568	49865	49424	51523
<b>C. INDEXES (1993=100)</b>									
<b>C1. Volume Indices</b>									
Merchandise Exports	100.0	113.7	149.2	159.9	149.9	155.0	179.0	221.7	274.7
Merchandise Imports	100.0	124.1	156.4	155.5	170.8	195.7	214.2	212.1	210.0
<b>C2. Price Indices</b>									
Merchandise export price index	100.0	104.2	95.8	94.1	104.9	96.2	92.2	90.4	86
Merchandise import price index	100.0	99.3	100.7	108.1	104.3	93.0	99.6	102.3	99
Merchandise Terms of Trade	100.0	105.0	95.1	87.0	100.6	103.5	92.6	88.4	86

Source: Reserve Bank of India.

**Table A15. External Debt and Debt Service**

	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>I. (millions of US dollars)</b>									
<b>A. Debt Outstanding and disbursed</b>									
Total long term	85676	93907	87040	85427	88606	93021	94354	95971	94120
Public and pub. guaranteed	83906	87480	80422	78045	79398	84611	86410	83491	82446
Private non-guaranteed	1770	6427	6618	7382	9208	8409	7944	12480	11674
Short term	3626	4264	5049	6726	5046	4329	3933	3462	2951
IMF	5041	4312	2374	1313	664	288	26	0	0
Total DOD	94342	102483	94464	93466	94317	97637	98313	99433	97071
<b>B. Debt Service</b>									
Interest	4178	4633	4918	4364	4864	5120	3782	4182	3817
Amortizations	4033	5144	6929	6644	6936	6574	6062	6661	5465
IMF repurchases	134	1174	1719	972	613	390	262	25	0
Total	8345	10951	13566	11981	12413	12084	10107	10868	9282
<b>II. Ratios (%)</b>									
Total DOD to GDP	34.4	31.8	26.6	24.3	23.0	23.6	22.0	21.6	20.2
Total DOD (% total exports)	280.5	244.1	190.4	169.6	161.1	163.4	145.7	125.9	121.1
Debt service (% total exports)	24.8	26.1	27.3	21.7	21.2	20.2	15.0	13.8	11.6

Source: Global Development Finance, 2003.

Table A16. Financial Sector Indicators

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>A. Banking System</b>						
1. Depth and Structure						
Total domestic credit (% of GDP)	47.7	48.8	49.9	51.3	54.2	55.8
of which private credit (% of GDP)	25.3	25.9	26.5	27.5	29.7	30.4
Number of banks						
Public Sector	27	27	27	27	27	27
Private Banks						30
Foreign Banks						23
2. Efficiency and Strength						
Spread over LIBOR	10.4	8.1	8.0	7.1	5.8	8.3
Non-performing loans as % of total						
Public sector banks(27)	17.8	16.0	15.9	14.0	12.4	11.1
Private banks (34)	8.5	8.7	10.8	8.2	8.4	9.7
Foreign banks (45)	4.3	6.4	7.6	7.0	6.8	5.4
<b>B. Stock Market</b>						
Market Capitalization (%GDP)	32.0	31.4	25.4	41.5	32.4	23.1
Value Traded (%GDP)	25.06	38.64	35.80	62.63	111.56	52.20
No. of listed companies					5795	
S&P/IFC investable index (annual % change)	-2.0	5.8	-23.0	81.0	-31.1	-19.9

Sources: RBI and World Development Indicators.



Table A17. Investment Climate

	Year	India	Income Group Average	Regional Average	Middle-Income Average
<b>Private Investment Environment</b>					
Private Investment/Gross Domestic Fixed Investment (%)	1995-1999	61.0	53.7	71.8	74.8
Domestic Credit to Private Sector (stock, % GDP)	2001	29.1	24.1	28.8	57.8
Real lending Rate	2001				
Highest Marginal Corporate Tax Rate (%)	2002	36.0			
Euromoney Credit Rating	Sep-02	55.1	28.4	38.7	46.5
ICRG Composite Risk Rating	Oct-02	65.8	58.8	69.5	69.8
Institutional Investor Risk Rating	Sep-02	47.3	18.0	36.4	39.0
<b>Governance</b>					
ICRG Corruption Rating (1-6, bad to good)	Feb-03	1.5			
ICRG Bureaucratic Quality Rating (1 - 6)	Feb-03	3.0			
ICRG Law and Order (1 - 6)	Feb-03	4.0			
<b>Openness</b>					
Trade (imports+exports)/GDP (%)	2001	19.5	37.6	23.4	50.2
FDI inflows (% GDP)	2001	0.6	1.7	0.6	3.9
WTO member?		Y			
Weighted Mean Tariff (%)	2001	28.2			
<b>Infrastructure</b>					
Paved Roads, % of total	1995-2001	45.7	16.1	36.9	52.7
Motor vehicles (per 1000 persons)	2000	8	10	8	65
Cost of Calls to US (US\$ per 3 min)	2001	4.20	..	3.60	..
Internet Users (thousands)	2001	5,000	9,337	5,413	87,311
Electricity consumption (kwh per capita)	2000	355	350	323	1,391
GDP per unit energy use (PPP \$ per Kg oil equivalent)	1999	4.6	3.6	4.9	4.0
<b>Wages and Productivity</b>					
Minimum Wage (US\$ per year)	1995-99	408			
Labor Cost Per Worker in Manufacturing (US\$ per year)	1995-99	1,192			
Value Added Per Worker in Manufacturing (US\$ per year)	1995-99	3,118			
R&D Expenditure (% of GNI)	1989-2000	0.62	..	0.62	..

Source: World Bank, World Development Indicators Database, 2003.

Table A18. Vulnerability Indicators

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
<b>A. Market Indicators</b>						
Annual percent change in average exchange rate (%)	6.1	4.7	13.2	3.0	5.4	4.4
Annual change in T-Bill rates (short-term)						
Average spread on Eurobonds (basis points)						
Annual change in stock market index (%)	-2.0	5.8	-23.0	81.0	-31.1	-19.9
<b>B. Risk Ratings</b>						
ICRG composite (1-100, bad to good)	68.1	69.2	65.2	63.3	63.8	65.0
Euromoney (1-100, bad to good)						
Institutional Investor (1-100, bad to good)						
<b>C. Financial</b>						
Annual growth in real domestic credit (%)	0.7	6.5	3.4	10.7	10.5	9.0
Foreign currency to total deposits (%)	15.4	16.4	17.0	18.1	18.6	21.9
Non-perfm. loans of commercial banks (% of total)						
Public Sector	17.84	16.0	15.89	13.98	12.37	11.09
Private Banks	8.49	8.7	10.81	8.17	8.37	9.65
Foreign Banks	4.29	6.4	7.59	6.99	6.84	5.38
<b>D. Reserve Cover Indicators</b>						
Reserve cover of imports (months of imports)	5.7	5.94	6.7	6.8	6.7	8.8
Reserves to short term debt	3.9	5.8	7.5	9.7	12.2	18.3
Reserves/M2 (%)	12.2	13.2	13.7	14.8	15.3	18.0
<b>E. Prices</b>						
Annual change in terms of trade (%)	-8.5	15.6	2.8	-10.5	-4.5	-2.2
Annual Depreciation REER (%)	0.3	5.0	-5.3	-0.2	5.1	2.9
<b>F. External</b>						
Current account balance (% of GDP)	-1.3	-1.4	-1.0	-1.1	-0.6	0.2
External Debt (% of GDP)	24.3	23.0	23.6	22.0	21.6	20.2
<b>G. Fiscal sustainability indicators (General Govt.)</b>						
Total Public Debt (% of GDP)	65.1	66.5	66.9	70.6	75.4	79.8
Fiscal Deficit (% of GDP)	6.4	6.7	9.3	9.7	9.6	11.0
Primary Deficit (% of GDP)	1.2	1.5	3.9	3.8	3.6	4.7

Sources: IFS, WDI, Reserve Bank of India and World Bank Staff Estimates.

Table A19. Millennium Development Goals Indicators

	1990	1994	1999	2001
<b>1. Eradicate extreme poverty and hunger 2015 target = halve 1990 \$1 a day poverty and malnutrition rates</b>				
Population below \$1 a day (%)	..	44	..	..
Poverty gap at \$1 a day (%)	..	12	..	..
Poverty rate (%)	..	36	..	28.6
Percentage share of income or consumption held by poorest 20%	..	..	8	..
Prevalence of child malnutrition (% of children under age 5)	64	53	47	..
Population below minimum level of dietary energy consumption (%)	25	..	23	..
<b>2. Achieve universal primary education 2015 target = net enrollment to 100</b>				
Net primary enrollment ratio (% of relevant age group)	..	51	77	..
Percentage of cohort reaching grade 5 (%)	..	55	60	..
Youth literacy rate (% ages 15-24)	64	68	72	73
<b>3. Promote gender equality 2005 target = education ratio to 100</b>				
Ratio of girls to boys in primary and secondary education (%)	68	70	75	..
Ratio of young literate females to males (% ages 15-24)	74	78	81	81
Share of women employed in the nonagricultural sector (%)	..	..	..	..
Proportion of seats held by women in national parliament (%)	8	..	48	..
<b>4. Reduce child mortality 2015 target = reduce 1990 under 5 mortality by two-thirds</b>				
Under 5 mortality rate (per 1,000)	..	94	95	..
Infant mortality rate (per 1,000 live births)	..	79	68	..
Immunization, measles (% of children under 12 months)	..	35	42	..
<b>5. Improve maternal health 2015 target = reduce 1990 maternal mortality by three-fourths</b>				
Maternal mortality ratio (per 100,000 live births)	..	424	540	..
Births attended by skilled health staff (% of total)	..	34	42	..
<b>6. Combat HIV/AIDS, malaria and other diseases 2015 target = halt, and begin to reverse, AIDS, etc.</b>				
Prevalence of HIV, female (% ages 15-24)	..	..	0.6	..
Contraceptive prevalence rate (% of women ages 15-49)	..	40.6	48.2	..
Number of children orphaned by HIV/AIDS	..	..	..	..
Incidence of tuberculosis (per 100,000 people)	..	467	544	..
Tuberculosis cases detected under DOTS (%)	..	..	6	..
<b>7. Ensure environmental sustainability 2015 target = various (see notes)</b>				
Forest area (% of total land area)	21.4	..	..	21.6
Nationally protected areas (% of total land area)	..	4.8	4.8	..
GDP per unit of energy use (PPP \$ per kg oil equivalent)	3.3	4	4.7	..
CO2 emissions (metric tons per capita)	0.8	1	1.1	..
Access to an improved water source (% of population)	..	68	78	..
Access to improved sanitation (% of population)	21	..	..	31
Number of households with toilet facility (%)	..	30	36	..
Access to secure tenure (% of population)	..	..	..	..
<b>8. Develop a Global Partnership for Development 2015 target = various (see notes)</b>				
Youth unemployment rate (% of total labor force ages 15-29)	..	10.1	..	12.1
Fixed line and mobile telephones (per 1,000 people)	5.9	13	26.5	32
Personal computers (per 1,000 people)	0.3	1.3	3.3	4.5

Note: In some cases the data are for earlier or later years than those stated

Source: World Development Indicators database, April 2003; National Family Health Survey (NFHS);

National Sample Survey (NSS); Planning Commission, Government of India

**Table A20: Development Indicators - India and Comparator Countries**

Indicator	Unit	Year	India	China	Brazil	Indonesia	Pakistan
Per Capita Income	US\$	2000	450	840	3580	570	440
PPP Per capita income	US\$	2000	2340	3920	7300	2830	1860
Population	Million	2000	1016	1262	170	210	138
Male literacy rate	Percent	2001	76	92	85	92	57
Female literacy rate	Percent	2001	54.3	76	85	82	28
Population below the poverty line [1]	Percent	Survey year in brackets	26.1 (2000)	6 (1996)	17.4 (1990)	15.7 (1996)	34 (1991)
Population below US\$1/day	Percent	Survey year in brackets	44.2 (1997)	18.8 (1999)	11.6 (1998)	7.7 (1999)	31 (1996)
Number of poor	Million	1999/2000	312.6	75.7	29.6	33	47
Infant mortality rate	Per 1000 live births	2000	69	32	32	41	83
Life expectancy at birth	Years	2000	63	70	68	66	63
Access to improved sanitation facilities [2]	Percent	2000	31	38	77	66	61

Notes: Data on Male and Female literacy rate for countries other than India is for the year 2000

Source: World Development Indicators, 2002, The World Bank; Poverty data on India (1999/2000) sourced from Planning Commission, GoI

**Memo Items**

[1] an alternate methodology used by Deaton and Dreze estimated the poverty headcount to be 28.6% in 1999/2000

[2] Access to improved sanitation facilities refers to % of population with at least adequate excreta disposal facilities (private or shared, but not public) that can effectively prevent contact with excreta

**Table A21: Unemployment Rates: Alternative Measures**

Unemployment rates	Usual Principal Status	Usual Principal and Subsidiary Status	Current Weekly Status	Current Daily Status
	(UPS)	(UPSS)	(CWS)	CDS)
All India				
1987-88	3.8	2.6	4.8	6.1
1993-94	2.6	1.9	3.6	6.0
1999-00	2.8	2.2	4.4	7.3
Urban				
1987-88	6.6	5.3	7.1	9.4
1993-94	5.2	4.5	5.8	7.4
1999-00	5.2	4.6	5.9	7.7
Rural				
1987-88	3.1	2.0	4.2	5.3
1993-94	1.8	1.2	3.0	5.6
1999-00	2.0	1.4	3.9	7.2



